

M-BUS AMR SOFTWARE

LorusTask Ver 3.0.0

OPERATION MANUAL



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Lorus Task

Version 3.0.0

1. Introduction

LorusTask is powerful software for read out of M-Bus Meters. Energy meters/devices with an M-Bus interface can be configured and read by LorusTask. This software is developed for reading of device data in M-bus network through serial interface. It gives wide possibilities for defining meters and organizing them. It supports standard exports of data.

This program is complete software for reading M-Bus network. Typically, one network consists of maximum of 250 slaves. So in this software, user can manage with different networks. Gateway to the M-Bus network is provided by M-Bus level converter. The software can reads particular or all devices and saves read data. Read data is seen in the main program. The user can initiate reading at any moment after selects the device or network.

2. Main features

- Simple, user friendly and modular design
- Data display - The read results can be displayed directly on-line
- Checking and verification of M-Bus installation
- Data integration of various M-Bus meter models
- Add, delete and edit M-Bus meters with identification
- Selection of communication modes
- Readout function for individual device
- Readout function for total M-Bus network
- Export of readout data for individual device
- Export of readout data for total devices
- Optional readout scheduler for automatic readouts
- Optional password security for start/termination of software
- Optional remote reading through GSM (CSD) modem communication

3. System requirements

- Operating system Microsoft® Windows® XP SP2 / Vista / 7
- Processor Intel Pentium, Intel Xeon, Intel Core™
- Microsoft® .NET Framework version 4.0 or higher
- Minimum 512 MB RAM (1 GB recommended)
- Minimum 100 MB free capacity on hard disk memory
- Microsoft® Office (MS Excel and MS Word)
- Adobe Reader®
- USB Port(s) / Serial port(s)
- Standard mouse and keyboard
- CD-ROM Drive (for software installation from disc)
- VGA Monitor 1024x768 or higher resolution

Additional recommendations:

- Uninterrupted Power Supply (UPS)
- Anti-Virus/Anti-Spyware Protection

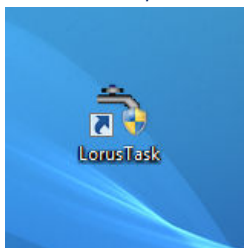
4. Software installation

- The software can be installed from CD or other medium which is provided by ista
- This software is using Microsoft .NET Framework. Please make sure that .NET is installed before proceeding with installation.
- Administrator rights are needed for installation process. It is a recommended best practice to back-up your system and data before you remove or install software.
- Insert the CD, if the CD does not start automatically, browse to your CD-ROM drive and double-click "lorustask_setup.exe".
- Follow the on-screen instructions to successfully complete the installation.
- Software licensing should be done by ista for corresponding installation on the PC before starting the usage of software.

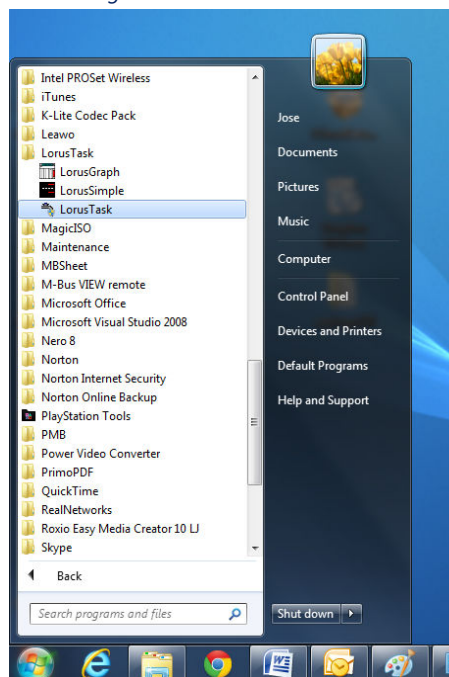
5. Start the application

- Start the application by double click on the link available on desktop or from "Start - Programs - LorusTask" menu.

Link on desktop



Start - Programs - LorusTask menu



- When software starts for first time, licensing code should be entered to unlock software. Please contact ista technical team for licensing issues.
- The available property/network details will be displayed in main window.
- Property details should be configured for each installation as per M-Bus network architecture.

6. Properties management

To manage the M-Bus devices for each property or project, it may be configured as different properties in main window as per designed/installed architecture. It can be various M-Bus loops; each can include maximum 250 devices. The property configuration will be done by ista technical team.

