
FISCAL DEVICE
DATECS FMP-350X
DATECS FMP-55X
DATECS FP-700X
DATECS FP-700XE
DATECS WP-500X
DATECS WP-50X
DATECS DP-25X
DATECS DP-150X
DATECS DP-05C
DATECS WP-25X

Programmer's Manual

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Description of the program interface

The fiscal device operates under the control of an application program, with which communicates via RS232 (USB or LAN) serial connection. The device executes a previously set of wrapped commands, arranged according to the type of the operations which have to be executed. The application program does not have a direct access to the resources of the fiscal device although it can detect data connected with the status of the fiscal device and the fiscal control unit.

Low level protocol

A) Protocol type - Master (Host) / Slave

The fiscal printer performs the commands sent by the Host and returns messages, which depend on the result. The fiscal printer cannot instigate asynchronous communications itself. Only responses to commands from the Host are sent to the Host. These messages are either wrapped or single byte control codes. The fiscal printer maintains the communication via the RS232 serial connection at baud rates of 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200 b/s, 8N1.

B) Sequence of the messages

Host sends a wrapped message, containing a command for the fiscal printer. ECR executes the requested operation and response with a wrapped message. Host has to wait for a response from the fiscal printer before to send another message. The protocol uses non-wrapped messages with a length one byte for processing of the necessary pauses and error conditions.

C) Non-wrapped messages – time-out

When the transmitting of messages from the Host is normal, Slave answers not later than 60 ms either with a wrapped message or with a 1 byte code. Host must have 500 ms of time-out for receiving a message from Slave. If there is no message during this period of time the Host will transmit the message again with the same sequence number and the same command. After several unsuccessful attempts Host must indicate that there is either no connection to the fiscal printer or there is a hardware fault.

Non-wrapped messages consist of one byte and they are:

A) NAK 15H

This code is sent by Slave when an error in the control sum or the form of the received message is found. When Host receives a NAK it must again send a message with the same sequence number.

B) SYN 16H

This code is sent by Slave upon receiving a command which needs longer processing time. SYN is sent every 60 ms until the wrapped message is not ready for transmitting.



D) Wrapped messages

a) Host to fiscal printer (Send)

<01><LEN><SEQ><CMD><DATA><05><BCC><03>

Example:

01 30 30 32 3F 24 30 30 32 3A 54 65 73 74 09 05 30 33 36 3F 03

b) Fiscal printer to Host (Receive)

<01><LEN><SEQ><CMD><DATA><04><STATUS><05><BCC><03>

Example:

01 30 30 33 35 24 30 30 32 3A 30 09 04 80 80 A0 80 86 9A 80 80 05 30 36 33 3A 03

Where:

<01> Preamble. - 1 byte long. Value: 01H.

<LEN> Number of bytes from <01> preamble (excluded) to <05> (included) plus the fixed offset of 20H.

Length: 4 bytes. Each digit from the two bytes is sent after 30H is added to it. From example – Input have 15(0Fh) bytes - 30 30 32 3F 24 30 30 32 3A 54 65 73 74 09 05

Now add 20h → 000F + 0020 = 002F. Sum 002F is presented as 30H, 30H, 32H, 3FH

<SEQ> Sequence number of the frame.

Length : 1 byte. Value: 20H – FFH. The fiscal printer saves the same <SEQ> in the return message. If the ECR gets a message with the same <SEQ> as the last message received it will not perform any operation, but will repeat the last sent message.

<CMD> The code of the command.

Length: 4 byte. The fiscal printer saves the same <CMD> in the return message. If the fiscal printer receives a non-existing code it returns a wrapped message with zero length in the data field and sets the respective status bit. Each digit from the two bytes is sent after 30H is added to it. From example, used command is 42 (2Ah). Command 002A is presented as 30H, 30H, 32H, 3AH

<DATA> Data.

Length: 0-213 bytes for Host to fiscal printer, 0-218 bytes for Fiscal printer to Host. Value: 20H – FFH. The format and length of the field for storing data depends on the command. If the command has no data the length of this field is zero. If there is a syntax error the respective status bit is established in the data and a wrapped message is returned with zero field length.

From example, input value **Text** is presented as 54H, 65H, 73H, 74H, 09H (ASCII to hex convert)

<04> Separator (only for fiscal printer-to-Host messages), - Not used in input

Length: 1 byte. Value: 04H.

<STATUS> The field with the current status of the fiscal device. - Not used in input

Length: 8 bytes. Value: 80H-FFH.

<05> Postamble

Length: 1 byte. Value: 05H.

<BCC> Control sum (0000H-FFFFH),

Length: 4 bytes. Value of each byte: 30H-3FH. The sum includes between <01> preamble (excluded) to <05> Each digit from the two bytes is sent after 30H is added to it.

From example sum of 30 30 32 3F 24 30 30 32 3A 54 65 73 74 09 05 is 036F. 036F is presented as 30H, 33H, 36H, 3FH

<03> Terminator, Length: 1 byte. Value: 03H.



Message composition, syntax and meanings

- a) The data field depends on the command.
- b) The parameters sent to the fiscal printer may be separated with a [\t] and/or may have a fixed length.
- c) The separator([\t]) between the parameters shows that it is mandatory.
- d) Some of the parameters are mandatory and others are optional. Optional parameters can be left empty, but after them must have separator ([\t]).

The symbols with ASCII codes under 32 (20H) have special meanings and their use is explained whenever necessary. If such a symbol has to be sent for some reason (for example in an ESCAPE-command to the display) it must be preceded by 16 (10H) with an added offset 40H.

Example: when we write **255,PrintColumns[\t][\t][\t]** for the data field then in that field there will be **50 72 69 6E 74 43 6F 6C 75 6D 6E 73 09 09 09** where each hexadecimal digit is an ASCII value.



Command explanations

This is example command syntax:

```
{Parameter1}<SEP>{Parameter2}<SEP>{Parameter3}<SEP><DateTime><SEP>
```

Note: <SEP> - this tag must be inserted after each parameter to separate different parameters. It's value is '\t' (tab). It is the same for all commands.

Mandatory parameters:

- **Parameter1** - This parameter is mandatory, it must be filled;
- **Parameter3** - This parameter is mandatory, it must be filled;
 - **A** - Possible value of Parameter3;
Answer(1) - if Parameter3 has value 'A' see Answer(1);
 - **B** - Possible value of Parameter3;
Answer(2) - if Parameter3 has value 'B' see Answer(2);
- **DateTime** - Date and time format: DD-MM-YY hh:mm:ss DST
 - **DD** - Day
 - **MM** - Month
 - **YY** - Year
 - **hh** - Hours
 - **mm** - Minutes
 - **ss** - Seconds
 - **DST** - Text DST. If exist means that summer time is active.

Optional parameters:

- **Parameter2** - This parameter is optional it can be left blank, but separator must exist. Default: X;

Note

If left blank parameter will be used with value, after "Default:" in this case 'X', but in some cases blank parameter may change the meaning of the command, which will be explained for each command;

Answer(X) - This is the default answer of the command.

Under each command there will be list with possible answers.

Answer when command fail to execute is the same for all commands, so it will not be explained after each command.

Answer when command fail to execute:

```
{ErrorCode}<SEP>
```

- **ErrorCode** - Indicates an error code;

**Command: 33 (21h) Clears the external display.****Parameters of the command:**

none

Answer:

{ErrorStatus}<SEP>

- **ErrorCode** - Indicates an error code;

Note: The command is not used on FMP-350X and FMP-55X;

Command: 35 (23h) Displaying text on second line of the external display.**Parameters of the command:**

{Text}<SEP>

Mandatory parameters:

- **Text** - Text to be sent directly to the external display (up to 20 symbols);

Answer:

{ErrorStatus}<SEP>

- **ErrorCode** - Indicates an error code;
 - *Note: The command is not used on FMP-350X and FMP-55X;*
-

Command: 38 (26h) Opening a non-fiscal receipt**Parameters of the command:**

none

Answer:

{ErrorCode}<SEP>{SlipNumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
 - **SlipNumber** - Current slip number (1...9999999);
-

Command: 39 (27h) Closing a non-fiscal receipt**Parameters of the command:**

none

Answer:

{ErrorCode}<SEP>{SlipNumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
 - **SlipNumber** - Current slip number (1...9999999);
-



Command: 42 (2Ah) Printing of a free non-fiscal text

Parameters of the command:

{Text}<SEP>{Bold}<SEP>{Italic}<SEP>{Height}<SEP>{Underline}<SEP>{alignment}<SEP>

Mandatory parameters:

- **Text** - text of 0...XX symbols. XX depend of opened receipt type. XX = (PrintColumns-2);

Optional parameters:

- **Bold** - flag 0 or 1, 1 = print bold text; empty field = normal text;
- **Italic** - flag 0 or 1, 1 = print italic text; empty field = normal text;
- **Height** - 0, 1 or 2. 0=normal height, 1=double height, 2=half height; empty field = normal height text;
- **Underline** - flag 0 or 1, 1 = print underlined text; empty field = normal text;
- **alignment** - 0, 1 or 2. 0=left alignment, 1=center, 2=right; empty field = left alignment;

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 43 (2Bh) Opening of storno documents

Parameters of the command:

{OpCode}<SEP>{OpPwd}<SEP>{TillNmb}<SEP>{Storno}<SEP>{DocNum}<SEP>{DateTime}<SEP>{FM Number}<SEP>{Invoice}<SEP>{ToInvoice}<SEP>{Reason}<SEP>{NSale}<SEP>

Mandatory parameters:

- **OpCode** - Operator number from 1...30;
- **OpPwd** - Operator password, ascii string of digits. Length from 1...8;
Note: WP-500X, WP-25X, WP-50X, DP-25X, DP-150X, DP-05C: the default password for each operator is equal to the corresponding number (for example, for Operator1 the password is "1") . FMP-350X, FMP-55X, FP-700X: the default password for each operator is "0000"
- **TillNmb** - Number of point of sale from 1...99999;
- **Storno** - Reason for storno.
If **Storno** has value '0' it opens storno receipt. Reason "operator error";
If **Storno** has value '1' it opens storno receipt. Reason "refund";
If **Storno** has value '2' it opens storno receipt. Reason "tax base reduction";
- **DocNum** - Number of the original document (global 1...9999999);
- **FMNumber** - Fiscal memory number of the device the issued the original document;
- **DateTime** - Date and time of the original document(format "DD-MM-YY hh:mm:ss DST");

Optional parameters:

- **Invoice** - If this parameter has value 'I' it opens an invoice storno/refund receipt.
- **ToInvoice** - If **Invoice** is 'I' - Number of the invoice that this receipt is referred to; If **Invoice** is blank this parameter has to be blank too;
- **Reason** - If **Invoice** is 'I' - Reason for invoice storno/refund. If **Invoice** is blank this parameter has to be blank too;
- **NSale** - Unique sale number (21 chars "LLDDDDDD-CCCC-DDDDDDDD", L[A-Z], C[0-9A-Za-z], D[0-9]) The parameter is not required only if the original document is printed by the cashier and not by the PC program.

**Answer:**

{ErrorCode}<SEP>{SlipNumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
 - **SlipNumber** - Current slip number (1...9999999);
-

Command: 44 (2Ch) Paper feed**Parameters of the command:**

{Lines}<SEP>

Optional parameters:

- **Lines** - Number of lines to feed from 1 to 99. Default: 1;

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
-

Command: 45 (2Dh) Check for mode connection with PC**Parameters of the command:**

Syntax 1: none

Syntax 2: {DisablePrinting}<SEP>

Optional parameters:

- **DisablePrinting** – Enable/disable printout. 1 – enable, 0 – disable;
 - Note: This option is possible to be used only if device is registered with FDType = 11 or 21!

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
-

Command: 46 (2Eh) Paper cutting**Parameters of the command:**

none

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Note: The command is only used on FP-700X;

**Command: 47 (2Fh) Displaying text on upper line of the external display.****Parameters of the command:**

{Text}<SEP>

Mandatory parameters:

- **Text** - Text to be sent directly to the external display (up to 20 symbols);

Answer:

{ErrorStatus}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Note: The command is not used on FMP-350X and FMP-55X;

Command: 48 (30h) Open fiscal receipt**Parameters of the command:**

Syntax 1:

{OpCode}<SEP>{OpPwd}<SEP>{TillNmb}<SEP>{Invoice}<SEP>

Syntax 2:

{OpCode}<SEP>{OpPwd}<SEP>{NSale}<SEP>{TillNmb}<SEP>{Invoice}<SEP>

Mandatory parameters:

- **OpCode** - Operator number from 1...30;
- **OpPwd** - Operator password, ascii string of digits. Length from 1...8;
Note: WP-500X, WP-25X, WP-50X, DP-25X, DP-150X, DP-05C: , the default password for each operator is equal to the corresponding number (for example, for Operator1 the password is "1") . FMP-350X, FMP-55X, FP-700X: the default password for each operator is "0000"
- **NSale** - Unique sale number (21 chars "LLDDDDDD-CCCC-DDDDDDDD", L[A-Z], C[0-9A-Za-z], D[0-9])
- **TillNmb** - Number of point of sale from 1...99999;
- **Invoice** - If this parameter has value 'I' it opens an invoice receipt. If left blank it opens fiscal receipt;

Answer:

{ErrorCode}<SEP>{SlipNumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
 - **SlipNumber** - Current slip number (1...9999999);
-

Command: 49 (31h) Registration of sale**Parameters of the command:**

Syntax 1:

{PluName}<SEP>{TaxCd}<SEP>{Price}<SEP>{Quantity}<SEP>{DiscountType}<SEP>{DiscountValue}<SEP>{Department}<SEP>

Syntax 2:

{PluName}<SEP>{TaxCd}<SEP>{Price}<SEP>{Quantity}<SEP>{DiscountType}<SEP>{DiscountValue}<SEP>{Department}<SEP>{Unit}<SEP>

Mandatory parameters: **PluName, TaxCd, Price**



- **PluName** - Name of product, up to 72 characters not empty string;
- **TaxCd** - Tax code;
 - '1' - vat group A;
 - '2' - vat group B;
 - '3' - vat group C;
 - '4' - vat group D;
 - '5' - vat group E;
 - '6' - vat group F;
 - '7' - vat group G;
 - '8' - vat group H;
- **Price** - Product price, with sign '-' at void operations. Format: 2 decimals; up to *9999999.99
- **Department** - Number of the department 0..99; If '0' - Without department;

Optional parameters: **Quantity**, **DiscountType**, **DiscountValue**

- **Quantity** - Quantity of the product (default: 1.000); Format: 3 decimals; up to *999999.999
- **Unit** - Unit name, up to 6 characters not empty string;

!!! Max value of **Price** * **Quantity** is *9999999.99. !!!

- **DiscountType** - type of discount.
 - '0' or empty - no discount;
 - '1' - surcharge by percentage;
 - '2' - discount by percentage;
 - '3' - surcharge by sum;
 - '4' - discount by sum; If **DiscountType** is non zero, **DiscountValue** have to contain value. The format must be a value with two decimals.
- **DiscountValue** - value of discount.
 - a number from 0.01 to 9999999.99 for sum operations;
 - a number from 0.01 to 99.99 for percentage operations;

Note

If **DiscountType** is zero or empty, parameter **DiscountValue** must be empty.

Answer:

{ErrorCode}<SEP>{SlipNumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **SlipNumber** - Current slip number (1...9999999);

Command: 50 (32h) Return the active VAT rates

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{nZreport}<SEP>{TaxA}<SEP>{TaxB}<SEP>{TaxC}<SEP>{TaxD}<SEP>{TaxE}<SEP>{TaxF}<SEP>{TaxG}<SEP>{TaxH}<SEP>{EntDate}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **nZreport** - Number of first Z report;
- **TaxX** - Value of Tax group X (0.00...99.99 taxable,100.00=disabled);
- **EntDate** - Date of entry (format DD-MM-YY);



Command: 51 (33h) Subtotal

Parameters of the command:

{Print}<SEP>{Display}<SEP>{DiscountType}<SEP>{DiscountValue}<SEP>

Optional parameters:

- **Print** - print out;
 - '0' - default, no print out;
 - '1' - the sum of the subtotal will be printed out;
- **Display** - Show the subtotal on the client display. Default: 0;
 - '0' - No display;
 - '1' - The sum of the subtotal will appear on the display;
 Note: The option is not used on FMP-350X and FMP-55X;
- **DiscountType** - type of discount.
 - '0' or empty - no discount;
 - '1' - surcharge by percentage;
 - '2' - discount by percentage;
 - '3' - surcharge by sum;
 - '4' - discount by sum; If {DiscountType} is non zero, {DiscountValue} have to contain value. The format must be a value with two decimals.
- **DiscountValue** - value of discount.
 - a number from 0.01 to 21474836.47 for sum operations;
 - a number from 0.01 to 99.99 for percentage operations;

Note

If **DiscountType** is zero or empty, parameter **DiscountValue** must be empty.

