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TC210, TC215..... 55

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Eurotrace 61

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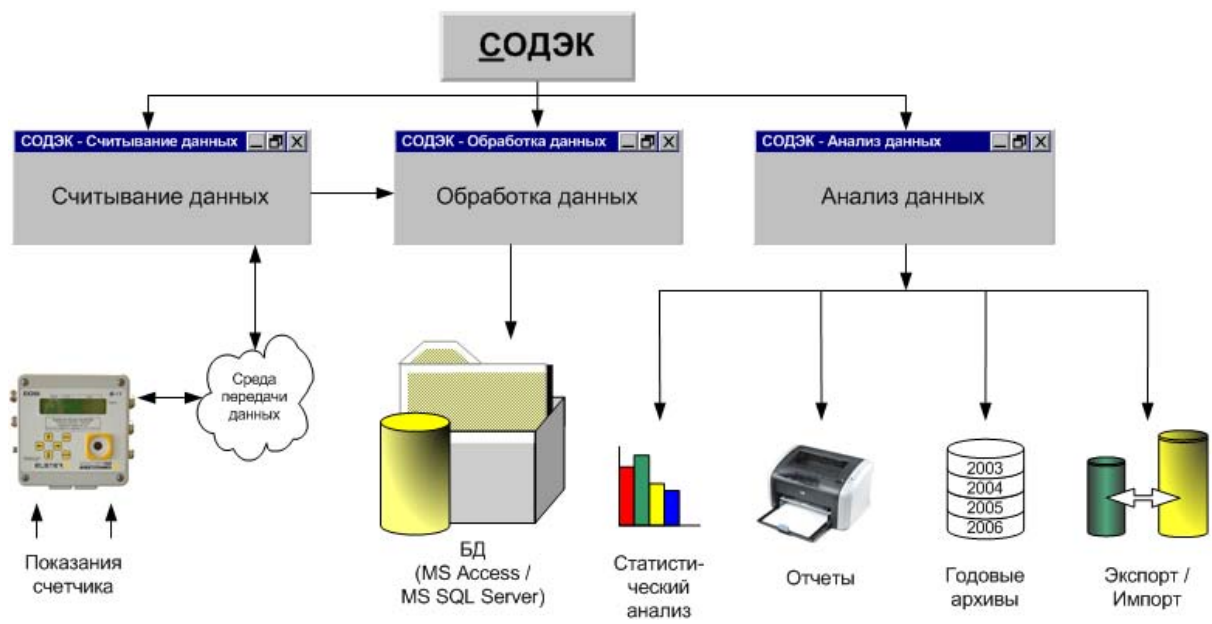
- 72

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-	73
-	73
	74
«	».....	75
	75
«	».....	77
7	78
8	80
	81

1.1 Введение

ЕК-87, ЕК-88, ТС-90, ЕК260, 210, ТС215.



- _____
- _____
- _____ « _____ »
- _____
- _____
- _____ / _____
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- _____

1.2 Установка

1.2.1 Установка драйверов для подключения к COM/USB

Desktop Windows, IBM PC- COM/USB,

- IBM PC- Microsoft Windows 95/98/NT/2000/Server 2000/Server 2003/XP/Vista.
- ().
- 100
- ().
- COM USB.

, . . . Desktop

- 1) Windows " " (| , | , | | () , , | ...).
- 2) Windows95, Microsoft DCOM95 \Service.
- 3) Win2000/Windows Server 2000/Windows Server2003, Microsoft MDAC 2.8 \Service.
- 4) Windows98, WindowsXP ,
- 5) USB COM- (USB-COM).

_____ .
DCOM95 (Distributed Component Object Model) –

MDAC (Microsoft Data Access Components) - ,
Windows 2000, MDAC
Windows. MDAC MS Office.

1.2.2 Óñòàí î âêà è ðåãèñòàöèÿ ÑÎ ÄÝÊ

- “ “ ” - ” ,
 “ ” .
 "setupsodek.exe".
- :
- ▶ CD-ROM . Windows
 - , [], .
 - ▶ “ ” (
www.gaselectro.ru .
 - ▶ , .
 - ▶ “ ” ,
 "C:\SODEK".
-
- 1) “ ” “ ” , “ ” (.
).
 (sodek.mdb), , , .
- 2) “ ” ,
 DbUpgrade.exe, .
- ▶ , .
 - ▶ “ ” ,
 - “ ” .
 - , [].


```

,
.
_____
" ( Register.exe ),
" -
▶ [ ]
.
```

1.2.3 Óäèäáí èå Ñî ÄÝÊ

```

unins000.exe. ( : C:\SODEK),
,
```

1.3 Работа с базами данных

1.3.1 Адаптируем базу данных к MS SQL Server

?

Microsoft Access (sodek.mdb)
Microsoft Access (sodek.mdb)
Server - "

Microsoft SQL Server.
" "

Microsoft SQL

Sodek.
MS SQL Server

(instance)

Microsoft SQL Server,
Sodek

?