Please follow below instructions to manage different properties:

- Select the property by clicking on the corresponding network.
- Click "List of devices" button to see the total available devices in the property.
- Select background grid colour for each property by clicking "Background colour"
- Click "Open Property" button to open and manage individual properties. Another way to open the property is from main menu item "File - Open".
- Data readout & device configuration options are inside of each property window.

The screenshot displays the LorusTask version 3.0.0 application window. On the left, a tree view shows a list of properties under 'Properties' and 'COM Ports'. The main area contains a table with 26 items, each representing a property loop. The table columns are: s, t, m, b, x, Number, Loop, Description, Device Count, ZIP, and City. The selected property is '68-020-0001 1 Sky Tower(1) Loop-1'.

s	t	m	b	x	Number	Loop	Description	Device Count	ZIP	City
					68-020-0001	1	Sky Tower(1) Loop-1...	58	293	Abu Dhabi
					68-020-0001	2	Sky Tower(1) Loop-2...	237	293	Abu Dhabi
					68-020-0001	3	Sky Tower(1) Loop-3...	152	293	Abu Dhabi
					68-020-0001	4	Sky Tower(1) Loop-3...	88	293	Abu Dhabi
					68-020-0001	5	Sky Tower(1) Loop-4...	240	293	Abu Dhabi
					68-020-0002	1	Sun Tower2_Loop-1...	79	293	Abu Dhabi
					68-020-0002	2	Sun Tower2_Loop-1...	168	293	Abu Dhabi
					68-020-0002	3	Sun Tower2_Loop-2...	227	293	Abu Dhabi
					68-020-0002	4	Sun Tower2_Loop-3...	224	293	Abu Dhabi
					68-020-0008	1	Rihan Heights Tower...	144	293	Abu Dhabi
					68-020-0008	2	Rihan Heights Tower...	125	293	Abu Dhabi
					68-020-0008	20	Rihan Heights Tower...	1	293	Abu Dhabi
					68-020-0008	3	Rihan Heights Tower...	162	293	Abu Dhabi
					68-020-0008	30	Rihan Heights Tower...	1	293	Abu Dhabi
					68-020-0008	4	Rihan Heights Tower...	159	293	Abu Dhabi
					68-020-0008	40	Rihan Heights Tower...	1	293	Abu Dhabi
					68-020-0008	5	Rihan Heights Tower...	104	293	Abu Dhabi
					68-020-0008	50	Rihan Heights Tower...	1	293	Abu Dhabi
					68-020-0008	6	Rihan Heights Tower...	179	293	Abu Dhabi
					68-020-0008	60	Rihan Heights Tower...	1	293	Abu Dhabi
					68-020-0009	1	Guardian - RT	212	293	Abu Dhabi
					68-020-0009	2	Guardian - OT	152	293	Abu Dhabi
					68-040-0010	1	LRDM	41	293	Dubai
					68-040-0012	1	Lake Shore Tower(Y...	137	293	Dubai
					68-040-0012	2	Lake Shore Tower(Y...	145	293	Dubai

The right-hand pane shows the detailed configuration for the selected property. It includes fields for Country Code (EN), Property Number (68-020-0001), and Loop (1). The Description is 'Sky Tower(1) Loop-1 (GF-F05)'. Other fields include ZIP (293861), City (Abu Dhabi), Street (REEM Island), House no., Contact Number, and P O Box. A 'Background Colour' button is also present. At the bottom, there is a 'List of devices' button and an 'Open Property' button, which is highlighted with a red box in the screenshot.

7. Data and device management module

7.1 Device data readout:

Data readout section includes following features:

- Perform readout from M-Bus network for each device
- Checking parameters for each device
- Verifying communication status in M-Bus network for each device
- Export downloaded data in convenient method

To familiarize with data readout section, please follow below instructions:

- Open corresponding property from main window.
- Available devices in the property will be listed as showing below, if configured.
- Devices will be displayed with its details (address, description, baud rate etc).
- Last readout data will be shown at right portion of window (if available).