Answer:

{ErrorCode}<SEP>{SlipNumber}<SEP>{Subtotal}<SEP>{TaxA}<SEP>{TaxB}<SEP>{TaxC}<SEP>{TaxD}<SEP>{TaxE}<SEP>{TaxF}<SEP>{TaxG}<SEP>{TaxH}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **SlipNumber** - Current slip number (1...9999999);
- **Subtotal** - Subtotal of the receipt (0.00...9999999.99 or 0...999999999 depending dec point position);
- **TaxX** - Receipts turnover by vat groups (0.00...9999999.99 or 0...999999999 depending dec point position);

Command: 53 (35h) Payments and calculation of the total sum (TOTAL)

Parameters of the command:

Syntax 1:

{PaidMode}<SEP>{Amount}<SEP>{Type}<SEP>

Mandatory parameters:

- **PaidMode** - Type of payment;
 - '0' - cash;
 - '1' - credit card;
 - '2' - debit card;
 - '3' - other pay#3
 - '4' - other pay#4
 - '5' - other pay#5



- **Amount** - Amount to pay (0.00...99999999.99 or 0...999999999 depending dec point position);

Optional parameters (with PinPad connected):

- **Type** - Type of card payment. Only for payment with debit card;
 - '1' - with money;
 - '12' - with points from loyal scheme;

Syntax 2:

{PaidMode}<SEP>{Amount}<SEP>{Change}<SEP>

- **PaidMode** - Type of payment;
 - '6' - Foreign currency
- **Amount** - Amount to pay (0.00...99999999.99 or 0...999999999 depending dec point position);
- **Change** - Type of change. Only if **PaidMode** = '6';
 - '0' - current currency;
 - '1' - foreign currency;

Answer: 1

{ErrorCode}<SEP>{Status}<SEP>{Amount}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Status** - Indicates an error;
 - 'D' - The command passed, return when the paid sum is less than the sum of the receipt. The residual sum due for payment is returned to Amount;
 - 'R' - The command passed, return when the paid sum is greater than the sum of the receipt. A message "CHANGE" will be printed out and the change will be returned to Amount;
- **Amount** - The sum tendered (0.00...99999999.99 or 0...999999999 depending dec point position);

Answer 2 - for payment with pinpad when transaction may be successful in pinpad, but unsuccessful in fiscal device:

{ErrorCode}<SEP>{Sum}<SEP>{CardNum}<SEP>

- **ErrorCode** -111560;
- **Sum** - Sum from last transaction in cents;
- **CardNum** - Last digits from card number;

Answer 3 - for payment with pinpad when error from pinpad occurred:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code;

Command: 54 (36h) Printing of a free fiscal text

Parameters of the command:

{Text}<SEP>Bold<SEP>Italic<SEP>DoubleH<SEP>Underline<SEP>alignment<SEP>

Mandatory parameters:

- **Text** - text of 0...XX symbols, XX = PrintColumns-2;

Optional parameters:

- **Bold** - flag 0 or 1, 1 = print bold text; empty field = normal text;
- **Italic** - flag 0 or 1, 1 = print italic text; empty field = normal text;
- **DoubleH** - flag 0 or 1, 1 = print double height text; empty field = normal text;
- **Underline** - flag 0 or 1, 1 = print underlined text; empty field = normal text;



- **alignment** - 0, 1 or 2. 0=left alignment, 1=center, 2=right; empty field = left alignment;

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 55 (37h) Pinpad commands

Parameters of the command:

{Option}<SEP>{Parameters}<SEP>

Mandatory parameters:

- **Option** - Option for execution.
 - '1' - Void;

If pinpad is configured for Borica:

Syntax:

{Option}<SEP>{PayType}<SEP>{Amount}<SEP>{RRN}<SEP>{AC}<SEP>

Mandatory parameters:

- **PayType** - Type of payment: 7 - Return with money, 13 - Return with points from loyal scheme;
- **Amount** - The amount of the transaction;
- **RRN** - RRN of the transaction(12 digits max);
- **AC** - AC of the transaction(6 digits max);

If pinpad is configured for UBB:

Syntax:

{Option}<SEP>{PayType}<SEP>{Amount}<SEP>{Number}<SEP>

Mandatory parameters:

- **PayType** - Type of payment: 16 - Return with AC number, 17 - Return with receipt number;
- **Amount** - The amount of the transaction;
- **Number** - depend on PayType(16 - AC number, 17 - receipt number)

If pinpad is configured for DSK:

Syntax:

{Option}<SEP>{PayType}<SEP>{Amount}<SEP>

Mandatory parameters:

- **PayType** - Type of payment: 16 - Return with money;
- **Amount** - The amount of the transaction;

Syntax:

{Option}<SEP>{PayType}<SEP>

Mandatory parameters:

- **PayType** - Type of payment: 17 - Void last document;



- '2' - Copy of last document;

Syntax:

{Option}<SEP>

- '3' - Copy of document by type;

Syntax:

{Option}<SEP>{Type}<SEP>{Number}<SEP>

Mandatory parameters:

- **Type** - 1 - RRN, 2 - AC, 3 - Number of the transaction;
- **Number** - depends on Type(RRN - 12 digits max, AC - 6 digits max, Number - 6 digits max);

- '4' - Copy of all documents;

Syntax:

{Option}<SEP>

- '5' - End of day from Pinpad;

Syntax:

{Option}<SEP>

- '6' - Report from pinpad;

Syntax:

{Option}<SEP>

- '7' - Full report from pinpad;

Syntax:

{Option}<SEP>

- '8' - Enter date and time for Pinpad;

Syntax:

{Option}<SEP>{DateTime}<SEP>

Mandatory parameters:

- **DateTime** - Date and time in format: "DD-MM-YY hh:mm:ss DST";
 - **DD** - Day;
 - **MM** - Month;
 - **YY** - Year;
 - **hh** - Hour;
 - **mm** - Minute;
 - **ss** - Second;
 - **DST** - Text "DST" if exist time is Summer time;

- '9' - Check connection with Pinpad;

Syntax:

{Option}<SEP>

- '10' - Check connection with server;

Syntax:

{Option}<SEP>

- '11' - Loyalty balance;

Syntax:



{Option}<SEP>

- '12' - Get update;

Syntax:

{Option}<SEP>

- '13' - Used when command 53(paying with pinpad) and command 55 (option 14) returns error along with sum and last digits of card number

Syntax:

{Option}<SEP>{Operation}<SEP>

Mandatory parameters:

- **Operation** - Operation for execution;
 - '1' - Print receipt;
 - '2' - Void transaction from pinpad;
- '14' - Make sale from pinpad, without fiscal receipt;

Syntax:

{Option}<SEP>{Amount}<SEP>

Mandatory parameters:

- **Amount** - Amount for sale;
- '15' - Print receipt for pinpad after succesfull transaction. Must be executed after command 53(when paying with pinpad) and after command 56(when paying with pinpad);

Syntax:

{Option}<SEP>

Answer 1 - for options from 1 to 13 inclusive, and option 15:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Answer 2 - for option 14, when command passed:

{ErrorCode}<SEP>{AC}<SEP>{CardData}<SEP>{CardNumber}<SEP>{MIDNumber}<SEP>{RRN}<SEP>{TIDNumber}<SEP>{TransAmount}<SEP>{TransDate}<SEP>{TransTime}<SEP>{TransNumber}<SEP>{TransStatus}<SEP>{TransType}<SEP>{FullResponseCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **AC** - Authorization code for transaction;
- **CardData** - Type of card payment(unknown: -1, chip: 0, contactless: 1, magnetic stripe: 2, manually: 3);
- **CardNumber** - Card number;
- **MIDNumber** - Merchant ID;
- **RRN** - RRN number for transaction;
- **TIDNumber** - Terminal ID;
- **TransAmount** - Transaction amount;
- **TransDate** - Transaction date;
- **TransTime** - Transaction time;
- **TransNumber** - Transaction number;
- **TransStatus** - Transaction status(approved: 0, declined: 1, error: 2);
- **TransType** - Transaction type;
- **FullResponseCode** - Complete response code;

Answer 3 - for option 14 when command did not pass and the error is from pinpad:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code;



Answer 4 - for option 14 when transaction may be successful in pinpad, but unsuccessful in fiscal device:

{ErrorCode}<SEP>{Sum}<SEP>{CardNum}<SEP>

- **ErrorCode** -111560;
- **Sum** - Sum from last transaction in cents;
- **CardNum** - Last digits from card number;

Options: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14 can be executed only when receipt is closed.

Option 13 can be executed only when receipt is open.

Option 15 can be executed in both ways.

Command: 56 (38h) Close fiscal receipt

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{SlipNumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **SlipNumber** - Current slip number (1...9999999);

Command: 57 (39h) Enter and print invoice data

Parameters of the command:

{Seller}<SEP>{Receiver}<SEP>{Buyer}<SEP>{Address1}<SEP>{Address2}<SEP>{TypeTAXN}<SEP>{TAXN}<SEP>{VATN}<SEP>

Mandatory parameters: {TypeTAXN}, {TAXN}, {VATN}

- **TypeTAXN** - Type of client's tax number. 0-BULSTAT; 1-EGN; 2-LNCH; 3-service number
- **TAXN** - Client's tax number. ascii string of digits 8...13
- **VATN** - VAT number of the client. 10...14 symbols
- **Seller** - Name of the seller; 36 symbols max; if left blank prints empty space for hand-writing
- **Receiver** - Name of the receiver; 36 symbols max; if left blank prints empty space for hand-writing
- **Buyer** - Name of the buyer; 36 symbols max; if left blank prints empty space for hand-writing
- **Address1** - First line of the address; 36 symbols max; if left blank prints empty space for hand-writing
- **Address2** - Second line of the address; 36 symbols max; if left blank prints empty space for hand-writing

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 58 (3Ah) Registering the sale of a programmed item

Parameters of the command:

{PluCode}<SEP>{Quantity}<SEP>{Price}<SEP>{DiscountType}<SEP>{DiscountValue}<SEP>

Mandatory parameters: **PluCode**



- **PluCode:** The code of the item. from 1 to MAX_PLU. MAX_PLU: ECR-100000, Printer-3000;

Optional parameters: **Quantity, DiscountType, DiscountValue**

- **Quantity** - Quantity of the product (default: 1.000); Format: 3 decimals; up to *999999.999

Note

!!! Max value of **Price * Quantity** is *9999999.99. !!!

- **Price** - Product price. Format: 2 decimals; up to *9999999.99
- **DiscountType** - type of discount.
 - '0' or empty - no discount;
 - '1' - surcharge by percentage;
 - '2' - discount by percentage;
 - '3' - surcharge by sum;
 - '4' - discount by sum;
- **DiscountValue** - value of discount.
 - a number from 0.01 to 9999999.99 for sum operations;
 - a number from 0.01 to 100.00 for percentage operations;

Note

If **DiscountType** is zero or empty, this parameter must be empty.

Void operations are made by placing '-' before **PluCode** ! In order to make void operation the **Price** parameter must be the same as the price at which the item was sold.

Answer:

{ErrorCode}<SEP>{SlipNumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **SlipNumber** - Current slip number (1...9999999);

Command: 60 (3Ch) Cancel fiscal receipt

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 61 (3Dh) Set date and time

Parameters of the command:

{DateTime}<SEP>

Mandatory parameters:

- **DateTime** - Date and time in format: "DD-MM-YY hh:mm:ss DST";
 - **DD** - Day;
 - **MM** - Month;
 - **YY** - Year;
 - **hh** - Hour;
 - **mm** - Minute;



- **ss** - Second;
- **DST** - Text "DST" if exist time is Summer time;

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 62 (3Eh) Read date and time

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{DateTime}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **DateTime** - Date and time in format: "DD-MM-YY hh:mm:ss DST";
 - **DD** - Day;
 - **MM** - Month;
 - **YY** - Year;
 - **hh** - Hour;
 - **mm** - Minute;
 - **ss** - Second;
 - **DST** - Text "DST" if exist time is Summer time;

Command: 63 (3Fh) Show current date and time on the external display

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{DateTime}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **DateTime** - Date and time in format: "DD-MM-YY hh:mm:ss DST";
 - **DD** - Day;
 - **MM** - Month;
 - **YY** - Year;
 - **hh** - Hour;
 - **mm** - Minute;
 - **ss** - Second;
 - **DST** - Text "DST" if exist time is Summer time;

Note: The command is not used on FMP-350X and FMP-55X;

Command: 64 (40h) Information on the last fiscal entry

Parameters of the command:



{Type}<SEP>

- **Type** - Type of returned data. Default: 0;
 - **0** - Turnover on TAX group;
 - **1** - Amount on TAX group;
 - **2** - Storno turnover on TAX group;
 - **3** - Storno amount on TAX group;

Answer:

{ErrorCode}<SEP>{nRep}<SEP>{SumA}<SEP>{SumB}<SEP>{SumC}<SEP>{SumD}<SEP>{SumE}<SEP>{SumF}<SEP>{SumG}<SEP>{SumH}<SEP>{Date}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **nRep** - Number of report 1...3650;
- **SumX** - Depend on **Type**. X is the letter of TAX group (0.00...9999999.99 or 0...999999999 depending dec point position);
- **Date** - Date of fiscal record in format DD-MM-YY;

Command: 65 (41h) Information on daily taxation**Parameters of the command:**

{Type}<SEP>

- **Type** - Type of returned data. Default: 0;
 - **0** - Turnover on TAX group;
 - **1** - Amount on TAX group;
 - **2** - Storno turnover on TAX group;
 - **3** - Storno amount on TAX group;

Answer:

{ErrorCode}<SEP>{nRep}<SEP>{SumA}<SEP>{SumB}<SEP>{SumC}<SEP>{SumD}<SEP>{SumE}<SEP>{SumF}<SEP>{SumG}<SEP>{SumH}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **nRep** - Number of report (1...3650);
- **SumX** - Depend on **Type**. X is the letter of TAX group (0.00...9999999.99 or 0...999999999 depending dec point position);

Command: 66 (42h) Set invoice interval**Parameters of the command:**

Syntax 1:

{End}<SEP>

- If the current invoice counter didn't reached the end of the interval.

Syntax 2:

{Start}<SEP>{End}<SEP>

- If the current invoice counter have reached the end of the interval.

Syntax 3:



none – read current values.

- **Start** - The starting number of the interval. Max 10 digits (1...9999999999).
- **End** - The ending number of the interval. Max 10 digits (1...9999999999).

Answer:

{ErrorCode}<SEP>{Start}<SEP>{End}<SEP>{Current}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Start** - The current starting value of the interval (1...9999999999)
- **End** - The current ending value of the interval (1...9999999999)
- **Current** - The current invoice receipt number (1...9999999999)

Command: 68 (44h) Number of remaining entries for Z-reports in FM

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{ReportsLeft}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **ReportsLeft** - The number of remaining entries for Z-reports in FM (1...1825 or 3650).

Command: 69 (45h) Reports

Parameters of the command:

{ReportType}<SEP>

Mandatory parameters:

- **ReportType** - Report type;
 - 'X' - X report; Answer(1)
 - 'Z' - Z report; Answer(1)
 - 'D' - Departments report; Answer(2)
 - 'G' - Item groups report; Answer(2)

Answer:

{ErrorCode}<SEP>{nRep}<SEP>{TotA}<SEP>{TotB}<SEP>{TotC}<SEP>{TotD}<SEP>{TotE}<SEP>{TotF}<SEP>{TotG}<SEP>{TotH}<SEP>{StorA}<SEP>{StorB}<SEP>{StorC}<SEP>{StorD}<SEP>{StorE}<SEP>{StorF}<SEP>{StorG}<SEP>{StorH}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **nRep** - Number of Z-report (1...3650);
- **TotX** - Total sum accumulated by TAX group X - sell operations (0.00...9999999.99 or 0...999999999 depending dec point position);
- **StorX** - Total sum accumulated by TAX group X - storno operations (0.00...9999999.99 or 0...999999999 depending dec point position);

Answer(2):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;



Command: 70 (46h) Cash in and Cash out operations

Parameters of the command:

{Type}<SEP>{Amount}<SEP>

Mandatory parameters:

- **Type** - type of operation;
 - '0' - cash in;
 - '1' - cash out;
 - '2' - cash in - (foreign currency);
 - '3' - cash out - (foreign currency);
- **Amount** - the sum (0.00...99999999.99 or 0...999999999 depending dec point position); If Amount=0, the only Answer is returned, and receipt does not print.

Answer:

{ErrorCode}<SEP>{CashSum}<SEP>{CashIn}<SEP>{CashOut}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **CashSum** - cash in safe sum (0.00...99999999.99 or 0...999999999 depending dec point position);
- **CashIn** - total sum of cash in operations (0.00...99999999.99 or 0...999999999 depending dec point position);
- **CashOut** - total sum of cash out operations (0.00...99999999.99 or 0...999999999 depending dec point position);

Command: 71 (47h) General information, modem test

Parameters of the command:

{InfoType}<SEP>

Optional parameters:

- **InfoType** - Type of the information printed. Default: 0;
 - '0' - General diagnostic information about the device;
 - '1' - test of the modem;
 - '2' - general information about the connection with NRA server;
Answer(2)
 - '3' - print information about the connection with NRA server;
 - '4' - test of the LAN interface if present;
 - '6' - test of the SD card performance;
 - '9' - test of the Ble module (if present);
 - '10' - test of the modem without PPP connection;
 - '11' - Send all unsent documents (command execution is accepted only once in every 5 minutes);

Answer(1):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Answer(2):

{ErrorCode}<SEP>{LastDate}<SEP>{NextDate}<SEP>{Zrep}<SEP>{ZErrZnum}<SEP>{ZErrCnt}<SEP>{ZErrNum}<SEP>{SellErrnDoc}<SEP>{SellErrCnt}<SEP>{SellErrStatus}<SEP>SellNumber<SEP>SellDate<SEP>LastErr<SEP>RemMinutes<SEP>



- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **LastDate** - Last connection to the server;
- **NextDate** - Next connection to the server;
- **Zrep** - Last send Z report;
- **ZErrZnum** - Number of Z report with error;
- **ZErrCnt** - Sum of all errors for Z reports;
- **ZErrNum** - Error number from the server;
- **SellErrnDoc** - Number of sell document with error;
- **SellErrCnt** - Sum of all errors for sell documents;
- **SellErrStatus** - Error number from the server;
- **SellNumber** - Last received document number from the server;
- **SellDate** - The date and time of last received document from the server;
- **LastErr**- Last error from the server;
- **RemMinutes**- Remaining minutes until next GetDeviceInfo request;

Command: 72 (48h) Fiscalization

Parameters of the command:

{SerialNumber}<SEP>{TAXnumber}<SEP>

Mandatory parameters:

- **SerialNumber** - Serial Number (Two letters and six digits: XX123456);
- **TAXnumber** - TAX number (max 13 characters);

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 74 (4Ah) Reading the Status

Parameters of the command:

{Option}<SEP>

Optional parameters:

- **Option** - Type of information to return;
 - '0' - current receipt status; *Answer(2)*
 - '1' - Fiscal QRcode string - the contents of the QR code printed in the last fiscal document; *Answer(3)*

Answer(1):

{ErrorCode}<SEP>{StatusBytes}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **StatusBytes** - Status Bytes (See the description of the status bytes).