?

Microsoft Access?

Access

Microsoft
"report".

```
MSACCESS.exe c:\Sodek\db\sodek.mdb /WRKGRP c:\Sodek\db\sodek.mdw /USER  
"report"
```

Windows
Windows

sodek.ini [Interface]\OpenDBInMSAccess=ON

c **?**

MS Access (.mdb)

2 . , ' sodek.mdb ,

:



?

?

"?

:"...

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"

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1.3.2 Í àñòðî ééà ï àðàì àòðî à ï î äëëþ ÷áí èÿ

```

Microsoft Access,
(sodek.mdb sodek.mdw)
(
Microsoft Access
),
:
▶
▶ sodek.ini Windows
▶ sodek.ini Windows
▶ [Directories] "DataBaseDir=(...)"
▶ "=" Microsoft Access (sodek.mdb)
▶
▶ (sodek.mdb sodek.mdw)
▶
_____ :
{ }
[Directories]
DataBaseDir=C:\SODEK\DB
{ }
[Directories]
DataBaseDir=\\Datastore\Data\SODEK\mdb

Microsoft SQL Server,
:
▶
▶
▶ |
▶

```

► SQL Server>].'
 : < >[\<
 ► [OK].
 _____:
 Datastore\SQLData3
 { 'Datastore'- , 'SQLData3' - MS
 SQL Server}
 Datastore
 { MS SQL Sever (,
), }
 _____ TCP/IP- , :
 192.168.0.63\SQLData3

1.3.3 Ñî àäèí àí èà ñ áàçî é ààí í û ã

_____,
 (_____).

► | | (MDB)

► | | (MSSQL)

(".\Export")



- 1. _____
- 2. _____

1.3.5.1.1

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).

▶ [>],

▶ [>>],

▶ [<],

▶ [<<],

▶ ,

(c)

()

< > = < ()> + «00:00:00»
 < > = < ()> + «23:59:59»

[],

1.3.5.1.2

▶


▶

▶ [],

▶ | |
:

1. _____
2. _____

1.3.5.2.1

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, . -
()
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/
. - " "
" ".
- :
▶ », «
▶ , 
▶ .
▶ (".
tf").
▶ .
« », -
« ».

1.3.5.2.2

_____.

_____ :

- ▶ _____,
- ▶ _____,
- ▶ _____ [_____],

_____ - _____

« _____ ».

1.3.5.3

_____ « _____ ».

_____ Windows

1.3.6 ã â û ä å ð ö è â û

_____ (1 + 0|1|2|3 _____),

...
 \[SODEK]\BD\Years.

_____ - _____

_____ - _____

_____ 1 _____ : 1)

; 2)

1.3.6.1

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- ▶
- ▶
- ▶
- ▶
- ▶
- ▶

_____ :

- _____

|

" \ "

" \ " (- "10:00").

[OK].

() _____

1.3.6.2

- _____

1.4 Считывание данных

-
 -
 ()
 GmbH, " Elster
 (:)
 WinLIS.
 -
 , [LIS200](#).

1.4.1 Āđàì áí í û á ô àéëû

-
 ASCII- (. MS Excel).
 -
LIS100 (EK-88, EK-87, TC-90)
 :
 tempz.NNN -
 tempza.NNN -
 tempze.NNN -
 NNN (999 001)
LIS200 (EK260, TC210, TC215)
 :
 NNNNNNNN.agr -
 NNNNNNNN.aga -
 NNNNNNNN -

1.4.2 Ñàì áéñòàà ì ðèáí ðî â

LIS100 -
 ELSTER GmbH.
 DS100
 : -87, -88 -90.
LIS200 -
 LIS200, LIS100.
 2001. : 260, 210 215. 61107-

1.4.3 Åâääáí èå

-88, -87

TC-90

15

EK260

-1
-2

210, 215

" - " " "

_____ LIS200, _____

_____ ("*.ini"). _____

1.4.4 Äëàâí î á ì áí þ

_____ (F3) -

_____ (F4)

_____ (F1)

?

1.4.4.1 -

1.4.4.2 -

_____ « »

1.4.4.3

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"?"

1.4.5 Äèàëî ãè

1.4.5.1

« »

0 9 12 z). (

1 254). (

260

()

« »

LIS100 (EK-88,...)

[LIS100.](#)

LIS200 (EK260,...)

[LIS200.](#)

LIS100 - 0 9, LIS200 - 0 9
A F.

(LIS200).

260.

RS-485.

" " ("

1:180 (" " "),
E K260).

(LIS200),

...

00:00

).

« »

LIS100

"..."

LIS200

"...";

« »

" "

" "

' "

' "

1.4.5.2

« »

[LIS100](#)

"8N1" (. .

- 8,

, - - 1),

[LIS200](#) - "7E1" (. .

- 7,

, - - 1).

« »

"W", "-", "+", "A" ",",

GmbH,
"-100".