The screenshot displays the 'Property 68-020-0008 1 Rihan Heights Tower-A-(L1-L16) [modem 0563926179]' window. The main area is divided into two panes. The left pane, titled '144 M-Bus devices', contains a table with columns: 'o. n.', 'Bus addr.', 'm', 'Output', 'MAN', 'Identifica...', 'Description', and 'Status'. The right pane shows detailed readout data for a selected device, including timepoint, bus address, manufacturer, medium, status, and various energy and temperature parameters.

o. n.	Bus addr.	m	Output	MAN	Identifica...	Description	Status
66548138			2400 Baud	LUG	66548138	T#A_Flat-1604	
66548114			2400 Baud	LUG	66548114	T#A_Flat-1404	
66540271			2400 Baud	LUG	66540271	T#A_Flat-1208	
66540448			2400 Baud	LUG	66540448	T#A_Flat-0605	
66455725			2400 Baud	LUG	66455725	T#A_Flat-0808	
66540276			2400 Baud	LUG	66540276	T#A_Flat-0306	
66540278			2400 Baud	LUG	66540278	T#A_Flat-1308	
66540698			2400 Baud	LUG	66540698	T#A_Flat-0205	
66540283			2400 Baud	LUG	66540283	T#A_Flat-0508	
66540285			2400 Baud	LUG	66540285	T#A_Flat-1501	
66540291			2400 Baud	LUG	66540291	T#A_Flat-1201	
66540292			2400 Baud	LUG	66540292	T#A_Flat-1506	
66540294			2400 Baud	LUG	66540294	T#A_Flat-1002	
66540299			2400 Baud	LUG	66540299	T#A_Flat-0709	
66540303			2400 Baud	LUG	66540303	T#A_Flat-0203	
66540275			2400 Baud	LUG	66540275	T#A_Flat-0606	
66540308			2400 Baud	LUG	66540308	T#A_Flat-0209	
66666608			2400 Baud	LUG	66666608	T#A_Flat-1403	
66540314			2400 Baud	LUG	66540314	T#A_Flat-0309	
66540320			2400 Baud	LUG	66540320	T#A_Flat-1405	
66637180			2400 Baud	LUG	66637180	T#A_Flat-1503	
66540328			2400 Baud	LUG	66540328	T#A_Flat-0706	

Readout Data (Right Pane):

- Timepoint : 2013-04-15 11:07:59
- Bus address : 000, Ident.Nr. : 66548138
- Manufacturer : LUG, Version : 003
- Medium : Heat (outlet) (4), Access number : 31
- Status : 96
- 01 : Actuality duration = 8 s
- 02 : Averaging duration = 8 s
- 03 : Energy = 20005 kWh
- 04 : Volume = 6760.16 m³
- 05 : Power = 0 kW
- 06 : Volume flow = 0.003 m³/h
- 07 : Flow temperature = 18 °C
- 08 : Return temperature = 6 °C
- 09 : Temperature difference = 11.9 K
- 10 : Volume = 8520.72 m³
- Storage no. 1
- 11 : Energy = 16877 kWh
- Storage no. 1
- 12 : Fabrication No. = 66548138
- 13 : On time = 17424 h
- 14 : On time = 277 h
- value during error state
- 15 : On time = 277 h
- Storage no. 1 value during error state
- 16 : Date = 2013-01-01
- Storage no. 1
- 17 : Energy = 19659 kWh
- Storage no. 2
- 18 : Energy = 18835 kWh
- Storage no. 3
- 19 : Energy = 17928 kWh
- Storage no. 4
- 20 : Energy = 16877 kWh
- Storage no. 5
- 21 : Energy = 14621 kWh
- Storage no. 6

START Readout []