Answer(2):

{ErrorCode}<SEP>{PrintBufferStatus}<SEP>{ReceiptStatus}<SEP>{Number}<SEP>{QRamount}<SEP>{QRnumber}<SEP>{QRdatetime}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;



- **PrintBufferStatus** - 0- empty buffer, no lines pending, 1-buffer is not empty;
- **ReceiptStatus** - Status of the current receipt.
 - 0 - Receipt is closed;
 - 1 - Normal receipt is open;
 - 2 - Storno receipt is open. Reason "mistake by operator";
 - 3 - Storno receipt is open. Reason "refund";
 - 4 - Storno receipt is open. Reason "tax base reduction";
 - 5 - standart non-fiscal receipt is open;
- **Number** - The number of the current or the last receipt (1...9999999);
- **QRamount** - Fiscal QRcode - the amount of the last fiscal receipt;
- **QRnumber** - Fiscal QRcode - the slip number of the last fiscal receipt (1...9999999);
- **QRdatetime** - Fiscal QRcode - the date and time of the last fiscal receipt;

Answer(3):

{ErrorCode}<SEP>{QRCodeString}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **QRCodeString** - the Fiscal QRcode string;

Command: 76 (4Ch) Status of the fiscal transaction

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{IsOpen}<SEP>{Number}<SEP>{Items}<SEP>{Amount}<SEP>{Payed}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **IsOpen**
 - 0 - Receipt is closed;
 - 1 - Normal receipt is open;
 - 2 - Storno receipt is open. Reason "mistake by operator";
 - 3 - Storno receipt is open. Reason "refund";
 - 4 - Storno receipt is open. Reason "tax base reduction";
 - 5 - standard non-fiscal receipt is open;
- **Number** - The number of the current or the last receipt (1...9999999);
- **Items** - number of sales registered on the current or the last fiscal receipt (0...9999999);
- **Amount** - The sum from the current or the last fiscal receipt (0.00...9999999.99 or 0...999999999 depending dec point position);
- **Payed** - The sum payed for the current or the last receipt (0.00...9999999.99 or 0...999999999 depending dec point position);

Command: 80 (50h) Play sound

Parameters of the command:

{Hz}<SEP>{mSec}<SEP>

Mandatory parameters:

- **Hz** - Frequency (0...65535);



- **mSec** - Time in milliseconds (0...65535);

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 83 (53h) Programming of VAT rates

Parameters of the command:

{TaxA}<SEP>{TaxB}<SEP>{TaxC}<SEP>{TaxD}<SEP>{TaxE}<SEP>{TaxF}<SEP>{TaxG}<SEP>{TaxH}<SEP>{decimal_point}<SEP>

Mandatory parameters:

- **TaxX** - Value of VAT rate X;
 - **0.00...99.99** - enabled;
 - **100.00** - disabled;
- **decimal_point** - value: 0 or 2(if decimal_point = 0 - work with integer prices. If decimal_point = 2 - work with fract prices);

Note

When changing decimal_point is necessart to restart the printer so the correct values indicate on the client display

Answer:

{ErrorCode}<SEP>{RemainingChanges}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **RemainingChanges** - number of remaining changes (1...30);

Command: 84 (54h) Printing of barcode

Parameters of the command:

Syntax 1: {Type}<SEP>{Data}<SEP>

Syntax 2: {Type}<SEP>{Data}<SEP>{QRcodeSize}<SEP>

Mandatory parameters:

- **Type** - Type of barcode;
 - **'1'** - EAN8 barcode. **Data** must contain only 8 digits; Use Syntax 1;
 - **'2'** - EAN13 barcode. **Data** must contain only 13 digits; Use Syntax 1;
 - **'3'** - Code128 barcode. **Data** must contain symbols with ASCII codes between 32 and 127. **Data** length is between 3 and 31 symbols; Use Syntax 1;
 - **'4'** - QR code. **Data** must contain symbols with ASCII codes between 32 and 127. **Data** length is between 3 and 279 symbols; Use Syntax 2;
 - **'5'** - Interleave 2of5 barcode. **Data** must contain only digits, from 3 to 22 chars; Use Syntax 1;
 - **'6'** - PDF417 truncated **Data** must contain symbols with ASCII codes between 32 and 127. **Data** length is between 3 and 400 symbols; Use Syntax 1;
 - **'7'** - PDF417 normal **Data** must contain symbols with ASCII codes between 32 and 127. **Data** length is between 3 and 400 symbols; Use Syntax 1;
- **Data** - Data of the barcode; Length of **Data** depends on the type of the barcode.

Optional parameters:



-
- **QRcodeSize** - Dots multiplier (3...10) for QR barcodes and PDF417 barcodes. Default: 4;

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
-

Command: 86 (56h) Date of the last fiscal record

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{DateTime}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
 - **DateTime** - The date and the time of the last fiscal record in format: DD-MM-YYYY hh:mm:ss;
-

Command: 87 (58h) Get item groups information

Parameters of the command:

{ItemGroup}<SEP>

Optional parameters:

- **ItemGroup** - Number of item group; If ItemGroup is empty - item group report;

Answer:

{ErrorCode}<SEP>{TotSales}<SEP>{TotSum}<SEP>{Name}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
 - **TotSales** - Number of sales for this item group for day;
 - **TotSum** - Accumulated sum for this item group for day;
 - **Name** - Name of item group;
-

Command: 88 (58h) Get department information

Parameters of the command:

{Department}<SEP>

Optional parameters:

- **Department** - Number of department (1...99); If **Department** is empty - department report;

Answer:

{ErrorCode}<SEP>{TaxGr}<SEP>{Price}<SEP>{TotSales}<SEP>{TotSum}<SEP>{STotSales}<SEP>{STotSum}<SEP>{Name}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
 - **TaxGr** - Tax group of department;
 - **Price** - Price of department;
-



- **TotSales** - Number of sales for this department for day;
- **TotSum** - Accumulated sum for this department for day;
- **STotSales** - Number of storno operations for this department for day;
- **STotSum** - Accumulated sum from storno operations for this department for day;
- **Name** - Name of the department;

Command: 89 (59h) Test of Fiscal Memory

Parameters of the command:

{Write}<SEP>

Optional parameters:

- **Write** - Write test. Default: 0;
 - **0** - Read test.
 - **1** - Write and read test;

Answer:

{ErrorCode}<SEP>{Records}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Records** - Number of records left (0...16).

Command: 90 (5Ah) Diagnostic information

Parameters of the command:

Syntax 1: {Param}<SEP>

Optional parameters:

- **none** - Diagnostic information without firmware checksum;
Answer(1)
- **'1'** - Diagnostic information with firmware checksum;
Answer(1)

Syntax 2: {Param}

Optional parameters:

- **none** - Diagnostic information without firmware checksum;
Answer(2)
- **'1'** -Diagnostic information with firmware checksum;
Answer(2)

Answer(1): {ErrorCode}<SEP>{Name}<SEP>{FwRev}<SEP>{FwDate}<SEP>

{FwTime}<SEP>{Checksum}<SEP>{Sw}<SEP>{SerialNumber}<SEP>{FMNumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Name** - Device name (up to 32 symbols).
- **FwRev** - Firmware version. 6 symbols;
- **FwDate** - Firmware date DDMMYY. 7 symbols;
- **FwTime** - Firmware time hhmm. 4 symbols.
- **Checksum** - Firmware checksum. 4 symbols;
- **Sw** - Switch from Sw1 to Sw8. 8 symbols (not used at this device, always 00000000);
- **SerialNumber** - Serial Number (Two letters and six digits: XX123456);
- {FMNumber} –Fiscal memory number (8 digits)

Answer(2): {Name},{FwRev} {Sp} {FwDate} {Sp} {FwTime},{Checksum},{Sw},
{SerialNumber},{FMNumber}



-
- **Name** - Device name (up to 32 symbols).
 - **FwRev** - Firmware version. 6 symbols;
 - **Sp** - Space. 1 symbol;
 - **FwDate** - Firmware date DDMMYY. 7 symbols;
 - **FwTime** - Firmware time hhmm. 4 symbols.
 - **Checksum** - Firmware checksum. 4 symbols;
 - **Sw** - Switch from Sw1 to Sw8. 8 symbols;
 - **SerialNumber** - Serial Number (Two letters and six digits: XX123456);
 - {FMNumber} –Fiscal memory number (8 digits)
-

Command: 91 (5Bh) Programming of Serial number and FM number

Parameters of the command:

{SerialNumber}<SEP>{FMnumber}<SEP>

Mandatory parameters:

- **SerialNumber** - Serial Number (Two letters and six digits: XX123456);
- **FMnumber** - Fiscal Memory Number (Eight digits);

Answer:

{ErrorCode}<SEP>{Country}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
 - **Country** - name of the country (up to 32 symbols);
-

Command: 92 (5Ch) Printing of separating line

Parameters of the command:

{Type}<SEP>

Mandatory parameters:

- **Type** - Type of the separating line.
 - '1' - Separating line with the symbol '-';
 - '2' - Separating line with the symbols '-' and ' ';
 - '3' - Separating line with the symbol '=';
 - '4' - Print fixed text "НЕ СЕ ДЪЛЖИ ПЛАЩАНЕ";

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
-

Command: 94 (5Eh) Fiscal memory report by date

Parameters of the command:

{Type}<SEP>{Start}<SEP>{End}<SEP>

Mandatory parameters:



- **Type** - 0 - short; 1 - detailed;

Optional parameters:

- **Start** - Start date. Default: Date of fiscalization (format DD-MM-YY);
- **End** - End date. Default: Current date (format DD-MM-YY);

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 95 (5Fh) Fiscal memory report by number of Z-report

Parameters of the command:

{Type}<SEP>{First}<SEP>{Last}<SEP>

Mandatory parameters:

- **Type** - 0 - short; 1 - detailed;

Optional parameters:

- **First** - First Z-report in the period. Default: 1;
- **Last** - Last Z-report in the period. Default: Number of last Z-report;

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 96 (60h) Set Software Password.

Parameters of the command:

Syntax 1:

{SoftPassword}<SEP>

Mandatory parameters:

- **SoftPassword** - Software Password (max 16 characters);

Syntax 2:

{OldPasw}<SEP>{NewPasw}<SEP>

Mandatory parameters:

- **OldPasw** - Value of the old password. Max 16 characters. The default password is empty string;
- **NewPasw** - Value of the new password. Max 16 characters.

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 98 (62h) Programming of TAX number

Parameters of the command:



{TAXnumber}<SEP>

Mandatory parameters:

- **TAXnumber** - TAX number (max 13 characters);

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 99 (63h) Reading the programmed TAX number

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{TAXnumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **TAXnumber** - TAX number (max 13 characters);

Command: 100 (64h) Reading an error

Parameters of the command:

{Code}<SEP>

Mandatory parameters:

- **Code** - Code of the error(negative number);

Answer:

{ErrorCode}<SEP>{Code}<SEP>{ErrorMessage}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Code** - Code of the error, to be explained;
- **ErrorMessage** - Explanation of the error in **Code**;

Command: 101 (65h) Set operator password

Parameters of the command:

{OpCode}<SEP>{OldPwd}<SEP>{NewPwd}<SEP>

Mandatory parameters:

- **OpCode** - Operator number from 1...30;
- **NewPwd** - Operator password, ascii string of digits. Length from 1...8;

Optional parameters:

- **OldPwd** - Operator old password or administrator (oper29 & oper30) password. Can be blank if service jumper is on.

Answer:



{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 103 (67h) Information for the current receipt

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>{SumVATA}<SEP>{SumVATB}<SEP>{SumVATC}<SEP>{SumVATD}<SEP>{SumVATE}<SEP>{SumVATF}<SEP>{SumVATG}<SEP>{SumVATH}<SEP>{Inv}<SEP>{InvNum}<SEP>fStorno<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **SumVATx** - The current accumulated sum on VATx (0.00...99999999.99 or 0...999999999 depending dec point position);
- **Inv** - '1' if it is expanded receipt; '0' if it is simplified receipt;
- **InvNmb** - Number of the next invoice (up to 10 digits)
- **fStorno** - '1' if a storno receipt is open; '0' if it is normal receipt;

Command: 105 (69h) Report operators

Parameters of the command:

{FirstOper}<SEP>{LastOper}<SEP>{Clear}<SEP>

Optional parameters:

- **FirstOper** - First operator. Default: 1 (1...30);
- **LastOper** - Last operator. Default: Maximum operator number (1...30);
- **Clear** - Clear registers for operators. Default: 0;
 - '0' - Does not clear registers for operators.
 - '1' - Clear registers for operators.

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 106 (6Ah) Drawer opening

Parameters of the command:

{mSec}<SEP>

Optional parameters:

- **mSec** - The length of the impulse in milliseconds. (0...65535)

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Note: *only for FP-705*



Command: 107 (6Bh) Defining and reading items

Parameters of the command:

{Option}<SEP>{Parameters}<SEP>

Mandatory parameters: **Option**

- **'I'** - Items information;
Syntax:
{Option}<SEP>
Answer(3)
- **'P'** - Item programming;

Syntax1:

{Option}<SEP>{PLU}<SEP>{TaxGr}<SEP>{Dep}<SEP>{Group}<SEP>{PriceType}<SEP>{Price}<SEP>{AddQty}<SEP>{Quantity}<SEP>{Bar1}<SEP>{Bar2}<SEP>{Bar3}<SEP>{Bar4}<SEP>{Name}<SEP>

Syntax2:

{Option}<SEP>{PLU}<SEP>{TaxGr}<SEP>{Dep}<SEP>{Group}<SEP>{PriceType}<SEP>{Price}<SEP>{AddQty}<SEP>{Quantity}<SEP>{Bar1}<SEP>{Bar2}<SEP>{Bar3}<SEP>{Bar4}<SEP>{Name}<SEP>{Unit}<SEP>

Mandatory parameters:

- **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000);
- **TaxGr** - VAT group (letter 'A'...'H' or cyrillic 'A'...'3');
- **Dep** - Department (0...99);
- **Group** - Stock group (1...99);
- **PriceType** - Price type ('0' - fixed price, '1' - free price, '2' - max price) ;
- **Price** - Price (0.00...9999999.99 or 0...999999999 depending dec point position);
- **Quantity** - Stock quantity (0.001...99999.999);
- **Name** - Item name (up to 72 symbols);
- **Unit** - Measurement unit 0 - 19;

Optional parameters:

- **AddQty** - A byte with value 'A',
- **BarX** - Barcode X (up to 13 digits);

Answer(1)

- **'A'** - Change of the available quantity for item;

Syntax:

{Option}<SEP>{PLU}<SEP>{Quantity}<SEP>

Mandatory parameters:

- **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000);
- **Quantity** - Stock quantity (0.001...99999.999);

Answer(1)

- **'D'** - Item deleting;

Syntax:

{Option}<SEP>{firstPLU}<SEP>{lastPLU}<SEP>

Mandatory parameters:

- **firstPLU** - First item to delete (For ECRs 1...100000; For FPs 1...3000). If this parameter has value 'A', all items will be deleted (**lastPLU** must be empty);

Optional parameters:

- **lastPLU** - Last item to delete (For ECRs 1...100000; For FPs 1...3000). Default: **firstPLU**;



Answer(1)

- **'R'** - Reading item data;
Syntax:
{Option}<SEP>{PLU}<SEP>
Mandatory parameters:
 - **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000);

Answer(2)

- **'F'** - Returns data about the first found programmed item;
Syntax:
{Option}<SEP>{PLU}<SEP>
Optional parameters:
 - **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000). Default: 1;

Answer(2)

- **'L'** - Returns data about the last found programmed item;
Syntax:
{Option}<SEP>{PLU}<SEP>
Optional parameters:
 - **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000). Default: For ECRs 100000; For FPs 3000;

Answer(2)

- **'N'** - Returns data for the next found programmed item;
Syntax:
{Option}<SEP>
Note

The same command with option 'F' or 'L' must be executed first. This determines whether to get next('F') or previous ('L') item.

Answer(2)

- **'f'** - Returns data about the first found item with sales on it;
Syntax:
{Option}<SEP>{PLU}<SEP>
Optional parameters:
 - **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000). Default: 1;

Answer(2)

- **'l'** - Returns data about the last found item with sales on it;
Syntax:
{Option}<SEP>{PLU}<SEP>
Optional parameters:
 - **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000). Default: For ECRs 100000; For FPs 3000;

Answer(2)

- **'n'** - Returns data for the next found item with sales on it;
Syntax:
{Option}<SEP>
Note

The same command with option 'f' or 'l' must be executed first. This determines whether to get next('f') or previous ('l') item; *Answer(2)*

- **'X'** - Find the first not programmed item;
Syntax:
{Option}<SEP>{PLU}<SEP>
Optional parameters:
 - **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000). Default: 1;

Answer(4)



- 'x' - Find the last not programmed item;

Syntax:

{Option}<SEP>{PLU}<SEP>

Optional parameters:

- **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000). Default: For ECRs 100000; For FPs 3000;

Answer(4)

Answer(1):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Answer(2):

{ErrorCode}<SEP>{PLU}<SEP>{TaxGr}<SEP>{Dep}<SEP>{Group}<SEP>{PriceType}<SEP>{Price}<SEP>{Turnover}<SEP>{SoldQty}<SEP>{StockQty}<SEP>{Bar1}<SEP>{Bar2}<SEP>{Bar3}<SEP>{Bar4}<SEP>{Name}<SEP>{Units}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000);
- **TaxGr** - VAT group (letter 'A'...'H' or cyrillic 'A'...'3');
- **Dep** - Department (0...99);
- **Group** - Stock group (1...99);
- **PriceType** - Price type ('0' - fixed price, '1' - free price, '2' - max price);
- **Price** - Price (0.00...9999999.99 or 0...999999999 depending dec point position);
- **Turnover** - Accumulated amount of the item (0.00...9999999.99 or 0...999999999 depending dec point position);
- **SoldQty** - Sold out quantity (0.001...99999.999);
- **StockQty** - Current quantity (0.001...99999.999);
- **BarX** - Barcode X (up to 13 digits);
- **Name** - Item name (up to 72 symbols);
- **Units** - Measurement unit 0 - 19;

Answer(3):

{ErrorCode}<SEP>{Total}<SEP>{Prog}<SEP>{NameLen}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Total** - Total count of the programmable items (For ECRs: 100000; For FPs: 3000);
- **Prog** - Total count of the programmed items (For ECRs 0...100000; For FPs 0...3000);
- **NameLen** - Maximum length of item name (72);

Answer(4):

{ErrorCode}<SEP>{PLU}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **PLU** - Item number (For ECRs 1...100000; For FPs 1...3000);

Command: 109 (6Dh) Print duplicate copy of receipt

Parameters of the command:

none

Answer:

{ErrorCode}<SEP>



- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 110 (6Eh) Additional daily information

Parameters of the command:

{Type}<SEP>

Optional parameters:

- **Type** - Type of information. Default: 0;
 - '0' - Payments (sell operations);
Answer(1)
 - '1' - Payments (storno operations);
Answer(2)
 - '2' - number and sum of sells;
Answer(3)
 - '3' - number and sum of discounts and surcharges;
Answer(4)
 - '4' - number and sum of corrections and annulled receipts;
Answer(5)
 - '5' - number and sum of cash in and cash out operations;
Answer(6)

Answer 1:

{ErrorCode}<SEP>{Pay1}<SEP>{Pay2}<SEP>{Pay3}<SEP>{Pay4}<SEP>{Pay5}<SEP>{Pay6}<SEP>{ForeignPay}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **PayX** - Value payed by payment X (0.00...9999999.99 or 0...999999999 depending dec point position);.
- **ForeignPay** - Value payed by foreign currency (0.00...9999999.99 or 0...999999999 depending dec point position);.

Answer 2:

{ErrorCode}<SEP>{Pay1}<SEP>{Pay2}<SEP>{Pay3}<SEP>{Pay4}<SEP>{Pay5}<SEP>{Pay6}<SEP>{ForeignPay}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **PayX** - Value payed by payment X for return (0.00...9999999.99 or 0...999999999 depending dec point position);.
- **ForeignPay** - Value payed by foreign currency (0.00...9999999.99 or 0...999999999 depending dec point position);.