« »

..INI _____ *modem.ops,*

, " " : "

()

()

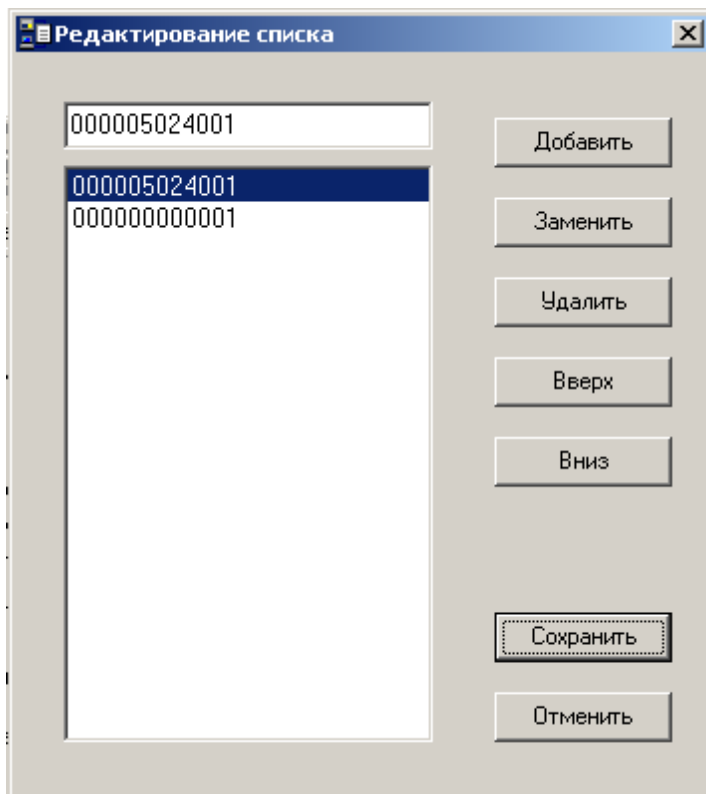
)	DCD (1- , 0-)	DCD (
)	DSR (1- , 0-)	DSR (
)	CTS (1- , 0-)	CTS (

DCD, DSR CTS , . ,

► [].

1.4.5.3

RS-485.

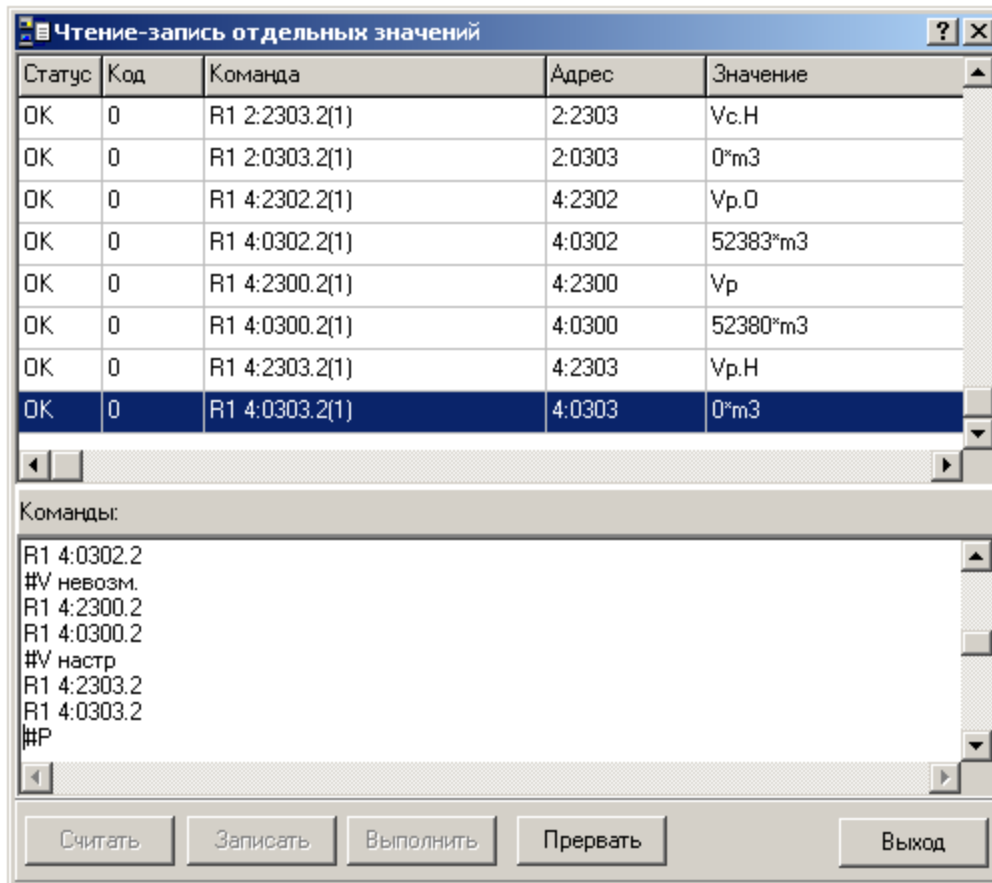


12,

0..9.