CTS 0563926179 Timeout 120 sec
DCD

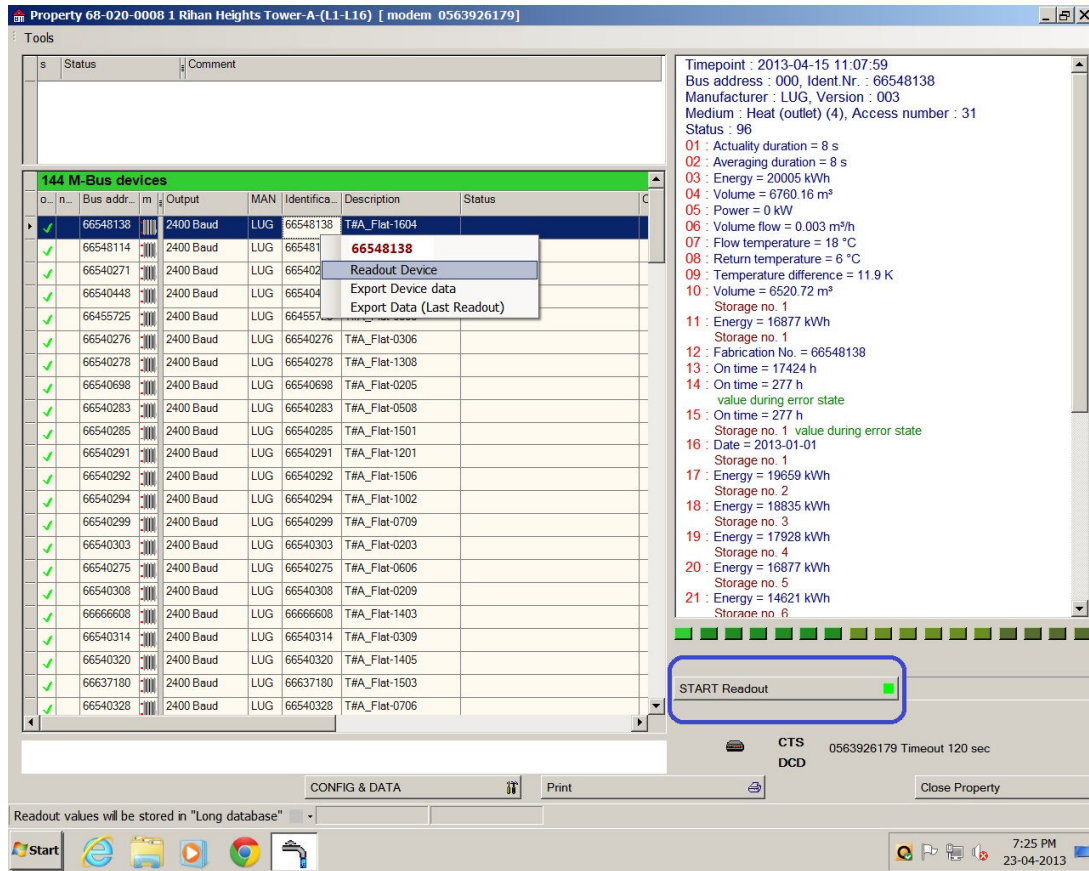
CONFIG & DATA [] Print [] Close Property []

Readout values will be stored in "Long database" []

Windows Taskbar: 7:08 PM, 23-04-2013

➤ Perform readout of devices in property window by any of below two options:

- By single device: Right click on the device and select “Readout Device”.
- By total network: Click “START Readout” button to read all devices together. When this option has been selected, it will update devices data one by one. It may take several minutes to finish the process depends upon device count and communication status).



➤ The energy or counting value will be displayed on “output” field after each device’s readout (when the readout is in progress).

➤ The status of communication will be displayed on the “status” field.

➤ Communication status symbol in second column is for easy status display.

- Cross mark : if couldn’t communicated to device
- Tick mark : if successfully downloaded the data from device

➤ Please check for any error messages in “status-comment” section.

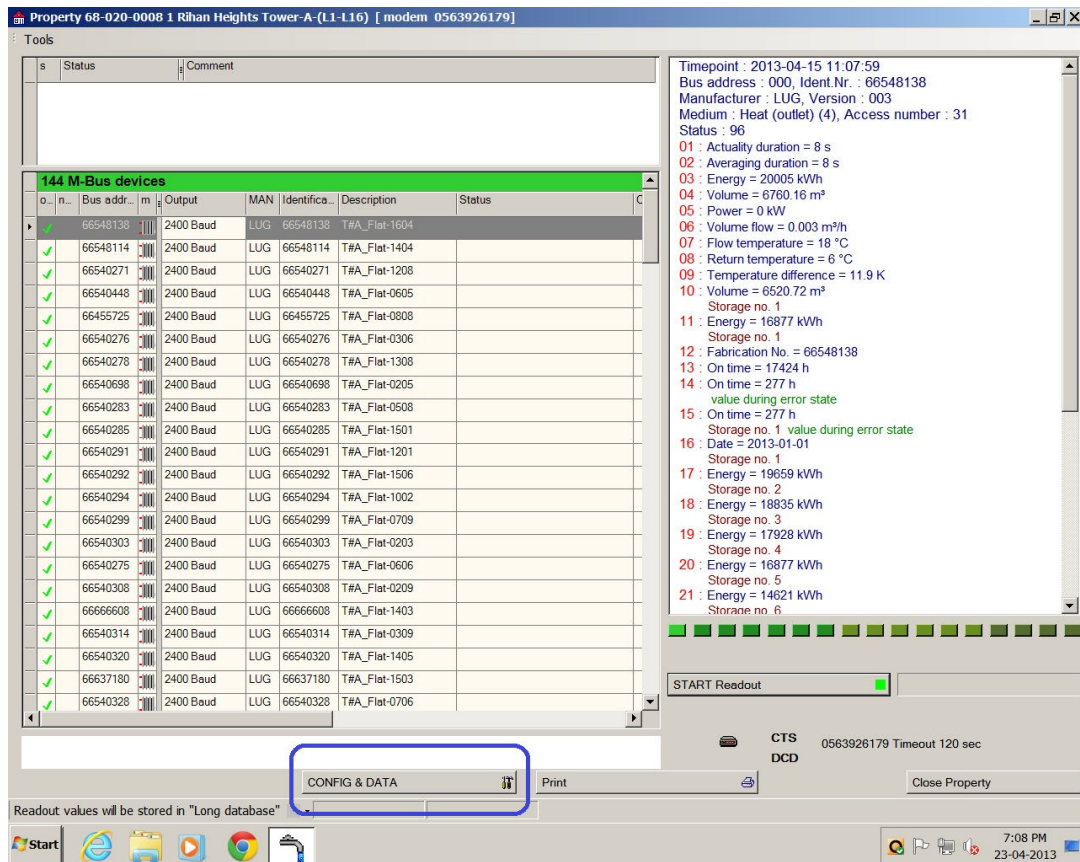
7.2 Device management and configuration:

Device management section includes following features:

- Add, edit, remove M-Bus devices
- Providing identification name and details for the device
- Communication settings (COM port, baud rate etc.)

To familiarize with device management section, please follow below instructions:

- ➔ Open corresponding property from main window.
- ➔ Press button "CONFIG & DATA" in the property window

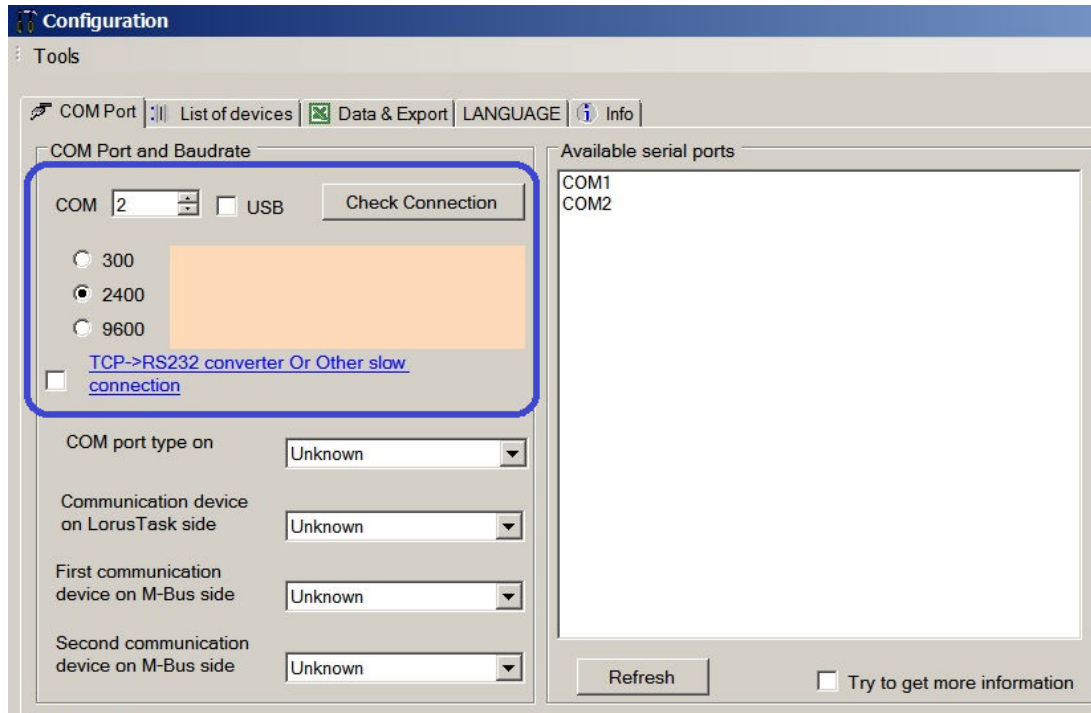


- ➔ Configuration window will be displayed with below major tabs:

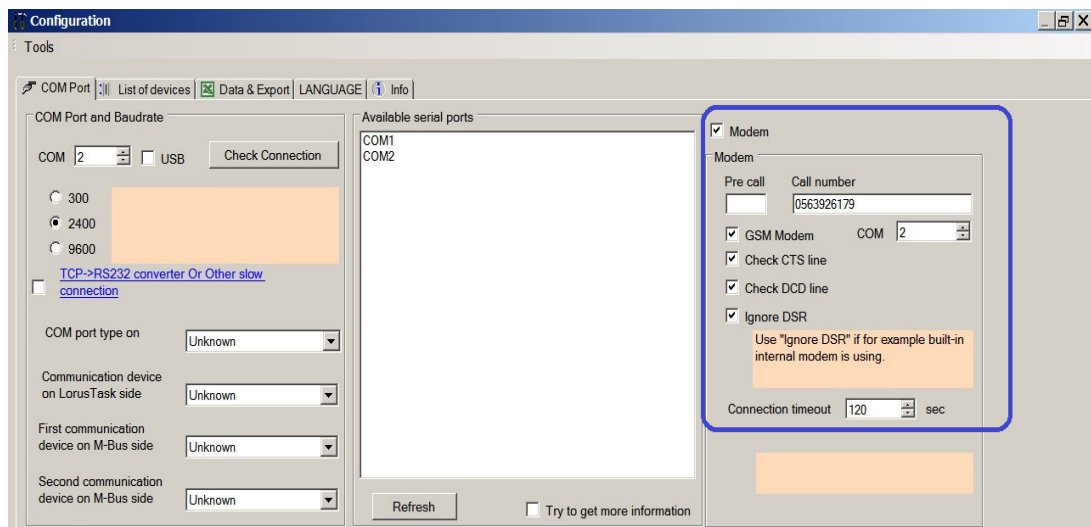
- COM Port
- List of devices
- Data & Export

COM Port and communication settings:

- Select "COM Port" tab and provide port number in the provided field (Serial interface number which is connected to M-Bus level converter).
- All available serial ports of the PC will be displayed in section "Available serial ports". Click "Refresh" to update the status of ports.
- Select appropriate baud rate for M-Bus devices.