Answer 3:

{ErrorCode}<SEP>{Num}<SEP>{Sum}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Num** - number of clients (integer number - 0,1,2,);
- **Sum** - sum of the sells (0.00...9999999.99)

Answer 4:



{ErrorCode}<SEP>{qSur}<SEP>{sSur}<SEP>{qDis}<SEP>{sDis}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **qSur** - number of surcharges;.
- **sSur** - sum of surcharges;.
- **qDis** - number of discounts;.
- **sDis** - sum of discounts;.

Answer 5:

{ErrorCode}<SEP>{qVoid}<SEP>{sVoid}<SEP>{qAnul}<SEP>{sAnul}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **qVoid** - number of corrections (integer number - 0,1,2,);
- **sVoid** - sum of corrections (0.00...9999999.99);
- **qAnul** - number of annulled (integer number - 0,1,2,);
- **sAnul** - sum of annulled (0.00...9999999.99);

Answer 6:

{ErrorCode}<SEP>{qCashIn1}<SEP>{sCashIn1}<SEP>{qCashOut1}<SEP>{sCashOut1}<SEP>{qCashIn2}<SEP>{sCashIn2}<SEP>{qCashOut2}<SEP>{sCashOut2}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **qCashIn1** - number of cash in operations (integer number - 0,1,2,);
- **sCashIn1** - sum of cash in operations (0.00...9999999.99);
- **qCashOut1** - number of cash out operations (integer number - 0,1,2,);
- **sCashOut1** - sum of cash out operations (0.00...9999999.99);
- **qCashIn2** - number of cash in operations in alternative currency (integer number - 0,1,2,);
- **sCashIn2** - sum of cash in operations in alternative currency (0.00...9999999.99);
- **qCashOut2** - number of cash out operations in alternative currency (integer number - 0,1,2,);
- **sCashOut2** - sum of cash out operations in alternative currency (0.00...9999999.99);

Command: 111 (65h) PLU report

Parameters of the command:

{Type}<SEP>{FirstPLU}<SEP>{LastPLU}<SEP>

Mandatory parameters:

- **Type** - Type of report;
 - '0' - PLU turnovers;
 - '1' - PLU turnovers with clearing;
 - '2' - PLU parameters;
 - '3' - PLU stock;

Optional parameters:

- **FirstPLU** - First PLU in the report (1...3000). Default: 1;
- **LastPLU** - Last PLU in the report (1...3000). Default: Maximum PLU in the FPr;

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;



Command: 112 (70h) Information for operator

Parameters of the command:

{Operator}<SEP>

Mandatory parameters:

- **Operator** - Number of operator (1...30);

Answer:

{ErrorCode}<SEP>{Receipts}<SEP>{Total}<SEP>{nDiscount}<SEP>{Discount}<SEP>{nSurcharge}<SEP>
{Surcharge}<SEP>{nVoid}<SEP>{Void}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Receipts** - Number of fiscal receipts, issued by the operator (0...65535);
- **Total** - Total accumulated sum (0.00...9999999.99 or 0...99999999 depending dec point position);
- **nDiscount** - Number of discounts (0...65535);;
- **Discount** - Total accumulated sum of discounts with sign (0.00...9999999.99 or 0...99999999 depending dec point position);
- **nSurcharge** - Number of surcharges (0...65535);
- **Surcharge** - Total accumulated sum of surcharges with sign(0.00...9999999.99 or 0...99999999 depending dec point position);
- **nVoid** - Number of corrections (0...65535);
- **Void** - Total accumulated sum of corrections with sign(0.00...9999999.99 or 0...99999999 depending dec point position);

Command: 116 (74h) Reading FM.

Parameters of the command:

{Operation}<SEP>{Address}<SEP>{nBytes}<SEP>

Mandatory parameters:

- **Operation** - type of operation = '0';
- **Address** - Start address 0...FFFFFF (format ascii-hex).
- **nBytes** - Number of bytes (1...104)

Answer:

{ErrorCode}<SEP>{Data}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Data** - Data read. Number of bytes is equal to **nBytes** requested, multiplied by 2;

Command: 122 (7Ah) Printing of a free vertical fiscal text

Parameters of the command:

{Text}<SEP>

Mandatory parameters:

- **Text** - text of 0...128 symbols;

Double-byte control codes:



- (0Bh 42h) - Bolds all symbols.
- (0Bh 62h) - Stops the bolding of the symbols.
- (0Bh 55h) - Overlines all symbols.
- (0Bh 75h) - Stops the overlining of the symbols
- (0Bh 4Fh) - Underlines all symbols.
- (0Bh 6Fh) - Stops the underlining of the symbols.

Box drawing symbols:

- (82h) - up right
- (84h) - up left
- (91h) - down right
- (92h) - down left
- (93h) - up right + down right
- (94h) - up left + down left
- (95h) - up left + down right
- (96h) - down left + down right
- (97h) - up right + down left + up left + down right
- (ACh) - vertical line

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Note

All information is automatically printed after XX executions of the command. XX=10 for 2 inch paper, XX=16 for 3 inch paper.

Command: 123 (7Bh) Device information

Parameters of the command:

{Option}[<SEP>]

Mandatory parameters:

- **Option** - Type of information to return;
 - '1' - Serial numbers, Header and Tax numbers; *Answer(1)*
 - '2' - Battery and GSM signal status; *Answer(2)*
 - '3' - Last fiscal receipt; *Answer(3)*
 - '4' - Full EJ verify; *Answer(4)*
 - '5' - Battery level; *Answer(5)*

Answer(1):

{ErrorCode}<SEP>{SerialNumber}<SEP>{FiscalNumber}<SEP>{Headerline1}<SEP>{Headerline2}<SEP>{TAXnumber}<SEP>{Headerline3}<SEP>{Headerline4}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **SerialNumber** - Serial number;
- **FiscalNumber** - FMemory number;
- **Headerline1** - Supposed to contain Company name (up to depending on device's maximum printing columns);
- **Headerline2** - Supposed to contain Company address (up to depending on device's maximum printing columns);



- **Headerline3** - Supposed to contain name of the business premises (up to depending on device's maximum printing columns);
- **Headerline4** - Supposed to contain address of the business premises (up to depending on device's maximum printing columns);
- **TAXnumber**

Answer(2):

{ErrorCode}<SEP>{MainBattery}<SEP>{RamBattery}<SEP>{Signal}<SEP>{Network}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **MainBattery** - Main Battery level in mV;
- **RamBattery** - Ram Battery level in mV;
- **Signal** - GSM Signal level in percentage;
- **Network** - GSM network status. 1-registered, 0-unregistered;

Answer(3):

{ErrorCode}<SEP>{BonFiscal}<SEP>{DateBonFiscal}<SEP>{Znumber}<SEP>{Zdate}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **BonFiscal** - Number of last sales receipt in current Z report (1...9999);
- **DateBonFiscal** - Date and time of last sales receipt (format "DD-MM-YYYY hh:mm:ss");
- **Znumber** - Number of last Z-report (1..????);
- **Zdate** - Date of last of Z-report (format "DD-MM-YYYY hh:mm:ss");

Answer(4):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Answer(5):

{ErrorCode}<SEP>{MainBattery}<SEP>{ChargeLevel}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **MainBattery** - Main Battery level in mV;
- **ChargeLevel** - Battery charge percentage;

Command: 124 (7Ch) Search receipt number by period

Parameters of the command:

{StartDate}<SEP>{EndDate}<SEP>{DocType}<SEP>

Optional parameters:

- **StartDate** - Start date and time for searching (format "DD-MM-YY hh:mm:ss DST"). Default: Date and time of first document;
- **EndDate** - End date and time for searching (format "DD-MM-YY hh:mm:ss DST"). Default: Date and time of last document;

Note

See DateTime format described at the beginning of the document;

- **DocType** - Type of document;
 - '0' - all types;
 - '1' - fiscal receipts;
 - '2' - daily Z reports;
 - '3' - invoice receipts;



- '4' - non fiscal receipts;
- '5' - payout receipts;
- '6' - fiscal receipts - storno;
- '7' - invoice receipts - storno;
- '8' - cancelled receipts (all voided);
- '9' - daily X reports;
- '10' - fiscal receipts, invoice receipts, fiscal receipts - storno and invoice receipts - storno;

Answer:

{ErrorCode}<SEP>{StartDate}<SEP>{EndDate}<SEP>{FirstDoc}<SEP>{LastDoc}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **StartDate** - Start date for searching, see DateTime format described at the beginning of the document;
- **EndDate** - End date for searching, see DateTime format described at the beginning of the document;
- **FirstDoc** - First document in the period. For **DocType** = '2' (1...3650), else (1...99999999);
- **LastDoc** - Last document in the period. For **DocType** = '2' (1...3650), else (1...99999999);

Command: 125 (7Dh) Information from EJ

Parameters of the command:

Syntax 1:

{Option}<SEP>{DocNum}<SEP>{RecType}<SEP>

Syntax 2 (read CSV data):

{Option}<SEP>{FirstDoc}<SEP>{LastDoc}<SEP>

Syntax 3 (read CSV data):

{Option}<SEP>

Syntax1: Mandatory parameters:

- **Option** - Type of information;
 - '0' - Set document to read; *Answer(1)*
 - '1' - Read one line as text. Must be called multiple times to read the whole document; *Answer(2)*
 - '2' - Read as data. Must be called multiple times to read the whole document; *Answer(3)*
 - '3' - Print document; *Answer(4)*

Syntax1: Optional parameters:

- **DocNum** - Number of document (1...9999999). Needed for **Option** = 0.
- **RecType** - Document type. Needed for **Option** = 0.
 - '0' - all types;
 - '1' - fiscal receipts;
 - '2' - daily Z reports;
 - '3' - invoice receipts;
 - '4' - nonfiscal receipts;
 - '5' - payout receipts;
 - '6' - fiscal receipts - storno;
 - '7' - invoice receipts - storno;
 - '8' - cancelled receipts (all voided);
 - '9' - daily X reports;
 - '10' - fiscal receipts, invoice receipts, fiscal receipts - storno and invoice receipts - storno;

Syntax2: Mandatory parameters:

- **Option** - Type of information;
 - '9' - Set document to read; *Answer(1)*



- **FirstDoc** - First document in the period (1...999999999). Number received in response to command 124;
- **LastDoc** - Last document in the period. (1...999999999). Number received in response to command 124;

Syntax3: Mandatory parameters:

- **Option** - Type of information;
 - '8' - Read as data. Must be called multiple times to read the whole document; *Answer(5)*

Answer(1):

{ErrorCode}<SEP>{DocNumber}<SEP>{RecNumber}<SEP>{Date}<SEP>{Type}<SEP>{Znumber}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **DocNumber** - Number of document (global 1...99999999);
- **RecNumber** - Number of document (depending "Type");
- **Date** - Date of document, see DateTime format described at the beginning of the document;
- **Type** - Type of document;
 - '0' - all types;
 - '1' - fiscal receipts;
 - '2' - daily Z reports;
 - '3' - invoice receipts;
 - '4' - non fiscal receipts;
 - '5' - payout receipts;
 - '6' - fiscal receipts - storno;
 - '7' - invoice receipts - storno;
 - '8' - cancelled receipts (all voided);
 - '9' - daily X reports;
- **Znumber**- number of Z report (1...3650);

Answer(2):

{ErrorCode}<SEP>{TextData}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **TextData** - Document text (up to 64 chars);

Answer(3):

{ErrorCode}<SEP>{Data}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Data** - Document data, structured information in base64 format. Detailed information in other document;

Answer(4):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Answer(5):

{ErrorCode}<SEP>{CSV_Col_1}<SEP> ... {CSV_Col_14}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **CSV_Col_1** - идентификационен номер на ФУ;
- **CSV_Col_2** - вид на ФБ - ФБ, Разширен ФБ, Сторно ФБ или Разширен сторно ФБ;
- **CSV_Col_3** - номер на ФБ;
- **CSV_Col_4** - уникален номер на продажба (УНП) - в случай, че ФУ е от типа "Фискален принтер" или работи в такъв режим;
- **CSV_Col_5** - стока/услуга - наименование;



- CSV_Col_6 - стока/услуга - единична цена;
- CSV_Col_7 - стока/услуга - количество;
- CSV_Col_8 - стока/услуга - стойност;
- CSV_Col_9 - обща сума на т ФБ/Сторно ФБ или Разширен ФБ/Разширен сторно ФБ;
- CSV_Col_10 - номер на фактура/кредитно известие - в случай че записът е за Разширен ФБ или съответно - за Разширен сторно ФБ;
- CSV_Col_11 - ЕИК на получател - в случай че записът е за разширен ФБ или Разширен сторно ФБ;
- CSV_Col_12 - номер на сторниран ФБ - в случай че записът се отнася за Сторно ФБ или Разширен сторно ФБ;
- CSV_Col_13 - номер на сторнирана фактура - в случай че записът се отнася за Разширен сторно ФБ;
- CSV_Col_14 - причина за издаване - в случай че записът се отнася за Сторно ФБ или Разширен сторно ФБ.

Command: 127 (7Fh) Stamp operations

Parameters of the command:

{Type}<SEP>{Name}<SEP>

Mandatory parameters:

- **Type** - Type of operation;
 - '0' - Print stamp;
 - '1' - Rename loaded stamp with command 203;
- **Name** - Name of stamp as filename in format 8.3;

Answer:

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Command: 135 (87h) Modem information

Parameters of the command:

{Option}[<SEP>]

Mandatory parameters:

- **Option** - Type of information to return;
 - 's' - Read the IMEI of the modem; *Answer(1)*
 - 'i' - Read the IMSI of the SIM card; *Answer(2)*
 - 'M' - Modem status. Returns the last state of the modem; *Answer(3)*

Answer(1):

{ErrorCode}<SEP>{IMEI}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **IMEI** - IMEI number of the modem;

Answer(2):

{ErrorCode}<SEP>{IMSI}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;



- **IMSI** - IMSI number of the SIM card;

Answer(3):

{ErrorCode}<SEP>{SignalLevel}<SEP>{IMEI}<SEP>{IMSI}<SEP>{MobileOparatorName}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **SignalLevel** - GSM Signal level in percentage 0...100;
- **IMEI** - IMEI number of the modem;
- **IMSI** - IMSI number of the SIM card;
- **MobileOparatorName**;

Command: 140 (8Ch) Defining and reading clients

Parameters of the command:

{Option}<SEP>{Parameters}<SEP>

Mandatory parameters: {Option}

- **'I'** - Clients information;

Syntax:

{Option}<SEP>

Answer(3)

- **'P'** - Clients programming;

Syntax:

{Option}<SEP>{FIRM}<SEP>{Name}<SEP>{TypeTAXN}<SEP>{TAXN}<SEP>{RecName}<SEP>
{VATN}<SEP>{Addr1}<SEP>{Addr2}<SEP>

Mandatory parameters:

- **FIRM** - Client number, index of record (1...1000);
- **Name** - Client's name (up to 36 chars);
- **TAXN** - Client's tax number (9...13 chars);
 - **TypeTAXN** - Type of TAXN: '0' - BULSTAT; '1' - EGN; '2' - LNCH; '3' - service number;
- **RecName** - Reciever's name (up to 36 chars);
- **VATN** - VAT number of the client (up to 14 chars);
- **Addr1** - Client's address - line 1 (up to 36 chars);
- **Addr2** - Client's address - line 2 (up to 36 chars);

Answer(1)

- **'D'** - Client deleting;

Syntax:

{Option}<SEP>{firstFIRM}<SEP>{lastFIRM}<SEP>

Mandatory parameters:

- **firstFIRM** - First client to delete (1...1000); If this parameter has value 'A', all clients will be deleted(lastFIRM must be empty).

Optional parameters:

- **lastFIRM** - last client to delete (1...1000). Default: {firstFIRM}; ;

Answer(1)

- **'R'** - Reading client data;

Syntax:

{Option}<SEP>{FIRM}<SEP>

Mandatory parameters:

- **FIRM** - Client number (1...1000);

Answer(2)



- 'F' - Returns data about the first found programmed client;

Syntax:

{Option}<SEP>{FIRM}<SEP>

Optional parameters:

- **FIRM** - Client number (0...1000). Default: 0;

Answer(2)

- 'L' - Returns data about the last found programmed client;

Syntax:

{Option}<SEP>{FIRM}<SEP>

Optional parameters:

- **FIRM** - Client number (1...1000). Default: 1000;

Answer(2)

- 'N' - Returns data for the next found programmed client;

Syntax:

{Option}<SEP>

Note

The same command with option 'F' or 'L' must be executed first. This determines whether to get next('F') or previous ('L') client. *Answer(2)*

- 'T' - Find a client by tax number;

Syntax:

{Option}<SEP>{TAXN}<SEP>

- \b TAXN - Client's tax number (9...13 chars);

Answer(2)

- 'X' - Find the first not programmed client;

Syntax:

{Option}<SEP>{FIRM}<SEP>

Optional parameters:

- **FIRM** - Client number (0...1000). Default: 0;

Answer(4)

- 'x' - Find the last not programmed client;

Syntax:

{Option}<SEP>{FIRM}<SEP>

Optional parameters:

- **FIRM** - Client number (1...1000). Default: 1000;

Answer(4)

Answer(1):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Answer(2):

{ErrorCode}<SEP>{FIRM}<SEP>{TAXN}<SEP>{TypeTAXN}<SEP>{VATN}<SEP>{Name}<SEP>{RecName}<SEP>{Addr1}<SEP>{Addr2}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **FIRM** - Client number, index of record (1...1000);
- **Name** - Client's name (up to 36 chars);
- **TAXN** - Client's tax number (9...13 chars);
- **TypeTAXN** - Type of TAXN: '0' - BULSTAT; '1' - EGN; '2' - LNCH; '3' - service number;
- **RecName** - Reciever's name (up to 36 chars);
- **VATN** - VAT number of the client (up to 14 chars);
- **Addr1** - Client's address - line 1 (up to 36 chars);
- **Addr2** - Client's address - line 2 (up to 36 chars);



Answer(3):

{ErrorCode}<SEP>{Total}<SEP>{Prog}<SEP>{NameLen}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Total** - Total count of the programmable clients (1000);
- **Prog** - Total count of the programmed clients (0...1000);
- **NameLen** - Maximum length of client name (36);

Answer(4):

{ErrorCode}<SEP>{FIRM}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **FIRM** - Client number (1...1000);

Command: 202 (CAh) Customer graphic logo loading.