1.4.5.4

[LIS200](#)



= 0 -
 > 0 -
 < 0 -

```

" " " " " "
- " " " " " "
- ( )
- , " " " " " "
, " " " " " "
[ ]
, " " " "
.
[ ]
"sample.wpp".
-

```

Î î áðàèÿ	Êðàèèèé ôî ðì àð	Ï î ëí ú é ôî ðì àð	Ï ðèì áð
xòáí èå	<Àäðáñ>	R1 <Àäðáñ>	R1 13:2312
Çàì èñü	<Àäðáñ> (<Çì à÷áí èå>)	W1 <Àäðáñ> (<Çì à÷áí èå>)	W1 13:2312(0.6735)
Êî ì ì áí òàðèé	#<Ëð áí é òàêñò>	#<Ëð áí é òàêñò>	#

1.4.6 Ôàéëü í àñòðî àê

1.4.6.1

[USER]

NAME=GasElectro

MARK=0B

PASSWORD=00000000

[Directories]

TMPDir=C:\SODEK\TMP

LIS100

ARCDIR=C:\SODEK\ARC

LIS200

[CONNECT]

COM=COM1

INITCOM=19200,N,8,1,BIN,IGP0,TO700

VIAMODEM=1

-1

- 0

PROTOKOLTO=5000

(.)

PHONE=22

DIALMODE=T

REPDIALNUM=5

DIALINTERVAL=20

EM100=0

[MODEM]

TYPE=Default

[PARAM]

AUTOADJTIME=0

MINDIFTIME=10

()

MAXDIFTIME=30

()

DIALOG=1

LIS=200

RORange=MO:1

" " "MO:1"
 " " "TO:DDDDD."
 HHHH" " "MO:1"
 DDDDD.HHHH - "TO:DDDDD."
 - " " "MO:1"
 - " " "TO:DDDDD."
 - " " "MO:1"
 - " " "TO:DDDDD."

Borland Delphi TDateTime.

1.4.6.2**[TYPE]**

Default = modem1

"

"

IDC-2814 = modem2

[Default]

ResetCmd = &F

1.2)

(

InitCmd = E0|Q0

,

" | "

(

"|")

DialCmd = D

)

(

1.2


```

HangupCmd = H0                («          »)
CmdTerminal = +++
OkMsg      = OK                «          »
ConnectMsg = CONNECT          «          »
BusyMsg    = BUSY              «          »
NoCarrierMsg = NO CARRIER    «          »
NoDialToneMsg = NO DIALTONE   «          »
ErrorMsg   = ERROR            «          »
DialTimeout = 60000           (          )
CmdTimeout = 500              (          )

DCD = 1                        DCD
DSR = 1                        DSR
CTS = 1                        CTS

```

_____ 1.2 ResetCmd, InitCmd
 HangUpCmd " ".

▶ "modem.ops" (, Windows).

▶ [TYPE] :

=modemX

, - ;

▶ :

[]

▶ [Default] .

▶ .

▶ "modem.ops".

1.4.7 Dàæèì ø èí û RS-485

1.4.7.1

[LIS200.](#)

RS-485 EIA RS-422/RS-485.

RS-485 (").

RS-232 RS-485.

PC- ()

RS-485/232. LIS200

- ADAM-4520 - COM -

RS-232;

- ADAM-4530 -

ADAM-4520 RS-485 260

- -02.

[LIS200:](#)

2 = 5

2 = 0

2 = 2

2 = 19200

ADAM-4530 RS-485 260

- -02. RS-232 ADAM-4530

[LIS200:](#)