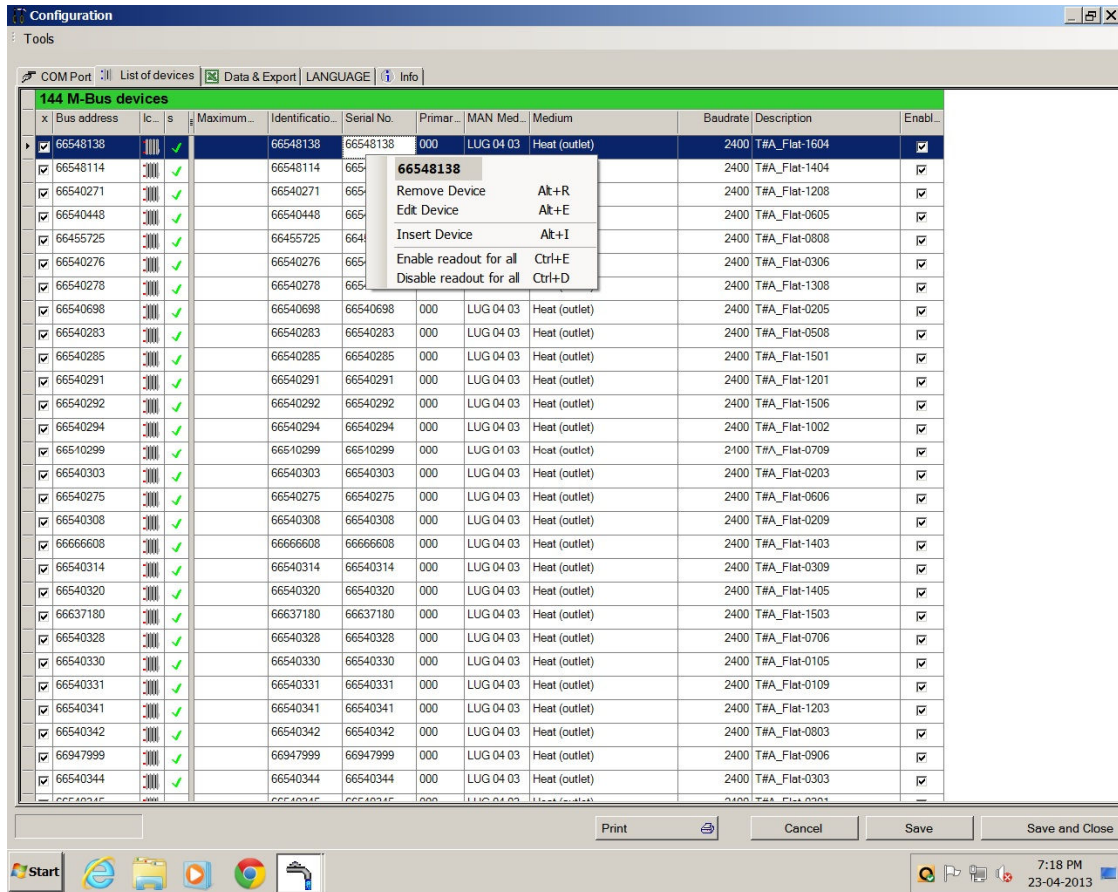


- Enable "Modem" option and other related settings if you are using GSM modem to read devices. (Optional settings)



Add, edit and remove devices:

➤ In “List of devices”, you can view and manage M-bus devices.



➤ Various menu options will be available with right click menu on each device. “Tools” menu items on top also is for same functions.

➤ Device addressing method should be decided and configured before adding devices. There are two methods to address the devices:

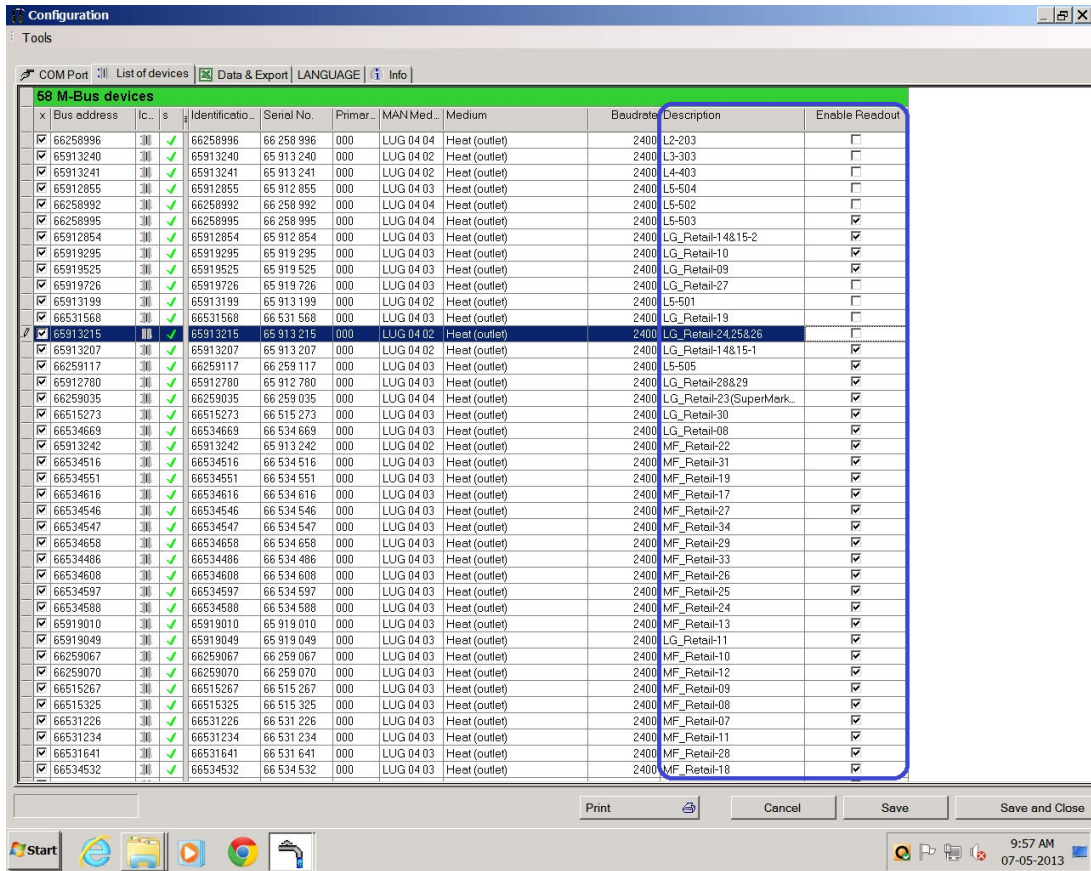
- By primary address : Address can be assigned from 0 to 250
- By secondary address : Address is manufacturer provided serial number

- Add M-bus devices by right click menu item "Insert Device". ("Tools" menu)

- Provide meter address, baud rate and description. Other information fields are optional. Click "Save and close" button to save device.
- Add all devices with short description (location) as per installed schedule. This refers to the identification for each device and appears everywhere with meter address. (For example, data exports)
- Select "Disable readout from device" option, if you want to ignore this device from readout process when performing total readout.
- Edit existing device information by right click menu item "Edit Device".