Parameters of the command: Syntax 1:

{Parameter}<SEP>

Mandatory parameters:

- **Parameter** - type of operation;
 - **START** - Preparation for data loading; *Answer(1)*
 - **STOP** - End of data; *Answer(2)*
 - **YmFzZTY0ZGF0YQ==** - base64 coded data of the graphic logo; *Answer(2)*
 - **POWEROFF** - Shutting down the device; *Answer(1)*
 - **RESTART** - Device restarting; *Answer(1)*

Answer(1):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Answer(2):

{ErrorCode}<SEP>{Checksum}

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Checksum** - Sum of decoded base64 data;

Command: 203 (CAh) Stamp image loading.

Parameters of the command: Syntax 1:

{Parameter}<SEP>

Mandatory parameters:

- **Parameter** - type of operation;
 - **START** - Preparation for data loading; *Answer(1)*
 - **STOP** - End of data; *Answer(2)*
 - **YmFzZTY0ZGF0YQ==** - base64 coded data of the graphic logo; *Answer(2)*

Answer(1):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

**Answer(2):**

{ErrorCode}<SEP>{Chechsum}

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **Chechsum** - Sum of decoded base64 data;

Command: 255 (FFh) Programming**Parameters of the command:**

{Name}<SEP>{Index}<SEP>{Value}<SEP>

Mandatory parameters:

- **Name** - Variable name;
 - **Device settings;**
 - **FpComBaudRate** - Baud rate of COM port for communication with PC (from 0 to 9)
 - **AutoPaperCutting** - Permission/rejection of the automatic cutting of paper after each receipt. (1 - permitted, 0 - rejected) (FP-700X only);
 - **PaperCuttingType** - Partial=0/Full=1 cutting of paper (FP-700X only);
 - **BarCodeHeight** - Barcode height from '1' (7mm) to '10' (70mm);
 - **BarcodeName** - Enable/Disable printing of the barcode data;
 - **ComPortBaudRate** - Baud rate of COM port that has peripheral device assigned.(from 0 to 999999) Number of COM port is determined by "**Index**".
 - **ComPortProtocol** - Protocol for communication with peripheral device assigned COM port. (from 0 to 9), if device is scale; Number of COM port is determined by "**Index**".
 - **MainInterfaceType** - PC interface type. 0-auto select, 1-RS232, 2-BLUETOOTH, 3-USB, 4-LAN;
 - **TimeOutBeforePrintFlush**- Time out between fiscal printer commands before start auto print(in milliseconds). value 1...999999999;
 - **WorkBatteryIncluded** - FPr works with battery on main supply (1 - enable; 0 - disable);
 - **Dec2xLineSpacing** - 0...5 - Default 0; Decrease the space between text lines. Greater values = less line spacing.
 - **PrintFontType** - Printer font type. 0: default, coarser with a small line spacing, 1: smaller, with greater spacing between rows.;
 - **FooterEmptyLines** - number of blank lines for proper paper cutting;
 - **HeaderMinLines** - Minimum number of lines from the header after printing the footer;
 - **LogoPrintAfterFooter** - Print the logo after rows to push the paper. 1: yes, 0: no. default: 0;
 - **EnableNearPaperEnd** - handling of near paper end. 0: No handling, 1: handling (default);
 - **DateFromNAPServDisable** - Synchronize date/time from the NRA server (0 - sync, 1 - does not sync);
 - **AutoPowerOff** - Minutes to automatically turn off ECR if it is idle. (0 - disable; from 1 minute to 240 minutes);
 - **BkLight_AutoOff** - Minutes to automatically turn off Backlight of the display if FPr is idle. (0 - disable; from 1 minute to 5 minutes);
 - **PinPad**
 - **PinpadComPort** - Number of COM port for communication with pinpad(1-COM1, 2-COM2, 4-Bluetooth);
 - **PinpadComBaudRate** - Baud rate of COM port that has pinpad device assigned.(from 0 to 9);
 - **PinpadType** - Type of pinpad(1 - BORICA; 2 - UBB; 3 - DSK);



- **PinpadConnectionType** - Type of connection between cash register and bank server(0- GPRS, 1-LAN);
- **PinpadReceiptCopies** - Copies of the receipt from pinpad(0 - 3);
- **PinpadReceiptInfo** - Where to print pinpad receipt(1 - in fiscal receipt; 0 - separate from fiscal receipt);
- **PinpadPaymentMenu** - Function of PY2 key in registration(1 - menu for payment with pinpad(card and loyalty scheme); 0 - payment with card with pinpad). Works only with configuration with BORICA.
- **PinpadLoyaltyPayment** - Function of PY4 key(1 - payment with pinpad with loyalty scheme; 0 - payment PY4). Works only with configuration with BORICA.
- **PinpadShortRec** - Short receipt(1) or normal receipt from pinpad(0);
- **Bluetooth** parameters (only for bluetooth enabled devices and not for FMP-55X)
 - **BthEnable** - turn on / off bluetooth module;
 - **BthDiscoverability** - turn on / off bluetooth device discoverability; (1 - discoverable; 0 - non-discoverable);
 - **BthPairing** - 0-unsecure, 1-reset and save, 2-reset;
 - **BthPinCode** - pin code for bluetooth pairing (default: 0000);
 - **BthVersion** - firmware version of bluetooth module;
 - **BthAddress** - bluetooth device address;
- **ECR** parameters;
 - **EcrLogNumber** - Logical number in the workplace (from 1 to 9999);
 - **EcrExtendedReceipt** - Type of the receipt(1 - extended, 0 - simplified);
 - **EcrDoveriteli** - Work with constituents: 1-enable(in one receipt only one constituent), 0 - disable;
 - **EcrWithoutPasswords** - Work without passwords (1 - enable; 0 - disable);
 - **EcrAskForPassword** - Require password after each receipt (1 - enable; 0 - disable);
 - **EcrAskForVoidPassword** - Require password for void operations (1 - enable; 0 - disable);;
 - **EcrConnectedOperReport** - When making Z-report, automatically make "Operator report" (1 - enable; 0 - disable);
 - **EcrConnectedDeptReport** - When making Z-report, automatically make "Report by Departments" (1 - enable; 0 - disable);
 - **EcrConnectedPluSalesReport** - When making Z-report, automatically make "Report by PLU with turnovers" (1 - enable; 0 - disable);
 - **EcrConnectedGroupsReport** - When making Z-report, automatically make "Group report" (1 - enable; 0 - disable);;
 - **EcrConnectedCashReport** - When making Z-report, automatically make "Ecr report" (1 - enable; 0 - disable);
 - **EcrUserPeriodReports** - Periodic reports (1 - enable; 0 - disable) ;
 - **EcrPluDailyClearing** - When making Z-report, automatically clear PLU turnover (1 - enable; 0 - disable);
 - **EcrSafeOpening** - Open drawer on every total (1 - enable; 0 - disable);
 - **EcrScaleBarMask** - Text up to 10 symbols. If second number of the weight barcode match any of the symbols in this string, barcode will be interpreted as normal barcode.
 - **EcrNumberBarcode** - Count of used barcodes for each programmed article (1...4);
 - **RegModeOnIdle** - Time to clear display after last receipt in miliseconds(1 - 2 147 483 647);
 - **FlushAtEndOnly** - For ECR's only. The receipt is printed after last payment;
 - **EcrMidnightWarning** - For ECR's only. Minutes before midnight, when ECR starts showing warning for Z report.
 - **EcrMandatorySubtotal** - For ECR's only. The operator must press STL key before payment. 1: yes, 0: no. default: 0;



- **Seller** - For ECR's only; Name of the seller; 36 symbols max;
- **AutoMonthReport** - For ECR's only; Flag for a monthly report suggesting; 1: yes, 0: no. default: 1;
- **AutoMonthReportDubl** - For ECR's only; Flag for a monthly report duplicate suggesting; 1: yes, 0: no. default: 1;
- **EcrUnsentWarning** - For ECR's only; Warning for unsent documents from XX hours. The value must be set in hours before device will be blocked; 0: no. default: 0;
- **Currencies**
 - **CurrNameLocal** - Local currency name(up to 3 chars);
 - **CurrNameForeign** - Foreign currency name(up to 3 chars);
 - **ExchangeRate** - Exchange rate(from 1 to 999999999, decimal point is before last five digits);
- **Unit names;**
 - **Unit_name** - Text up to 6 chars. The line is determined by "**Index**". Index 0 is for line 1...Index 19 is for line 20;
- **Header of the receipt**
 - **Header** - Text up to XX symbols. Header line is determined by "**Index**",
 - for FP-700X XX= 42, 48 or 64 columns;
 - for FMP-350X XX= 42, 48 or 64 columns;
 - for FMP-55X XX= 32 columns;
 - for DP-25X, DP-150X, WP-500X, WP-25X, WP-50X XX= 42 columns; Index 0 is for line 1, Index 9 is for line 10;
- **Footer of the receipt**
 - **Footer** - Text up to XX symbols. Footer line is determined by "**Index**".
 - for FP-700X XX= 42, 48 or 64 columns;
 - for FMP-350X XX= 42, 48 or 64 columns;
 - for FMP-55X XX= 32 columns;
 - for DP-25X, DP-150X, WP-500X, WP-25X, WP-50X XX= 42 columns; Index 0 is for line 1, Index 9 is for line 10;
- **Operators;**
 - **OperName** - Name of operator. Text up to 32 symbols. Number of operator is determined by "**Index**";
 - **OperPasw** - Password of operator. Text up to 8 symbols. (Require Service jumper)
Number of operator is determined by "**Index**";
Note: WP-500X, WP-50X, WP-25X, DP-25X, DP-150X, DP-05C: the default password for each operator is equal to the corresponding number (for example, for Operator1 the password is "1") . FMP-350X, FMP-55X, FP-700X: the default password for each operator is "0000"
- **Payments**
 - **PayName** - Name of payment. Text up to 16 symbols. Number of payment is determined by "**Index**";
 - **Payment_forbidden** - Forbid the payment (1- forbidden, 0 - not forbidden). Number of payment is determined by "**Index**";
- **Shortcut keys (Only for ECRs)**
 - **DPxx_PluCode** - Number of PLU assigned to shortcut key. (0 - Key is disabled; from 1 to 99999 for assigning PLU). Number of key is determined by "**Index**";
- **Keys discount and surcharge (Only for ECRs)**
 - **KeyNDB_value** - Value for value surcharge; Value is in cents. (from 0 to 999999999);
 - **KeyNDB_percentage** - Percentage for percentage surcharge; Value is in hundredths (0.01) of a percent. (from 0 to 9999);
 - **KeyOTS_value** - Value for value discount; Value is in cents. (from 0 to 999999999);
 - **KeyOTS_percentage** - Percentage for percentage discount; Value is in hundredths (0.01) of a percent. (from 0 to 9999);
 - **KeyNDB_forbidden** - Forbid the surcharge key (1- forbidden, 0 - not forbidden);



- **KeyOTS_forbidden** - Forbid the discount key (1- forbidden, 0 - not forbidden);
- **Service**
 - **ServPasw** - Password of the Service man. Text up to 8 symbols;(Require Service jumper)
 - **ServMessage** - Message that will be printed when "ServDate" is reached, up to 64 symbols. Message line is determined by "**Index**";
 - **ServiceDate** - Service date(Format: DD-MM-YY HH:MM:SS);
- **Receipt parameters;**
 - **PrnQuality** - Contrast of Printing (from 0 to 20);
 - **PrintColumns** - Number of printer columns:
 - for FP-700X = 42, 48 or 64 columns;
 - for FMP-350X = 42, 48 or 64 columns;
 - for FMP-55X = 32 columns;
 - for DP-25X, DP-150X, WP-500X, WP-50X, WP-25X = 42 columns;
 - **EmptyLineAfterTotal** - Print empty line after TOTAL line in fiscal receipts (1 - enable, 0 -disable);
 - **DbHHeigh_totalinreg** - Print TOTAL line in fiscal receipts with double height (1 - enable, 0 -disable);
 - **Bold_payments** – Bold print of the payment names in fiscal receipt (1 - enable, 0 -disable);
 - **DublReceipts** - Print receipt duplicate (1 - enable, 0 -disable);
 - **IntUseReceipts** - Number of internal receipts (from 0 to 9);
 - **BarcodePrint** - Print PLU barcode in the receipt (1 - enable, 0 -disable);
 - **LogoPrint** - Print the logo in the receipt (1 - enable, 0 -disable);
 - **DoveritelPrint** - Print the department name at the beginning of the receipt (1 - enable, 0 -disable);
 - **ForeignPrint** - Print total sum in foreign currency (1 - enable, 0 -disable, 2 - print exchange rate);
 - **VatPrintEnable** - Print VAT rates in the receipt (1 - enable, 0 -disable);
 - **EnableNearPaperEnd** - handling of near paper end. 0: No handling, 1: handling (default);
- **Menu functions to enable or disable from the keyboard for fiscal printers only;**
 - **DsblKeyZreport** - Disable Z report generating from the keyboard; (1 - disabled, 0 - enabled);
 - **DsblKeyXreport** - Disable X report generating from the keyboard; (1 - disabled, 0 - enabled);
 - **DsblKeyDiagnostics** - Disable diagnostic info; (1 - disabled, 0 - enabled);
 - **DsblKeyFmReports** - Disable fiscal memory reports; (1 - disabled, 0 - enabled);
 - **DsblKeyJournal** - Disable electronic journal menu; (1 - disabled, 0 - enabled);
 - **DsblKeyDateTime** - Disable changing the date and time; (1 - disabled, 0 - enabled);
 - **DsblKeyCloseReceipt** - Disable manually closing of the receipt; (1 - disabled, 0 - enabled);
 - **DsblKeyCancelReceipt** - Disable manually cancellation of the receipt; (1 - disabled, 0 - enabled);
- **Modem and network**
 - **ModemModel** - Model of the modem (0 - Quectel M72, 1 - Quectel UC20, 2 - Quectel M66, 3- Quectel UG96);
 - **SimPin** - PIN code of SIM card. Text up to 16 symbols;
 - **APN** - Access Point Name. Text up to 64 symbols. Number of APN is determined by "**Index**";
 - **APN_User** - APN Username. Text up to 32 symbols. Number of APN is determined by "**Index**";



- **APN_Pass** - APN Password. Text up to 32 symbols. Number of APN is determined by "Index";
- **SimICCID** - ICC number of the SIM card. Text up to 31 symbols (readonly);
- **SimIMSI** - IMSI number of the SIM card. Text up to 16 symbols (readonly);
- **SimTelNumber** - MSISDN number of the SIM card. Text up to 16 symbols (readonly);
- **IMEI** - IMEI of the modem(read only);
- **LanMAC** - MAC address of the LAN controller(up to 12 chars);
- **DHCPenable** Enable use of DHCP (1 - enable, 0 -disable);
- **LAN_IP** - IP address when DHCP is disabled(up to 15 chars);
- **LAN_NetMask** - Net mask when DHCP is disabled(up to 15 chars);
- **LAN_Gateway** - Default gateway when DHCP is disabled(up to 15 chars);
- **LAN_PriDNS** - Primary DNS when DHCP is disabled(up to 15 chars);
- **LAN_SecDNS** - Second DNS when DHCP is disabled(up to 15 chars);
- **LANport_fpCommands** - The number of listening port for PC connection. default: 4999 (only for devices with LAN);
- **WLAN_Enable** - Enable/disable wlan interface. 1 – enable, 0 – disable (only for devices with WLAN);
- **WLAN_DHCPenable** - Flag "Use DHCP during WLAN connection" (1 - enable, 0 - disable) (only for devices with WLAN);
- **WLAN_IP** - IP address (only for devices with WLAN);
- **WLAN_NetMask** - Net mask (only for devices with WLAN);
- **WLAN_Gateway** - Default gateway (only for devices with WLAN);
- **WLAN_PriDNS** - Primary DNS (only for devices with WLAN);
- **WLAN_SecDNS** - Secondary DNS (only for devices with WLAN);
- **WLAN_AP_SSID** - SSID of WLAN Access point. Text up to 32 symbols. Number of WLAN APN is determined by "Index"; (only for devices with WLAN)
- **WLAN_AP_Password** - Password of WLAN Access point. Text up to 32 symbols. Number of WLAN APN is determined by "Index" (only for devices with WLAN);
- **NRA data -(Read Only)**
 - **Nap1RType** - Registration type(1 char);
 - **Nap2FDType** - FD type(1 char);
 - **Nap3EIK** - EIK(up to 16 chars);
 - **Nap4EIKType** - EIK type(1 char);
 - **Nap5FDIN** - ID of the FD(up to 16 chars);
 - **Nap6FMIN** - ID of the fiscal memory of the FD (up to 16 chars);
 - **Nap7FDRID** - FD registration number(up to 16 chars);
 - **Nap8RCFD** - Reason for deregistration(up to 2 chars);
 - **Nap9FDCert** - Certificate number(up to 16 chars);
 - **Nap10IMSI** - IMSI(up to 32 chars);
 - **Nap11MSISDN** - Telephone number(up to 16 chars);
 - **Nap12OPID** - Operator ID(1 char);
 - **Nap13OrgName** - Name of the organisation(up to 200 chars);
 - **Nap14PSNum** - PS number(up to 16 chars);
 - **Nap15PSType** - PS type(up to 3 chars);
 - **Nap16SEKATTE** - EKATTE code(up to 16 chars);
 - **Nap17Settl** - Settlement name(up to 64 chars);
 - **Nap18AEkte** - Area code(up to 16 chars);
 - **Nap19Area** - Area(up to 100 chars);
 - **Nap20StreetCode** - Street code(up to 16 chars);
 - **Nap21Street** - Street(up to 100 chars);
 - **Nap22StrNo** - Street number(up to 16 chars);



- **Nap23Block** - Block(up to 16 chars);
- **Nap24En** - Entrance(up to 16 chars);
- **Nap25Fl** - Floor(up to 16 chars);
- **Nap26Ap** - Apartment(up to 16 chars);
- **Nap27PSName** - PS name(up to 200 chars);
- **Nap28SOD** - Exploitation start date(up to 19 chars);
- **Nap29ServiceEIK** - Service organization EIK(up to 16 chars);
- **Nap30ServiceEIKType** - Service organization EIK type(1 char);
- **Nap31ServiceCo** - Date of expiration of service contract(up to 19 chars);
- **Nap32APN** - APN(up to 100 chars);
- **Nap33IP** - IP(up to 200 chars);
- **Nap34Port** - Port(up to 5 chars);
- **Nap35APNUser** - APN name(up to 32 chars);
- **Nap36APNPassword** - APN password(up to 32 chars);
- **NapBlockDateTime** - The date and time after which the device will be blocked due to a lack of connection with the NRA server;

Note: "**Index**" = 0 for current values, "**Index**" = 1 for saved values after successful registration/change on the NRA server;