2 = 5

2 = 0

2 = 2

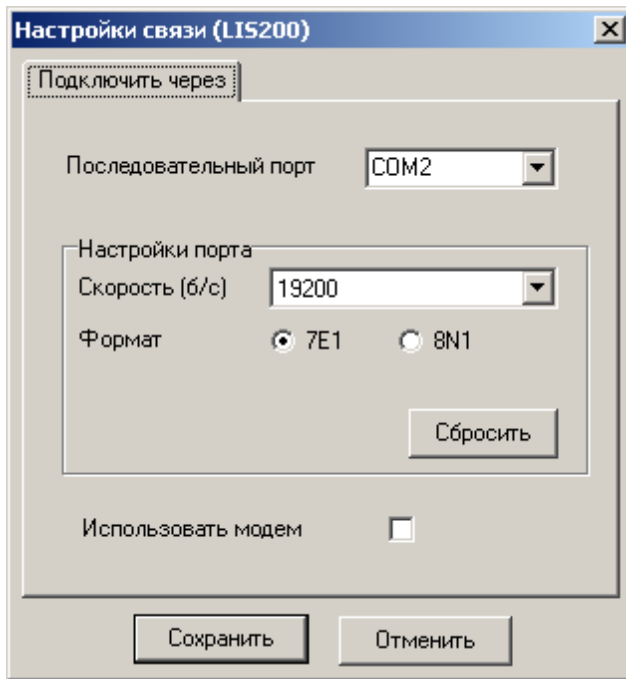
2 = 19200

RS-485

2:70

1.4.7.2

RS-485



1.4.7.3

RS-485

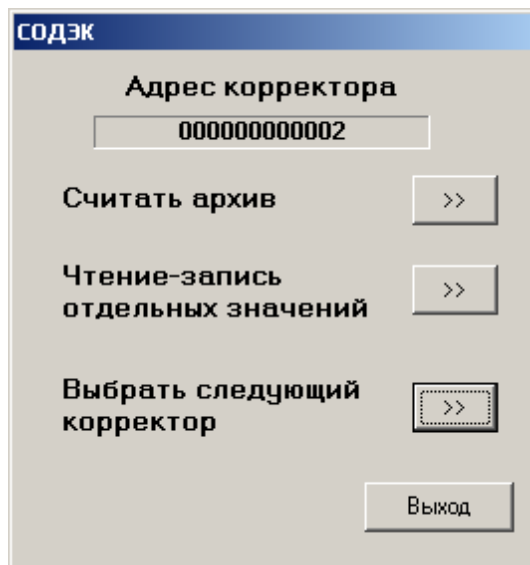
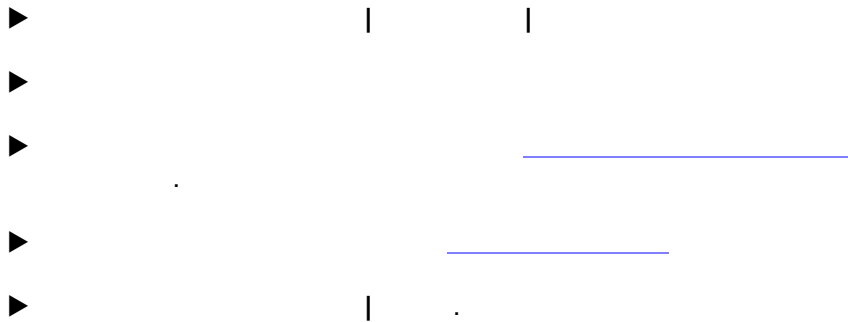
RS-485.



RS-485

1.4.7.4

LIS200: RS-485 ().



LIS200.

on-line

- ▶
- ▶
- ▶
- ▶
- ▶

(
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1.4.8 Í àñòđî ééà ñ÷èòû âàí èÿ ï î ðàññì èñàí èð

Windows

“ - Windows “ ”.

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“ ”.



“ > ”.



“ — ”.



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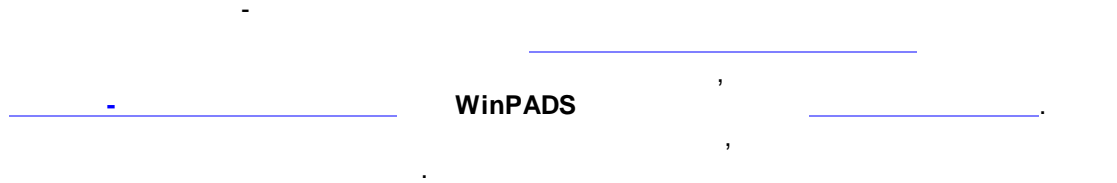


“ ” “ ”

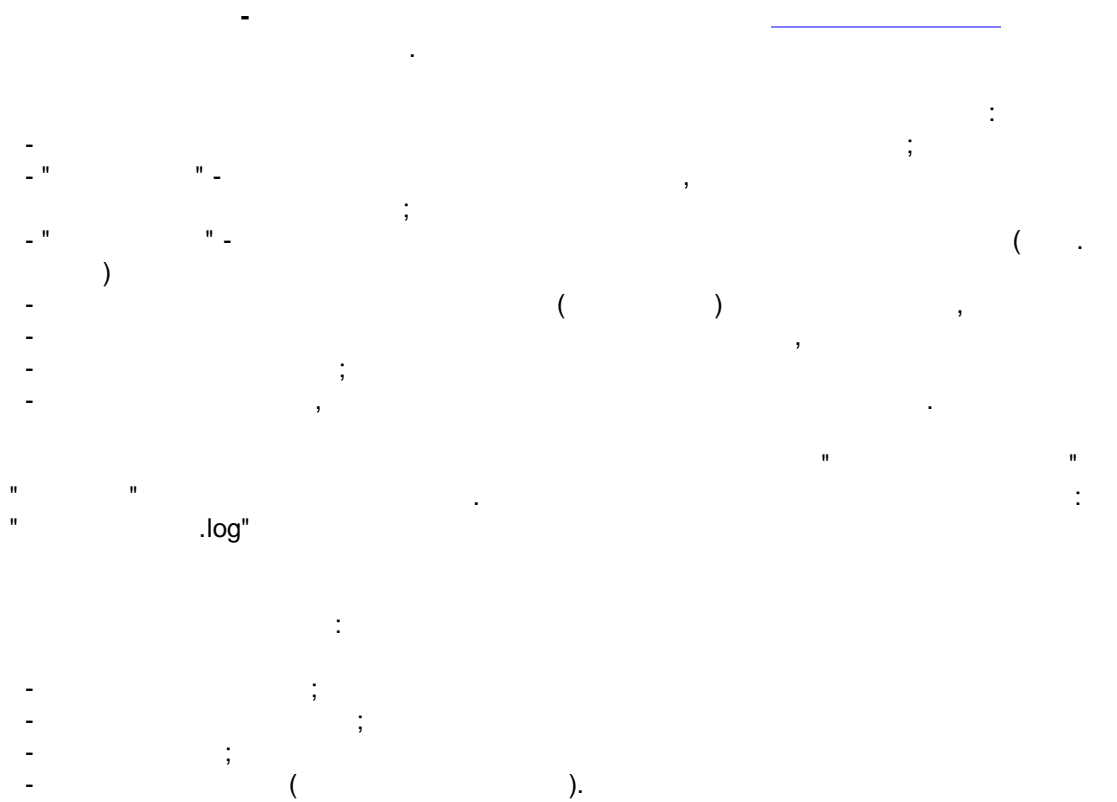


“ ” “ ” ”

1.5 Обработка данных



1.5.1 Автоматическая обработка



1.5.2 Интерфейс

1.5.2.1



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1.5.2.2

_____ -
(" ") _____ ,
"..\SODEK\TMP".
_____ -

1.5.2.3

_____ (" ").
" " "
" " "

1.5.2.4

...

1.5.2.5

_____ ,
" " " ,
" " \ " ,
" " " ,

1.5.2.6 "?"

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-

1.5.3 Đái òà ñ ĩ òĩ ãđài ì ĩ é

1.5.3.1

_____, " (., "...\SODEK\ARC").

_____ " " "

" " " "drug and drop".

() " " " "

_____ " " "

1.5.3.2

_____ " " "

- " " " "
- " _____ " " "
- " " " "

1.6 Анализ данных

90, 210, 215) LIS100, LIS200 (-87, -88, 260, ()).

« »,

() (MS Access), (MS SQL Server).

1.6.1 Í à†àëî ðàáí òù

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1.6.2.3

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). _____ (,

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1.6.2.4

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« » - (,

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" (, ",)

(" " " " " " (, "),

_____  (),

() , _____

() " _____ "

_____ , _____

» (« ») «

» (« ») .


(" " " " " " " ") ,

15- 10 2007 :

▶ _____

- ▶ « »
- ▶ « »
- ▶ «2007 .»
- ▶ « »
- ▶ «10» (« »)
- ▶ «10 15:00»

\ :

▶ 

▶ () " " -

" " "

" " "

(" " ' ; " "

).

:

Ураб.общ.	Вст.общ.	Р	Т
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▶ 

▶ () -

" "

" " : "

LIS100, LIS200

(.)

LIS200

(. /)

EK260



. : .

[TC210, TC215](#)

1.6.2.5

« »

(V), (P) (T). - (V),

. : .

1.6.2.6

« »

(, -)

/



1.6.2.9

Separated Values) XLS (Microsoft Excel). CSV (Column

- ▶ _____
- ▶ " "
- ▶ .
- ▶ | |
- ▶ (" ") - CSV
- ▶ XLS. (" ")

[], XLS, Excel, Microsoft Office. Excel;

XLS (.)
(. /)

" "
" "
" "

1.6.2.10

() EK260.
(), _____


" " , (" ") ,
 () , (. _____
 « _____ »), _____.

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)- () (,

- () ,
 (" ' ")
) " " (- 0x2004) . : " " (16- " ")

- () ,
 _____ ,
 , " (" ") ,
 , " (" ") . ,
 " , " " .

- ▶ [LIS200.](#)
- ▶ " " " " , | .
- ▶ .
- ▶ " " .
- ▶ :
- ▶ " " ' ,
- ▶ " " c [Enter].
- ▶ , .
- ▶ :
- ▶ " ...".
- ▶ / ,
- ▶ :
- ▶ Windows " " _
- ▶ ,
- ▶ , [SHIFT] + [Up, Down, PgUp, PgDown], [CTRL]+[].
- ▶ " "
- ▶ MS Office.

1.6.2.11.4

TC210, TC215

TC210, TC215

TC210 (TC215)

« _____ »
: " " , " " " " ").

« _____ »
: " " " " ").

« _____ »
: " " ").

TC210 (TC215)

« _____ »

1.6.3 Đảảàèèđĩ ààí èả ààí í ù ã

1.6.3.1

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1.6.3.3

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[OK].