- **Variables for FM (Read Only)**
 - **nZreport** - Number of current Z-report;
 - **nReset** - Number of current memory failure;
 - **nVatChanges** - Number of current VAT change;
 - **nIDnumberChanges** - Number of current SN changes (0 - not programmed; 1 - programmed);
 - **nFMnumberChanges** - Number of current FM number changes (0 - not programmed; 1 - programmed);
 - **nTAXnumberChanges** - Number of current TAX number changes (0 - not programmed; 1 - programmed);
 - **valVat** - Current value of VAT. Number of VAT is determined by "**Index**";
 - **FMDeviceID** - ID of the fiscal memory;
 - **IDnumber** - Serial number of the ECR;
 - **FMnumber** - Number of FM;
 - **TAXnumber** - TAX number;
 - **FmWriteDateTime** - Date and time for writing block in FM;
 - **LastValiddate** - Last valid date (written on FM or EJ);
- **Variables for FM (Read and Write)**
 - **TAXlabel** - TAX number label(up to 10 chars);
- **Internal variables (Read Only)**
 - **UNP** - Last printed unique sale number (21 chars "LLDDDDDD-CCCC-DDDDDD", L[A-Z], C[0-9A-Za-z], D[0-9]);
 - **StornoUNP** - Last printed unique sale number in strono document (21 chars "LLDDDDDD-CCCC-DDDDDD", L[A-Z], C[0-9A-Za-z], D[0-9]);
 - **Fiscalized** - flag that shows if FPr is fiscalized. (1 - fiscalized; 0 - not fiscalized);
 - **DFR_needed** - Shows if fiscal receipt is issued after last Z-report. (1 - Z-report is needed; 0 - Z-report is not needed);
 - **DecimalPoint** - number of symbols after decimal point;
 - **nBon** - global number of receipts;
 - **nFBon** - Global number of fiscal receipts;
 - **nInvoice** - Number of invoices;
 - **InvoiceRangeBeg** - Start of the invoice range(from 0 to 999999999);
 - **InvoiceRangeEnd** - End of the invoice range(from 0 to 999999999);
 - **nFBonDailyCount** - Number of fiscal receipts for the day;



- **nLastFiscalDoc** - Last number of fiscal receipt;
- **CurrClerk** - number of current operator;
- **EJNewJurnal** - New EJ;
- **EJNumber** - Number of current EJ;
- **DateLastSucceededSent** - Date/time of last connection to the server;
- **NapRegistered** - ECR is registered on the NRA server (1 - registered; 0 -not registered);
- **DeregOnSever** - ECR is deregistered on the NRA server (1 - deregistered; 0 - not deregistered);
- **Item Groups**
 - **ItemGroups_name** - Name of item group. Text up to 32 symbols. Number of item group is determined by "**Index**";
- **Department registers**
 - **Dept_name** - Name of department. Text up to 72 symbols. Number of department is determined by "**Index**";
 - **Dept_price** - Programmed price of department(from 0 to 999999999). Number of department is determined by "**Index**";
 - **Dept_vat** - VAT group of department(from 1 to 8). Number of department is determined by "**Index**";
- **ECR variables only in DP-05C**
 - **DHL_Algo** - flag that tells if the entered tovaritelnica has to be checked with DHL's algorithm;
 - **EIK_validation** - flag that tells if the entered EIK number has to be valid;
 - **EGN_validation** - flag that tells if the entered EGN number has to be valid;
 - **Bonuses** - Description of the bonus. Text up to 40 symbols. Number of bonus is determined by "**Index**";
 - **TextReducedVAT** - Free text lines describing reason for reduced VAT. Text up to 42 symbols. Number of line is determined by "**Index**";

Optional parameters:

- **Index** - Used for index if variable is array. For variable that is not array can be left blank. Default: 0;

Note

For example: Header[], Index 0 refer to line 1. Index 9 refer to line 10.

- **Value** - If this parameter is blank ECR will return current value (*Answer(2)*). If the value is set, then ECR will program this value (*Answer(1)*);

Answer(1):

{ErrorCode}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;

Answer(2):

{ErrorCode}<SEP>{VarValue}<SEP>

- **ErrorCode** - Indicates an error code. If command passed, **ErrorCode** is 0;
- **VarValue** - Curent value of the variable;

Status bits

The current status of the device is coded in field 8 bytes long which is sent within each message of the fiscal printer. Description of each byte in this field:

Byte 0: General purpose

- 0.7 = 1 Always 1.
- 0.6 = 1 Cover is open.



- 0.5 = 1 General error - this is OR of all errors marked with #.
- 0.4 = 1# Failure in printing mechanism.
- 0.3 = 0 Always 0.
- 0.2 = 1 The real time clock is not synchronized.
- 0.1 = 1# Command code is invalid.
- 0.0 = 1# Syntax error.

Byte 1: General purpose

- 1.7 = 1 Always 1.
- 1.6 = 0 Always 0.
- 1.5 = 0 Always 0.
- 1.4 = 0 Always 0.
- 1.3 = 0 Always 0.
- 1.2 = 0 Always 0.
- 1.1 = 1# Command is not permitted.
- 1.0 = 1# Overflow during command execution.

Byte 2: General purpose

- 2.7 = 1 Always 1.
- 2.6 = 0 Always 0.
- 2.5 = 1 Nonfiscal receipt is open.
- 2.4 = 1 EJ nearly full.
- 2.3 = 1 Fiscal receipt is open.
- 2.2 = 1 EJ is full.
- 2.1 = 1 Near paper end.
- 2.0 = 1# End of paper.

Byte 3: Not used

- 3.7 = 1 Always 1.
- 3.6 = 0 Always 0.
- 3.5 = 0 Always 0.
- 3.4 = 0 Always 0.
- 3.3 = 0 Always 0.
- 3.2 = 0 Always 0.
- 3.1 = 0 Always 0.
- 3.0 = 0 Always 0.

Byte 4: Fiscal memory

- 4.7 = 1 Always 1.
- 4.6 = 1 Fiscal memory is not found or damaged.
- 4.5 = 1 OR of all errors marked with '*' from Bytes 4 и 5.
- 4.4 = 1* Fiscal memory is full.
- 4.3 = 1 There is space for less then 60 reports in Fiscal memory.
- 4.2 = 1 Serial number and number of FM are set.
- 4.1 = 1 Tax number is set.
- 4.0 = 1* Error when trying to access data stored in the FM.

Byte 5: Fiscal memory

- 5.7 = 1 Always 1.
- 5.6 = 0 Always 0.
- 5.5 = 0 Always 0.
- 5.4 = 1 VAT are set at least once.



- 5.3 = 1 Device is fiscalized.
- 5.2 = 0 Always 0.
- 5.1 = 1 FM is formatted.
- 5.0 = 0 Always 0.

Byte 6: Not used

- 6.7 = 1 Always 1.
- 6.6 = 0 Always 0.
- 6.5 = 0 Always 0.
- 6.4 = 0 Always 0.
- 6.3 = 0 Always 0.
- 6.2 = 0 Always 0.
- 6.1 = 0 Always 0.
- 6.0 = 0 Always 0.

Byte 7: Not used

- 7.7 = 1 Always 1.
- 7.6 = 0 Always 0.
- 7.5 = 0 Always 0.
- 7.4 = 0 Always 0.
- 7.3 = 0 Always 0.
- 7.2 = 0 Always 0.
- 7.1 = 0 Always 0.
- 7.0 = 0 Always 0.

Error codes

Error code	Error name	Description
(100000 - 100100) GENERIC ERRORS - FISCAL DEVICES		
-100001	ERR_IO	General error in fiscal device: In - out error(cannot read or write)
-100002	ERR_CHECKSUM	General error in fiscal device: Wrong checksum
-100003	ERR_END_OF_DATA	General error in fiscal device: No more data
-100004	ERR_NOTFOUND	General error in fiscal device: The element is not found
-100005	ERR_NO_RECORDS	General error in fiscal device: There are no records found
-100006	ERR_ABORTED	General error in fiscal device: The operation is aborted
-100007	ERR_WRONG_MODE	Wrong mode(standart, training...) is selected.
-100008	ERR_NOT_READY	General error in fiscal device: Device is not ready
-100009	ERR_NOTHING_TO_PRINT	General error in fiscal device: Nothing to print
(100100 - 100254) FISCAL MEMORIES		
-100100	ERR_FM_BUSY	Fiscal memory error: Fiscal memory is busy
-100101	ERR_FM_FAILURE	Fiscal memory error: Fiscal memory failure. Could not read or write
-100102	ERR_FM_WRITE_PROTECTED	Fiscal memory error: Forbidden write in fiscal memory
-100103	ERR_FM_WRONG_ADDRESS	Fiscal memory error: Wrong address in fiscal memory



-100104	ERR_FM_WRONG_SIZE	Fiscal memory error: Wrong size in fiscal memory
-100105	ERR_FM_NOT_CONNECTED	Fiscal memory error: Fiscal memory is not connected
-100106	ERR_FM_WRONG_CHECK_SUM	Fiscal memory error: Wrong checksum in fiscal memory(invalid data)
-100107	ERR_FM_BLOCK_IS_EMPTY	Fiscal memory error: Empty block in fiscal memory
-100108	ERR_FM_MAX_NUMBER	Fiscal memory error: Maximum number of block in fiscal memory
-100109	ERR_FM_WRONG_RANGE	Fiscal memory error: Wrong range in fiscal memory
-100110	ERR_FM_EMPTY_RANGE	Fiscal memory error: Empty range in fiscal memory
-100111	ERR_FM_NEW_MODULE	Fiscal memory error: New module in fiscal memory
-100112	ERR_FM_NOT_EMPTY	Fiscal memory error: Fiscal memory is not empty
-100113	ERR_FM_NOT_EQUAL	Fiscal memory error: Fiscal memory is not equal
-100114	ERR_FM_FULL	Fiscal memory error: Fiscal memory is full
-100115	ERR_FM_NEED_UPDATE	Fiscal memory error: Fiscal memory needs update
-100116	ERR_FM_BLOCKED	Fiscal memory error: Fiscal memory is blocked
(100400 - 100499) PRINTER DRIVER ERRORS		
-100400	ERR_LTP_VCCERR	Line thermal printer mechanism error: Power supply error (3,3 V)
-100401	ERR_LTP_SVPERR	Line thermal printer mechanism error: Power supply error (24V or 8V)
-100402	ERR_LTP_STHERR	Line thermal printer mechanism error: Head overheating
-100403	ERR_LTP_PESENS	Line thermal printer mechanism error: Paper end
-100404	ERR_LTP_HDSENS	Line thermal printer mechanism error: Cover is open
-100405	ERR_LTP_NESENS	Line thermal printer mechanism error: Near paper end
-100406	ERR_LTP_MKSENS	Line thermal printer mechanism error: Mark sensor - not used
-100407	ERR_LTP_CUTERR	Line thermal printer mechanism error: Cutter error
-100408	ERR_LTP_PR_ERR	Line thermal printer mechanism error: Not used
-100409	ERR_LTP_PR_BUSY	Line thermal printer mechanism error: Not used
-100410	ERR_LTP_BZLPDEC	Line thermal printer mechanism error: Not used
-100411	ERR_LTP_BZLCLMP	Line thermal printer mechanism error: Not used
-100412	ERR_LTP_CHARGE_MODE	Line thermal printer mechanism error: Not used
-100413	ERR_LTP_INZERR_MODE	Line thermal printer mechanism error: Not used
-100414	ERR_LTP_MOTOR_OVERRUN	Printer on time is overrun.
(100500 - 100999) SYSTEM ERRORS		
-100500	ERR_PROGRAM_SELF_CHECK_ERROR	System error: Memory structure error
-100501	ERR_SRAM_ERROR	System error: Error in RAM
-100502	ERR_FLASH_ERROR	System error: Flash memory error
-100503	ERR_SDCARD_ERROR	System error: SD card error
-100504	ERR_INVALID_MSG_FILE	System error: Invalid message file
-100505	ERR_FM_ERROR	System error: Fiscal memory error(could not write or read)



-100506	ERR_NO_RAM_BATTERY	System error: No RAM battery
-100507	ERR_SAM_ERROR	System error: SAM module error
-100508	ERR_RTC_ERROR	System error: Real time clock error
-100509	ERR_PROGRAM_EXRAM_CHECK_ERROR	System error: Memory error
-100510	ERR_SDCARD_WRONG_SIZE	System error: The size of SD card is wrong.
-100511	ERR_TPM_ERROR	System error: TPM module error
(101000 - 101499) COMMON LOGICAL ERRORS		
-101000	ERR_NO_HEAP_MEMORY	Common logical error: No heap memory(cannot allocate memory for operation)
-101001	ERR_FILE_MANIPULATE	Common logical error: File manipulate error
-101003	ERR_REJECTED	Common logical error: Operation is rejected
-101004	ERR_BAD_INPUT	Common logical error: Bad input. Some of the data or parameters are incorrect
-101005	ERR_IAP	Common logical error: In Application Programming error
-101006	ERR_NOT_POSSIBLE	Common logical error: The execution of the operation is not possible
-101007	ERR_TMOUT	Common logical error: Timeout. The time for waiting execution is out
-101007	ERR_TIMEOUT	Common logical error: Timeout. The time for waiting execution is out
-101008	ERR_INVALID_TIME	Common logical error: Invalid time
-101009	ERR_CANCELLED	Common logical error: The operation is cancelled
-101010	ERR_INVALID_FORMAT	Common logical error: Invalid format
-101011	ERR_INVALID_DATA	Common logical error: Invalid data
-101012	ERR_PARSE_ERROR	Common logical error: Data parsing error
-101013	ERR_HARDWARE_CONFIGURATION	Common logical error: Hardware configuration error
-101014	ERR_ACCESS_DENIED	ERR_ACCESS_DENIED
-101015	ERR_BAD_DATA_LENGTH	Wrong data length
-101016	ERR_VERIFY_Z	Error during verification of Z reports
-101017	ERR_NO_PERMISSION	Common logical error: No permission
(101500 - 101999) UPDATE ERRORS		
-101500	ERR_NO_UPDATE	Update error: No update. The device is up to date
-101501	ERR_UPDATE_IN_PROGRESS	Update error: Update is already in progress
(102000 - 102999) GENERAL ERRORS		
-102000	ERR_LOW_BATTERY	Battery error: Low battery
-102001	ERR_LOW_BATTERY_WARNING	Battery error: Low battery warning
-102002	ERR_OPER_WRONG_PASSWORD	Operator error: Wrong operator password
-102003	ERR_IDNUMBER_IS_EMPTY	ECR error: ID number is empty
-102004	ERR_NOT_FOUND_BLUETOOTH	Bluetooth error: Bluetooth is not found
-102005	ERR_DISPLAY_DISCONNECTED	Display error: Display is not connected
-102006	ERR_PRINTER_DISCONNECTED	Printer error: Printer is not connected



-102007	ERR_SD_NOT_PRESENT	SD card error: SD card not present
-102008	ERR_SD2_NOT_PRESENT	SD card error: SD2 card not present
-102009	ERR_VAT_RATES_ARE_EMPTY	ECR error: VAT rates is not set.
-102010	ERR_HEADER_IS_EMPTY	ECR error: Header lines are empty.
-102011	ERR_ZDDS_NUM_IS_EMPTY	User is registered by VAT, but number of the user is not entered.
-102012	ERR_FMNUMBER_IS_EMPTY	ECR error: FM number is empty
-102013	ERR_SERVICEMAN_NAME_IS_EMPTY	ECR error: Serviceman name is empty
-102014	ERR_SERVICEMAN_ID_IS_EMPTY	ECR error: Serviceman ID is empty
-102015	ERR_TAXOFFICE_ID_IS_EMPTY	ECR error: Tax office ID is empty!
-102016	ERR_WRONG_FORMAT	ECR error: Wrong format
-102017	ERR_TAXNUMBER_IS_EMPTY	ECR error: TAX number is empty
-102018	ERR_WRONG_IDNUMBER	ECR error: ID number is wrong
-102019	ERR_DATETIME_EARLIER_THAN_PREV_Z	ECR error: Date and time are earlier than date and time of previous Z report.
-102020	ERR_NEED_SOFTWARE_PASSWORD	ECR error: The software password is not entered
(103000 - 103999) PLU DATABASE		
-103000	ERR_PLUDB_NOT_FOUND	PLU database error: PLU database is not found
-103001	ERR_PLUDB_PLUCODE_EXISTS	PLU database error: PLU code already exists
-103002	ERR_PLUDB_BARCODE_EXISTS	PLU database error: Barcode already exists
-103003	ERR_PLUDB_FULL	PLU database error: PLU database is full
-103004	ERR_P_HAVE_TURNOVER	PLU database error: PLU has turnover
-103005	ERR_PLUDB_NAME_EXISTS	PLU database error: In the PLU base has an article with same name.
-103006	ERR_PLUDB_NAMES_NOT_UNIQUE	PLU database error: PLU name is not unique.
-103007	ERR_PLUDB_FORMAT_INCOMPATIBLE	PLU database error: Database format is not compatible.
-103008	ERR_PLUDB_CAN_NOT_OPEN	Can't open the PLU database file
(104000 - 104999) SERVICE OPERATIONS		
-104000	ERR_NEED_Z_REPORT	Service operation error: Z report is needed for this operation
-104001	ERR_NEED_SERVICE_JUMPER	Service operation error: Service jumper is needed for this operation
-104002	ERR_NEED_SERVICE_PASSWORD	Service operation error: Service password is needed for this operation
-104003	ERR_FORBIDEN	Service operation error: The operation is forbidden
-104004	ERR_NEED_SERVICE_INTERVENTION	Service operation error: Service intervention is needed
-104005	ERR_NEED_ALL_CLEARING_REPORTS	Service operation error: All clearing report is needed.
-104006	ERR_Z_REPORT_CLOSED	Service operation error: Z report closed.
-104007	ERR_NEED_MONTH_REPORT	Service operation error: Montly report needed.
-104008	ERR_NEED_YEAR_REPORT	Service operation error: Year report needed.
-104009	ERR_NEED_BACKUP	Service operation error: Backup needed.
-104010	ERR_NEED_ALL_PAIDOUT	ERR_NEED_ALL_PAIDOUT