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1.6.3.4

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[].

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_____ (_____) 1 99.

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(, ,) :)

« _____ » ;)

. - . () [3/]

"

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" (.) " , "

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1.6.3.5

" " () :

- ▶

- ▶ " "
- ▶ ,
- ▶ [].

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1.6.3.6

- (), :

- ▶

- ▶ " | " :
- ▶ () ,
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1.6.3.7

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▶ _____.

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▶ [].

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1.6.3.8

_____ - (_____) ,
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() ,

▶ [].

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() , _____ ,
_____ .
_____ :

1.6.3.9

Eurotrace

Eurotrace:

- ▶ | EuroTRACE.
 - ▶ EuroTRACE - ".csv".
 - ▶ [].
- Eurotrace.

. :

1.6.3.10

, :

1. ! , :
 - " " " " ' ,
 2. .
 3. " " ,
 4. , .
- . :

2) « », « »
 « » (« » | « »).
 « », « »
 « » (« » | « » | « »).

3) _____

4) _____, _____
 _____ ()
 _____ ()

_____ ()
 _____, " " _____

_____ :
 _____ « »

1.6.4.2

() _____

:

▶ | . " "

▶ .

▶ , .

▶ (.) . /

▶ .

▶ " " , " "

▶ " " , "

▶ " " , [...] . (.) .

▶ [] . " _____ .

_____ . « _____ » , « _____ »

_____ . « _____ » (_____ « _____ » | « _____ ») .

_____ . « _____ » (« _____ » | « _____ » | « _____ ») .

_____ . _____ .

()

()

) (- , ' N
, " N- " " -
, " " -
24- .

- ▶ () :
- ▶ | -
- ▶ " " .
- ▶ " [] " .
- [] .
- [...] .
- [...] .
- [] .
- [] .



:



[>],

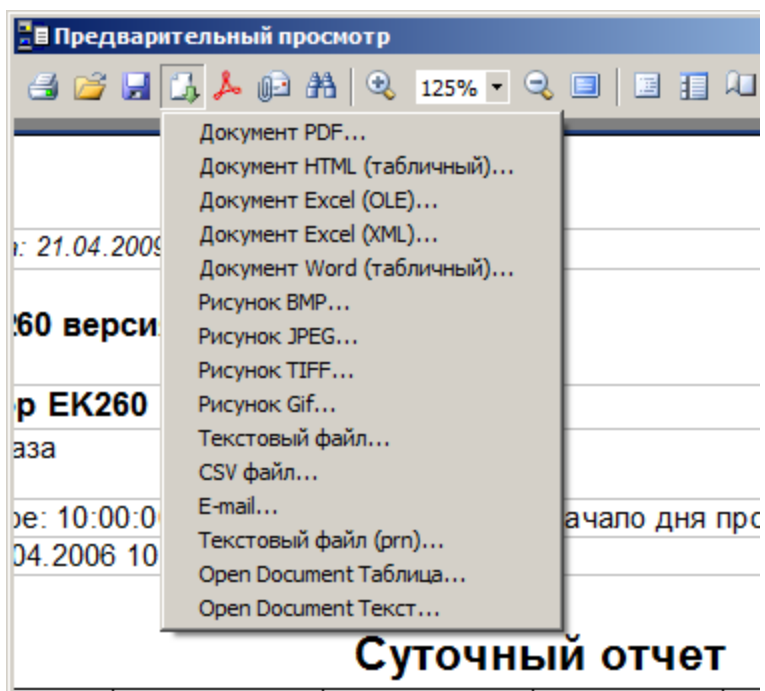
[>>],

[<],

[<<],

1.6.4.3

_____ " _____"
_____ (_____) _____



1.6.5 Àèðòáèüí û à ï ðèáí ðû

1.6.5.1

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1.6.5.3

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_____.

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1.6.5.4

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[].

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1.6.6 Æðàò è±åñêéé èí òåðò åéñ ì ðì ãðàì ì ù

1.6.6.1

_____ , _____ - ()

« _____ » , _____

_____ « _____ » , _____

_____ :

_____ « _____ »

1.6.6.2

_____ - _____ :

_____ :

_____ « _____ »

1.6.6.2.1

_____ - _____

_____ ([F10] [ALT+F4]) .

_____ :

1.6.6.2.2 -

... [Ctrl+F]

).

(« »

.

1.6.6.2.3 -

| _____

" "

| _____

" "

| _____

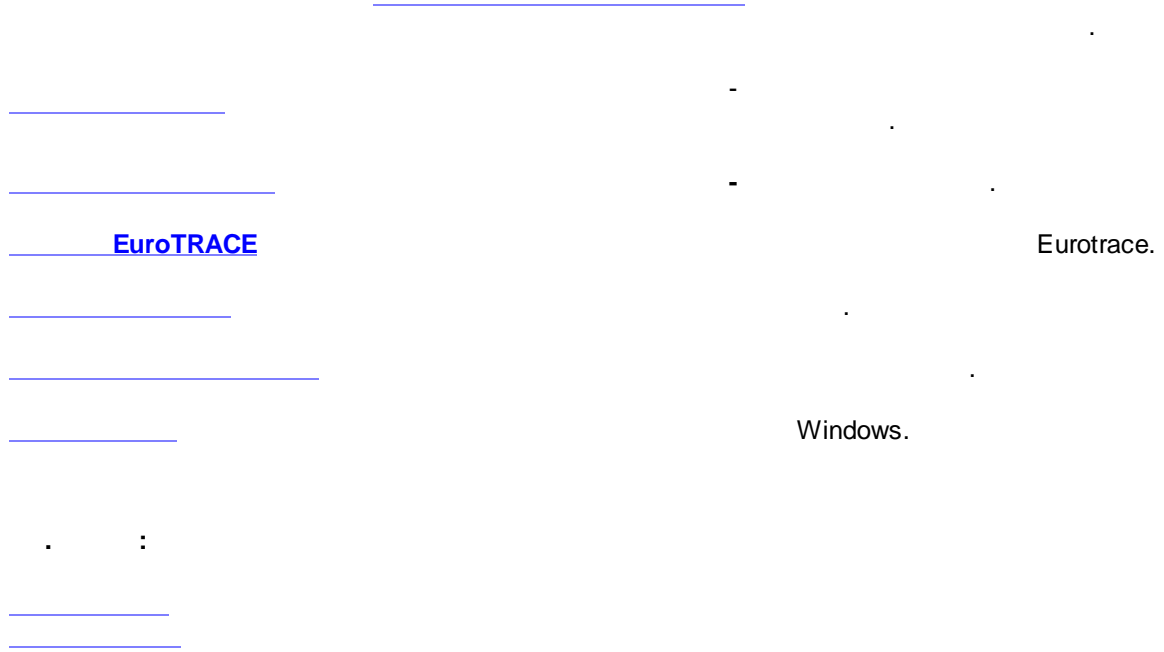
,

" " " " " " " "

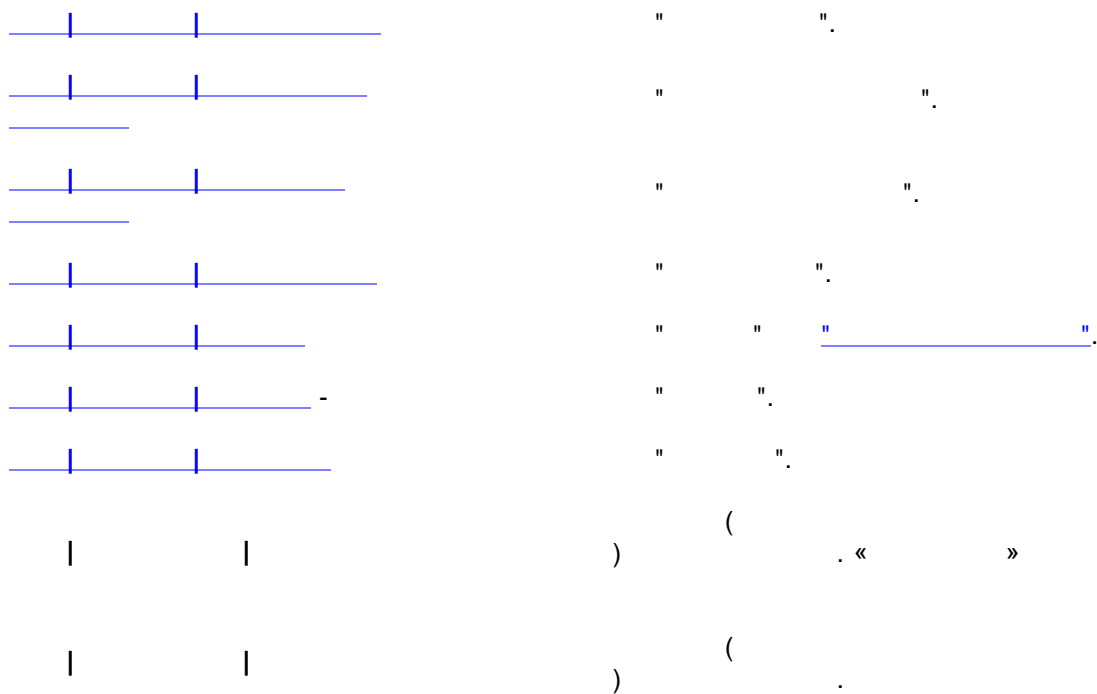
CSV XLS.

.

1.6.6.2.4 -



1.6.6.2.5 -



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| |) (« »

| |) (

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1.6.6.2.6 -

- « _____ »,

_____ « » : « », «

», « _____ ».

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1.6.6.2.7 -

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