-104011	ERR_NEED_OPERATOR_Z_REPORT	Clearing report for operator is needed.
-104012	ERR_NEED_GROUP_Z_REPORT	Clearing report for item group is needed.
-104013	ERR_NEED_VAT_CHANGES	VAT changes is needed.
(105000 - 105999) EJ - ERRORS		
-105000	ERR_EJ_NO_RECORDS	EJ error: No records in EJ
-105001	ERR_CANNOT_ADD_TO_EJ	EJ error: Cannot add to EJ
-105002	ERR_EJ_WRONG_MAC_RECORD	EJ error: SAM module signature error
-105003	ERR_EJ_IMPOSSIBLE_TO_CHK_MAC_RECORD	EJ error: Signature key version is changed -> impossible check
-105004	ERR_EJ_BAD_RECORDS	EJ error: Bad record in EJ
-105005	ERR_EJ_CAN_NOT_GENERATE_MAC	EJ error: Generate signature error(cannot generate signature)
-105006	ERR_EJ_WRONG_TYPE_TO_SIGN	EJ error: Wrong type of document to sign
-105007	ERR_EJ_ALREADY_SIGNED	EJ error: Document is already signed
-105008	ERR_EJ_NOT_FROM_THIS_DEVICE	EJ error: EJ is not from this device
-105009	ERR_EJ_NEAR_FULL	EJ error: EJ is almost full
-105010	ERR_EJ_FULL	EJ error: EJ is full
-105011	ERR_EJ_WRONG_FORMAT	EJ error: Wrong format of EJ
-105012	ERR_EJ_NOT_READY	The electronic journal is not ready.
-105013	ERR_EJ_NEED_NEW	Error in EJ structure. Create new one.
(106000 - 106999) CLIENTS DATABASE ERRORS		
-106000	ERR_R_FIRM_NOTEXIST	Client database error: Firm does not exist
-106001	ERR_FIRMDB_FIRMCODE_EXISTS	Client database error: Firmcode already exists
-106002	ERR_FIRMDB_EIK_EXISTS	Client database error: EIK already exists
-106003	ERR_FIRMDB_FULL	Client database error: Firm database is full
-106004	ERR_FIRMDB_NOT_FOUND	Client database error: Firm database is not found
(107000 - 107499) CERTIFICATE STORE		
-107001	ERR_INVALID_CERTIFICATE	Invalid certificate.
-107002	ERR_VALID_CERT_EXISTS	Certificate exist.
-107003	ERR_CERT_UNPACKING_FAILED	Certificate unpack failed.
-107004	ERR_CERT_WRONG_PASSWORD	Wrong certificate password.
-107005	ERR_CERT_FILE_WRITE	File write error.
-107006	ERR_CERT_FILE_READ	File read error.
-107007	ERR_CERT_NOT_FOUND	Certificate not found.
(108000 - 108999) DISCOUNT CARDS DATABASE ERRORS		
-108000	ERR_R_DISC_NOTEXIST	Discount card database error: Discount card does not exist
-108001	ERR_DISCDB_DISCCODE_EXISTS	Discount card database error: Discount card already exists
-108002	ERR_DISCDB_BARCODE_EXISTS	Discount card database error: Barcode already exists



-108003	ERR_DISCDB_FULL	Discount card database error: Discount card database is full
-108004	ERR_DISCDB_NOT_FOUND	Discount card database error: Discount card not found
(109000 - 109999) SMARTCARD ERRORS		
-109981	ERR_SMARTCARD_NOT_PRESENT	Smartcard error: No card in the holder.
-109982	ERR_SMARTCARD_CONFIG	Smartcard error: Configuration failed
-109983	ERR_SMARTCARD_COMMUNICATION	Smartcard error: SmartCard communication error.
-109984	ERR_SMARTCARD_CARD_FAULT	Smartcard error: Supply voltage drop, a VCC over-current detection or overheating.
-109985	ERR_SMARTCARD_MODULE_ERROR	Smartcard error: Unexpected response from the applet.
-109986	ERR_SMARTCARD_WRONG_ID	The ID of the smart card does not match the ID stored in the fiscal memory.
(110100 - 110199) EXT FISCAL DEVICE ERRORS		
-110100	ERR_DEVICE_COMM_ERROR	Device error: Communication error
-110101	ERR_DEVICE_WRONG_STRUCT	Device error: Wrong struct format
-110102	ERR_DEVICE_STFLAG_ACTIVE	Device error: ST flag is active
-110103	ERR_DEVICE_INVALID_DATA	Device error: Invalid data
-110104	ERR_DEVICE_NOT_FISCALIZED	Device error: Device is not fiscalized
-110105	ERR_DEVICE_ALREADY_FISCALIZED	Device error: Device is already fiscalized
-110106	ERR_DEVICE_IN_SERVICE_MODE	Device error: Device is in service mode
-110107	ERR_DEVICE_PASSED_SERVICE_DATE	Device error: Service date is passed
-110108	ERR_DEVICE_DAY_IS_OPEN	Device error: Day(shift) is open
-110109	ERR_DEVICE_DAY_IS_CLOSED	Device error: Day(shift) is closed
-110110	ERR_DEVICE_WRONG_NUMBERS	Device error: Z-report number and shift number are not equal
-110111	ERR_DEVICE_ADMIN_ONLY	Device error: Only admin has permission
-110112	ERR_DEVICE_UNFISCALIZED	Device error: Fiscal memory is closed
(110200 - 110299) NAP SERVER ERRORS		
-110200	ERR_NAP_OPEN_SESSION	NAP server error: Error open session
-110201	ERR_NAP_PREPARE_DATA	NAP server error: Error preparing data for server
-110202	ERR_NAP_SEND_DATA	NAP server error: There is unsend data
-110203	ERR_NAP_RECV_DATA	NAP server error: Receiving data error
-110204	ERR_NAP_EMPTY_DATA	NAP server error: Empty data
-110205	ERR_NAP_NEGATIVE_ANSWER	NAP server error: Server negative answer
-110206	ERR_NAP_WRONG_ANSWER_FORMAT	NAP server error: Wrong answer format
-110207	ERR_NAP_HOSTDI_ZERRO	NAP server error: Server HOSTDI is zero
-110208	ERR_NAP_EXCEPTION	NAP server error: Server exception
-110209	ERR_NAP_NOTPERSONALIZED	NAP server error: Not registered on server
-110209	ERR_NAP_NOTREGISTERED	NAP server error: Not registered on server
-110210	ERR_NAP_BLOCKED_72H	NAP server error: Communication with NAP server is blocked



-110211	ERR_NAP_BLOCKED_NO_MODEM_LAN	NAP server error: Modem error
-110212	ERR_NAP_BUSY	NAP server error: NAP is busy
-110213	ERR_NAP_REGISTERED	NAP server error: Already registered
-110214	ERR_NAP_WRONG_PSTYPE	NAP server error: Wrong PS type
-110215	ERR_NAP_DEREG_ON_SERVER	NAP server error: Deregistered in NAP
-110216	ERR_NAP_WRONG_IMSI	NAP server error: Wrong IMSI number
-110217	ERR_NAP_BLOCKED_MAX_ZERRORS	NAP server error: Device is blocked(maximum Z-reports)
-110218	ERR_NAP_WRONG_FDTYPE	NAP server error: Wrong FD(Fiscal device) type
-110219	ERR_NAP_BLOCKED_BY_SERVER	NAP server error: The ECR is blocked by server
-110220	ERR_NAP_BLOCKED_ERROR_FROM_SERVER	NAP server error: The ECR is blocked - server error
-110221	ERR_NAP_NO_SERVER_ADDRESS	NAP server error: No server address
-110222	ERR_NAP_NO_REGISTRATIONS_POSSIBLE	NAP server error: Max. registrations reached.
-110223	ERR_NAP_INVALID_OPERATOR_INN	Invalid INN of the cashier
-110224	ERR_NAP_INVALID_SERVER_INN	Invalid INN of the server
-110225	ERR_NAP_BLOCKED_MAX_SELLERRORS	NAP server error: Device is blocked(unsent sales documents)
-110226	ERR_NAP_BLOCKED_24H	NAP server error: Communication with NAP server is blocked. More than 24 hours from last sent receipt.
(110300 - 110399) WORK_INVALID		
-110300	ERR_WORK_INVALID_FILE	Working error: Invalid file
-110301	ERR_WORK_INVALID_PARAM	Working error: Invalid parameters
(110500 - 110599) MODEM ERRORS		
-110500	ERR_MODEM_CTRL	Modem error: error in communication between device and modem
-110501	ERR_MODEM_NO_SIM	Modem error: No SIM card
-110502	ERR_MODEM_PIN	Modem error: Wrong PIN of SIM
-110503	ERR_MODEM_ATTACH	Modem error: Cannot register to mobile network
-110504	ERR_MODEM_PPP	Modem error: No PPP connection(cannot connect)
-110505	ERR_MODEM_CONFIG	Modem error: Wrong modem configuration(for example - no programmed apn)
-110506	ERR_MODEM_WAIT_INIT	Modem error: Modem initializing
-110507	ERR_MODEM_NOTREADY	Modem error: Modem is not ready
-110508	ERR_MODEM_REMOVE_SIM	Modem error: Remove SIM card
-110509	ERR_MODEM_CELL_FOUND	Modem error: Modem found a cell
-110510	ERR_MODEM_CELL_NOTFOUND	Modem error: Modem does not find a cell
-110511	ERR_MODEM_LOT_DAYS_FAIL	Modem error: Failed lot days
(110600 - 110699) WIFI ERRORS		
-110601	ERR_MODEM_CONNECT_AP	Modem error: Device is not connected to AP(access point)



(110700 - 110799) NETWORK ERRORS		
-110700	ERR_NET_DNS_RESOLVE	Network error: Cannot resolve address
-110701	ERR_NET_SOCKET	Network error: Cannot open socket for communication with server
-110702	ERR_NET_CONNECTION	Network error: Connection error(cannot connect to a server)
-110703	ERR_NET_CONFIG	Network error: Config error(for example: no server address)
-110704	ERR_NET_SOCKET_CONNECTED	Network error: Connection socket is already opened
-110705	ERR_NET_SSL_ERROR	Network error: SSL communication error(something went wrong in cryptographic protocol)
-110706	ERR_NET_HTTP_ERROR	Network error: HTTP communication error(something went wrong in http protocol)
(110800 - 110899) TAX_TERMINAL_ERRORS		
-110800	ERR_DT_OK	Tax terminal error: No error
-110801	ERR_DT_UNKNOWN_ID	Tax terminal error: Unknown ID
-110802	ERR_DT_INVALID_TOKEN	Tax terminal error: Invalid token(key from the server)
-110803	ERR_DT_PROTOCOL_ERROR	Tax terminal error: Protocol error
-110804	ERR_DT_UNKNOWN_COMMAND	Tax terminal error: The command is unknown
-110805	ERR_DT_UNSUPPORTED_COMMAND	Tax terminal error: The command is not supported
-110806	ERR_DT_INVALID_CONFIGURATION	Tax terminal error: Invalid configuration
-110807	ERR_DT_SSL_IS_NOT_ALLOWED	Tax terminal error: SSL is not allowed
-110808	ERR_DT_INVALID_REQUEST_NUMBER	Tax terminal error: Invalid request number
-110809	ERR_DT_INVALID_RETRY_REQUEST	Tax terminal error: Invalid retry request
-110810	ERR_DT_CANT_CANCEL_TICKET	Tax terminal error: Cannot cancel ticket
-110811	ERR_DT_OPEN_SHIFT_TIMEOUT_EXPIRED	Tax terminal error: More than 24 hours from shift opening
-110812	ERR_DT_INVALID_LOGIN_PASSWORD	Tax terminal error: Invalid login name or password
-110813	ERR_DT_INCORRECT_REQUEST_DATA	Tax terminal error: Incorrect request data
-110814	ERR_DT_NOT_ENOUGH_CASH	Tax terminal error: Not enough cash
-110815	ERR_DT_BLOCKED	Tax terminal error: Blocked from server
-110854	ERR_DT_SERVICE_TEMPORARILY_UNAVAILABLE	Tax terminal error: Service temporarily unavailable
-110855	ERR_DT_UNKNOWN_ERROR	Tax terminal error: Unknown error
(111000 - 111499) REGMODE ERRORS		
-111000	ERR_R_CLEAR	Registration mode error: Common error, followed by deliting all data for the command
-111001	ERR_R_NOCLEAR	Registration mode error: Common error, followed by partly deliting data for the command
-111002	ERR_R_SYNTAX	Registration mode error: Syntax error. Check the parameters of the command
-111003	ERR_R_NPOSSIBLE	Registration mode error: Cannot do operation
-111004	ERR_R_PLU_NOTEXIST	Registration mode error: PLU code was not found
-111005	ERR_R_PLU_VAT_DISABLE	Registration mode error: Forbidden VAT



-111006	ERR_R_PLU_QTY_PRC	Registration mode error: Overflow in multiplication of quantity and price
-111007	ERR_R_PLU_NO_PRC	Registration mode error: PLU has no price
-111008	ERR_R_PLU_GRP_RANGE	Registration mode error: Group is not in range
-111009	ERR_R_PLU_DEP_RANGE	Registration mode error: Department is not in range
-111010	ERR_R_BAR_NOTEXIST	Registration mode error: BAR code does not exist
-111011	ERR_R_OVF_TOTAL	Registration mode error: Overflow of the PLU turnover
-111012	ERR_R_OVF_QTY	Registration mode error: Overflow of the PLU quantity
-111013	ERR_R_ECR_OVR	Registration mode error: ECR daily registers overflow
-111014	ERR_R_BILL_TL_OVR	Registration mode error: Bill total register overflow
-111015	ERR_R_OPEN_BON	Registration mode error: Receipt is opened
-111016	ERR_R_CLOSED_BON	Registration mode error: Receipt is closed
-111017	ERR_R_PAY_NOCASH	Registration mode error: No cash in ECR
-111018	ERR_R_PAY_STARTED	Registration mode error: Payment is initiated
-111019	ERR_R_OVF_TRZ_BUFF	Registration mode error: Maximum number of sales in receipt
-111020	ERR_R_NO_TRANSACTIONS	Registration mode error: No transactions
-111021	ERR_R_NEGATIVE_SUMVAT	Registration mode error: Possible negative turnover
-111022	ERR_R_PYFOREIGN_HAVERESTO	Registration mode error: Foreign payment has change
-111023	ERR_R_TRZ_NOT_EXIST	Registration mode error: Transaction is not found in the receipt
-111024	ERR_R_END_OF_24_HOUR_PERIOD	Registration mode error: End of 24 hour blocking
-111025	ERR_R_NO_VALID_INVOICE	Registration mode error: Invalid invoice range
-111026	ERR_R_POS_TERM_CANCELED	Registration mode error: Operation is cancelled by operator
-111027	ERR_R_POS_TERM_APPROVED	Registration mode error: Operation approved by POS
-111028	ERR_R_POS_TERM_NOT_APPROVED	Registration mode error: Operation is not approved by POS
-111029	ERR_R_POS_TERM_CONN_ERR	Registration mode error: POS terminal communication error
-111030	ERR_R_PLU_QTY_PRC_TOO_LOW	Registration mode error: Multiplication of quantity and price is 0
-111031	ERR_R_VALUE_TOO_BIG	Registration mode error: Value is too big
-111032	ERR_R_VALUE_BAD	Registration mode error: Value is bad
-111033	ERR_R_PRICE_TOO_BIG	Registration mode error: Price is too big
-111034	ERR_R_PRICE_BAD	Registration mode error: Price is bad
-111035	ERR_R_ALL_VOID_SELECTED	Registration mode error: Operation all void is selected to be executed
-111036	ERR_R_ONLY_ALL_VOID_IS_POSSIBLE	Registration mode error: Only all void operation is permitted
-111040	ERR_R_REST_NOFREESPC_SELLS	Registration mode error: Restaurant: There is no free space for other purchases
-111041	ERR_R_REST_NOFREESPCFORNEWACNT	Registration mode error: Restaurant: There is no free space for new account
-111042	ERR_R_REST_ACCOUNT_IS_OPENED	Registration mode error: Restaurant: Account is already opened
-111043	ERR_R_REST_WRONG_INDEX	Registration mode error: Restaurant: Wrong index



-111044	ERR_R_REST_ACNT_IS_NOTFOUND	Registration mode error: Restaurant: Account is not found
-111045	ERR_R_REST_NOT_PERMITTED	Registration mode error: Restaurant: Not permitted(only for admins)
-111046	ERR_R_OPEN_NONFISCALBON	Registration mode error: non-fiscal receipt is opened
-111047	ERR_R_OPEN_FISCALBON	Registration mode error: fiscal receipt is opened
-111048	ERR_R_BUYERS_TIN_IS_ENTERED	Registration mode error: Buyers TIN is already entered
-111049	ERR_R_BUYERS_TIN_IS_NOT_ENTERED	Registration mode error: Buyers TIN is not entered
-111050	ERR_R_PAY_NOT_STARTED	Registration mode error: Payment is not initiated
-111051	ERR_R_BON_TYPE_MISMATCH	Registration mode error: Receipt type mismatch
-111052	ERR_R_REACH_BON_TL_LIMIT	Registration mode error: Receipt total limit is reached
-111053	ERR_R_CASH_NO_MULT_MIN_COIN	Registration mode error: Sum cannot be divided by the minimum coin
-111054	ERR_R_PAY_BIG_AMOUNT	Registration mode error: Sum must be <= payment amount
-111055	ERR_R_PAY_VOUCHER_NEED_INPUT_SUM	Registration mode error: Sum of voucher must be entered when paying with voucher
-111056	ERR_R_PAY_VOUCHER_NEED_SURCHARGE	Registration mode error: Value surcharge of the difference between voucher sum and total must be done when paying with voucher and sum > total
-111057	ERR_R_PAY_FOREIGN_DISABLED	Registration mode error: Payment with foreign currency is disabled
-111058	ERR_R_PAY_FOREIGN_IMPOSSIBLE	Registration mode error: Payment with foreign currency is impossible
-111059	ERR_R_PAY_FOREIGN_SMALL_AMOUNT	Registration mode error: Sum must be bigger or equal to payment amount
-111060	ERR_R_SAFE_OPEN_DISABLED	Registration mode error: Safe opening is disabled
-111061	ERR_R_PAY_FORBIDDEN	Registration mode error: Forbidden payment
-111062	ERR_R_PERC_KEY_FORBIDDEN	Registration mode error: Forbidden key for surcharge/ discount
-111063	ERR_R_AMOUNT_BIGGER_BILLAMOUNT	Registration mode error: Entered sum is bigger than receipt sum
-111064	ERR_R_AMOUNT_SMALLER_BILLAMOUNT	Registration mode error: Entered sum is smaller than receipt sum
-111065	ERR_R_ZERO_BILLAMOUNT	Registration mode error: Fiscal printer: Sum of receipt is 0. Operation 'void' is needed
-111066	ERR_R_ALL_VOID_EXECUTED	Registration mode error: Fiscal printer: Operation 'void' is executed. Close receipt is needed
-111067	ERR_R_OPEN_STORNOBON	Registration mode error: Storno receipt is opened
-111068	ERR_R_PAY_ZERO_AMOUNT	Registration mode error: Sum is not entered
-111069	ERR_R_PLU_PRICETYPE_RANGE	Registration mode error: Price type is invalid
-111070	ERR_R_PLU_PRICETYPE_LINKED	Registration mode error: Linked surcharge is forbidden
-111071	ERR_R_PLU_PRICETYPE_NEGATIVE	Registration mode error: Negative price is forbidden
-111072	ERR_R_MORE_THAN_ONE_VAT	Registration mode error: More than 1 VAT in one receipt is not allowed
-111073	ERR_R_PINPAD	Registration mode error: Pinpad error
-111074	ERR_R_WRONG_BUYERS_DATA	Registration mode error: Buyer data is wrong
-111075	ERR_R_VAT_SYSTEM_DISABLE	Registration mode error: Vat system disable.



-111076	ERR_R_OPER_NOT_LOGGED_IN	Operator not logged in.
-111077	ERR_R_WRONG_DATE_FM	The receipt date is early on last date in fiscal memory.
-111078	ERR_R_CORR_DATA_NOT_ENTERED	Correction receipt data is not entered!
-111079	ERR_R_FRACTIONAL_QTY	Fractional quantity!
-111080	ERR_R_OUT_OF_STOCK	Registration mode error: Registration mode error: Out of stock
-111081	ERR_R_STL_NEEDED	Registration mode error: Must pushing of the STL before TL.
-111082	ERR_R_PACK_NOTEXIST	Package does not exist
-111083	ERR_R_PLU_UNIT_NOTEXIST	Measuring unit not found
-111084	ERR_R_PLU_CATEGORY_NOTEXIST	Category not found in the data base
-111085	ERR_R_DEP_WRONG_NAME	Invalid department name
-111086	ERR_R_BANK_TERM_NOT_CONFIGURED	Bank terminal not configured
-111087	ERR_R_SIGN_PAY_INCORECT	Disallowed 'признак расчета' (Russia)
-111088	ERR_R_SIGN_INCORRECT	Forbidden признак товара
-111089	ERR_R_PLU_OVER_MAX_PRC	Entered price is bigger than the programmed
-111090	ERR_R_PLU_FIX_PRC	Fix PLU's price
-111091	ERR_R_SIGN_AGENT_INCORECT	Incocrect sign agent.
-111092	ERR_R_PAY_VOUCHER_RESTO	Voucher payment cannot have change
-111093	ERR_R_PAY_ADVANCE_BIG	Sum for advance payment is bigger than the sum of article
-111094	ERR_R_PAY_STORNO_RESTO	Payment in storno can not have change
-111095	ERR_R_NOT_EXCISE_PLU_WITH_EXCISE_STAMP	Invalid parameter - PLU is not defined as excise PLU
-111096	ERR_R_EXCISE_PLU_WITHOUT_EXCISE_STAMP	Excise stamp of an excise PLU is not entered
-111097	ERR_R_EXCISE_PLU_FORBIDDEN	SALE FORBIDDEN (excise stamp is not valid)
(111500 - 111799) PINPAD ERRORS		
-111500	ERR_PINPAD_NONE	Pinpad error: No error from pinpad
-111501	ERR_PINPAD_GENERAL	Pinpad error: General uncreditbulbank icon error
-111502	ERR_PINPAD_INVALID_COMMAND	Pinpad error: Not valid command or sub command code
-111503	ERR_PINPAD_INVALID_PARAM	Pinpad error: Invalid parameter
-111504	ERR_PINPAD_INVALID_ADDRESS	Pinpad error: The address is outside limits
-111505	ERR_PINPAD_INVALID_VALUE	Pinpad error: The value is outside limits
-111506	ERR_PINPAD_INVALID_LENGTH	Pinpad error: The length is outside limits
-111507	ERR_PINPAD_NOT_PERMIT	Pinpad error: The action is not permitted in current state
-111508	ERR_PINPAD_NO_DATA	Pinpad error: There is no data to be returned
-111509	ERR_PINPAD_TIMEOUT	Pinpad error: Timeout occurs
-111510	ERR_PINPAD_INVALID_KEY_NUMBER	Pinpad error: Invalid key number
-111511	ERR_PINPAD_INVALID_KEY_ATTRIBUTES	Pinpad error: Invalid key attributes(usage)
-111512	ERR_PINPAD_INVALID_DEVICE	Pinpad error: Calling of non-existing device
-111513	ERR_PINPAD_NOT_SUPPORT	Pinpad error: (Not used in this FW version)



-111514	ERR_PINPAD_PIN_LIMIT	Pinpad error: Pin entering limit exceed
-111515	ERR_PINPAD_FLASH	Pinpad error: General error in flash commands
-111516	ERR_PINPAD_HARDWARE	Pinpad error: General hardware uncreditbulbank error
-111517	ERR_PINPAD_INVALID_CRC	Pinpad error: Invalid code check (Not used in this FW version)
-111518	ERR_PINPAD_CANCEL	Pinpad error: The button 'CANCEL' is pressed
-111519	ERR_PINPAD_INVALID_SIGNATURE	Pinpad error: Invalid signature
-111520	ERR_PINPAD_INVALID_HEADER	Pinpad error: Invalid data in header
-111521	ERR_PINPAD_INVALID_PASSWORD	Pinpad error: Incorrect password
-111522	ERR_PINPAD_INVALID_KEY_FORMAT	Pinpad error: Invalid key format
-111523	ERR_PINPAD_SCR	Pinpad error: General uncreditbulbank error in smart card reader
-111524	ERR_PINPAD_HAL	Pinpad error: Error code returned from HAL functions
-111525	ERR_PINPAD_INVALID_KEY	Pinpad error: Invalid key (may not be present)
-111526	ERR_PINPAD_NO_PIN_DATA	Pinpad error: The PIN length is less than 4 or bigger than 12
-111527	ERR_PINPAD_INVALID_REMINDER	Pinpad error: Issuer or ICC key invalid remainder length
-111528	ERR_PINPAD_NOT_INIT	Pinpad error: Not initialized (Not used in this FW version)
-111529	ERR_PINPAD_LIMIT	Pinpad error: Limit is reached (Not used in this FW version)
-111530	ERR_PINPAD_INVALID_SEQUENCE	Pinpad error: Invalid sequence (Not used in this FW version)
-111531	ERR_PINPAD_NO_PERMISSION	Pinpad error: The action is not permitted
-111532	ERR_PINPAD_NO_TMK	Pinpad error: TMK is not loaded. The action cannot be executed
-111533	ERR_PINPAD_INVALID_KEK	Pinpad error: Wrong key format
-111534	ERR_PINPAD_DUPLICATE_KEY	Pinpad error: Duplicated key
-111535	ERR_PINPAD_KEYBOARD	Pinpad error: General keyboard error
-111536	ERR_PINPAD_KEYBOARD_NOT_CALIBRATED	Pinpad error: The keyboard is no calibrated.
-111537	ERR_PINPAD_KEYBOARD_FAILED	Pinpad error: Keyboard bug detected.
-111538	ERR_PINPAD_DEVICE_BUSY	Pinpad error: The device is busy, try again
-111539	ERR_PINPAD_TAMPERED	Pinpad error: Device is tampered
-111540	ERR_PINPAD_EMSR	Pinpad error: Error in encrypted head
-111541	ERR_PINPAD_ACCEPT	Pinpad error: The button 'OK' is pressed
-111542	ERR_PINPAD_INVALID_PAN	Pinpad error: Wrong PAN
-111543	ERR_PINPAD_NOT_ENOUGH_MEMORY	Pinpad error: Out of memory
-111544	ERR_PINPAD_EMV	Pinpad error: EMV error
-111545	ERR_PINPAD_CRYPTOGRAPHY	Pinpad error: Cryptographic error
-111546	ERR_PINPAD_COMMUNICATION	Pinpad error: Communication error
-111547	ERR_PINPAD_INVALID_VERSION	Pinpad error: Invalid firmware version
-111548	ERR_PINPAD_NOPAPER	Pinpad error: Printer is out of paper
-111549	ERR_PINPAD_OVERHEATED	Pinpad error: Printer is overheated
-111550	ERR_PINPAD_NOT_CONNECTED	Pinpad error: Device is not connected



-111551	ERR_PINPAD_USE_CHIP	Pinpad error: Use the chip reader
-111552	ERR_PINPAD_END_DAY	Pinpad error: End the day first
-111554	ERR_PINPAD_BOR_ERR	Pinpad error: Error from Borica
-111555	ERR_PINPAD_NO_CONN	Pinpad error: No connection with pinpad
-111556	ERR_PINPAD_ECR	Pinpad error: Success in pinpad, unsuccess in ECR
-111557	ERR_PINPAD_NOT_CONF	Pinpad error: Not configured connection between fiscal device and PinPad
-111558	ERR_PINPAD_SAME_TRANS	Pinpad error: The last transactions are equals or connection is interrupted - try again.
-111559	ERR_PINPAD_RECEIPT	Pinpad error: Payment type: debit/credit card via PinPad. In the fiscal receipt is allowed only one payment with such type.
-111560	ERR_PINPAD_FP_TRANS	Pinpad error: Unknown result of the transaction between fiscal device and PinPad
-111561	ERR_PINPAD_NOT_CONF_TYPE	Pinpad error: Pinpad type not configured
-111700	ERR_PINPAD_INV_AMOUNT	Pinpad error: Invalid ammount.
-111701	ERR_PINPAD_TRN_NOT_FOUND	Pinpad error: Transaction not found.
-111702	ERR_PINPAD_FILE_EMPTY	Pinpad error: The file is empty.
-111703	ERR_PINPAD_MAX_CASHBACK	Entered cashback is bigger than cashback limit.
(111800 - 111899) SCALE REMOTE CONTROL		
-111800	ERR_SCALE_NOT_RESPOND	ERR_SCALE_NOT_RESPOND
-111801	ERR_SCALE_NOT_CALCULATED	ERR_SCALE_NOT_CALCULATED
-111802	ERR_SCALE_WRONG_RESPONSE	ERR_SCALE_WRONG_RESPONSE
-111803	ERR_SCALE_ZERO_WEIGHT	ERR_SCALE_ZERO_WEIGHT
-111804	ERR_SCALE_NEGATIVE_WEIGHT	ERR_SCALE_NEGATIVE_WEIGHT
-111805	ERR_SCALE_T_WRONG_INTF	ERR_SCALE_T_WRONG_INTF
-111806	ERR_SCALE_T_CONNECT	ERR_SCALE_T_CONNECT
-111807	ERR_SCALE_SEND	ERR_SCALE_SEND
-111808	ERR_SCALE_RECEIVE	ERR_SCALE_RECEIVE
-111809	ERR_SCALE_FILE_GENERATE	ERR_SCALE_FILE_GENERATE
-111810	ERR_SCALE_NOT_CONFIG	ERR_SCALE_NOT_CONFIG
(111900 - 111999) NTP SERVER ERRORS		
-111900	ERR_NTP_NO_COMM	Communication error wth NTP server: Cannot make communication
-111901	ERR_NTP_EARLIER_DATETIME	Communication error wth NTP server: The date and time is earlier than the last saved in the fiscal memory
-111902	ERR_NTP_WRONG_IP	Communication error wth NTP server: Wrong IP address
(112000 - 112099) FP_MODE ERRORS		
-112000	ERR_FP_INVALID_COMMAND	Fiscal printer error: Fiscal printer invalid command
-112001	ERR_FP_INVALID_SYNTAX	Fiscal printer error: Fiscal printer command invalid syntax
-112002	ERR_FP_COMMAND_NOT_PERMITTED	Fiscal printer error: Command is not permitted



-112003	ERR_FP_OVERFLOW	Fiscal printer error: Register overflow
-112004	ERR_FP_WRONG_DATE_TIME	Fiscal printer error: Wrong date/time
-112005	ERR_FP_NEEDED_MODE_PC	Fiscal printer error: PC mode is needed
-112006	ERR_FP_NO_PAPER	Fiscal printer error: No paper
-112007	ERR_FP_COVER_IS_OPEN	Fiscal printer error: Cover is open
-112008	ERR_FP_PRINTER_FAILURE	Fiscal printer error: Printing mechanism error

(112100 - 112199) FP_MODE ERRORS BY SYNTAX

-112100	_ERR_FP_SYNTAX_PARAM_BEGIN	_ERR_FP_SYNTAX_PARAM_BEGIN
-112101	ERR_FP_SYNTAX_PARAM_1	Invalid syntax of parameter 1.
-112102	ERR_FP_SYNTAX_PARAM_2	Invalid syntax of parameter 2.
-112103	ERR_FP_SYNTAX_PARAM_3	Invalid syntax of parameter 3.
-112104	ERR_FP_SYNTAX_PARAM_4	Invalid syntax of parameter 4.
-112105	ERR_FP_SYNTAX_PARAM_5	Invalid syntax of parameter 5.
-112106	ERR_FP_SYNTAX_PARAM_6	Invalid syntax of parameter 6.
-112107	ERR_FP_SYNTAX_PARAM_7	Invalid syntax of parameter 7.
-112108	ERR_FP_SYNTAX_PARAM_8	Invalid syntax of parameter 8.
-112109	ERR_FP_SYNTAX_PARAM_9	Invalid syntax of parameter 9.
-112110	ERR_FP_SYNTAX_PARAM_10	Invalid syntax of parameter 10.
-112111	ERR_FP_SYNTAX_PARAM_11	Invalid syntax of parameter 11.
-112112	ERR_FP_SYNTAX_PARAM_12	Invalid syntax of parameter 12.
-112113	ERR_FP_SYNTAX_PARAM_13	Invalid syntax of parameter 13.
-112114	ERR_FP_SYNTAX_PARAM_14	Invalid syntax of parameter 14.
-112115	ERR_FP_SYNTAX_PARAM_15	Invalid syntax of parameter 15.
-112116	ERR_FP_SYNTAX_PARAM_16	Invalid syntax of parameter 16.
-112199	_ERR_FP_SYNTAX_PARAM_END	_ERR_FP_SYNTAX_PARAM_END

(112200 - 112299) FP_MODE ERRORS BY VALUE

-112200	_ERR_FP_BAD_PARAM_BEGIN	_ERR_FP_BAD_PARAM_BEGIN
-112201	ERR_FP_BAD_PARAM_1	Bad value of parameter 1.
-112202	ERR_FP_BAD_PARAM_2	Bad value of parameter 2.
-112203	ERR_FP_BAD_PARAM_3	Bad value of parameter 3.
-112204	ERR_FP_BAD_PARAM_4	Bad value of parameter 4.
-112205	ERR_FP_BAD_PARAM_5	Bad value of parameter 5.
-112206	ERR_FP_BAD_PARAM_6	Bad value of parameter 6.
-112207	ERR_FP_BAD_PARAM_7	Bad value of parameter 7.
-112208	ERR_FP_BAD_PARAM_8	Bad value of parameter 8.
-112209	ERR_FP_BAD_PARAM_9	Bad value of parameter 9.
-112210	ERR_FP_BAD_PARAM_10	Bad value of parameter 10.
-112211	ERR_FP_BAD_PARAM_11	Bad value of parameter 11.
-112212	ERR_FP_BAD_PARAM_12	Bad value of parameter 12.
-112213	ERR_FP_BAD_PARAM_13	Bad value of parameter 13.
-112214	ERR_FP_BAD_PARAM_14	Bad value of parameter 14.



-112215	ERR_FP_BAD_PARAM_15	Bad value of parameter 15.
-112216	ERR_FP_BAD_PARAM_16	Bad value of parameter 16.
-112299	_ERR_FP_BAD_PARAM_END	_ERR_FP_BAD_PARAM_END
(112900 - 112999) EGAIS Module		
-112900	_ERR_RANGE_EM_BEGIN	_ERR_RANGE_EM_BEGIN
-112999	_ERR_RANGE_EM_END	_ERR_RANGE_EM_END
(113000 - 113999) FLASH_MEMORY ERRORS		
-113000	ERR_FLASH_WRONG_ID	Flash memory error: Reading ID error
-113001	ERR_FLASH_WRONG_SIZE	Flash memory error: Sector size error
(114000 - 114997) POS TERMINAL ERRORS		
-114000	ERR_POS_TERM_CHAN_CLOSED	POS- terminal error: Communication channel is closed
(118000 - 118999) ONLINE ERRORS		
-118000	ERR_ECRSRV_NO_SOCKET_OPENED	ECR server error: The connection socket is not open
-118001	ERR_ECRSRV_SET_IS_NOT_TAKEN	ECR server error: The set for this command is not opened
-118002	ERR_ECRSRV_WRONG_PARAM	ECR server error: Wrong parameter
-118003	ERR_ECRSRV_NOT_SEND	ECR server error: Socket send error. Could not send data to server
-118004	ERR_ECRSRV_RECV_TMOUT	ECR server error: Receiving timeout. No data is received on time
-118005	ERR_ECRSRV_SOCKET_CLOSED	ECR server error: Socket is closed
-118006	ERR_ECRSRV_UNKNOWN	ECR server error: Unknown state
-118007	ERR_ECRSRV_FORBIDEN	ECR server error: Forbidden operation
(120000 - 120999) PROGRAMMING ERROR		
-120000	ERR_PGM_NAME_NOT_UNIQUE	Programming: Name is not unique!
-120001	ERR_PGM_OPER_PASS_NOT_UNIQUE	Programming: Operator password is not unique!
-120002	ERR_PGM_DATETIME_OUT_OF_RANGE_MIN	Programming: Date and time is under the range.
-120003	ERR_PGM_DATETIME_OUT_OF_RANGE_MAX	Programming: Date and time is under the range.
(121000 - 121099) COURIER ERRORS		
-121000	ERR_SCANNER_GENERAL	Barcode scanner reading error!
-121001	ERR_COURIER_EIK_INVALID	Invalid EIK/EGN number!
(170000 - 170999) PENDRIVE ERRORS		
-170000	ERR_USB_HOST_INIT	USB error: Host init error
-170001	ERR_USB_NO_DEVICE	USB error: No device
-170002	ERR_USB_NO_FILESYSTEM	USB error: No filesystem
-170003	ERR_USB_FILE_OPEN	USB error: File open error



-170004	ERR_USB_FILE_COPY	USB error: File copy error
-170005	ERR_FILE_UNPACK	USB error: File unpack error
(171000 - 171999) RENTAL SERVICES		
-171000	ERR_RENTAL_NOT_FOUND	Rental database: Not found
-171001	ERR_RENTAL_FULL	Rental database: Full
-171002	ERR_RENTAL_POSITION_OCCUPIED	Rental database: Position is occupied
-171003	ERR_RENTAL_POSITION_FREE	Rental database: Position is free
-171004	ERR_RENTAL_SUBSCRIPTION_ACTIVE	Rental database: Subscription is active