- Remove a device from property by menu item "Remove Device".

- We can edit or add description to the device in main configuration window also. Double click on the description field of each device and provide the information and continue to next device.
- Remove the tick mark from "Enable Readout" field for disabling the readout of that device when performing the total readout of property.



- Click "Save" button once you finished all the configurations.

Symbols for the medium of devices:

- For easy identification, software is using different symbols for each type of device. This symbol will be shown with device after first readout is finished. Please refer below information about various symbols:

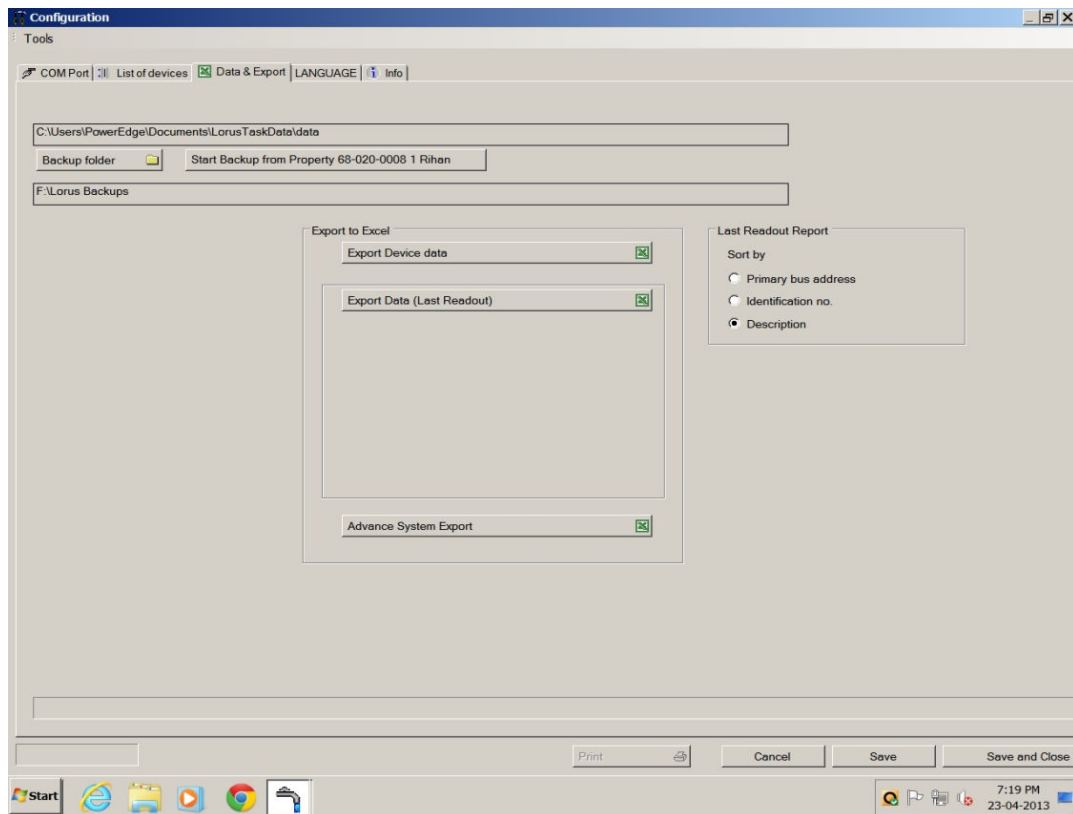


Symbol 1	:	Warm or mixed water
Symbol 2	:	Cold water
Symbol 3	:	The medium is unknown (No readout of the device yet)
Symbol 4	:	Oil (black)
Symbol 5	:	Unknown medium (dark gray)
Symbol 6	:	A/D transformer (dark yellow)
Symbol 7	:	Heat return or supply
Symbol 8	:	Heat / Cold
Symbol 9	:	Gas (magenta)
Symbol 10	:	Other medium (light Grey)
Symbol 11	:	Electricity (yellow)
Symbol 12	:	Pressure (brown)
Symbol 13	:	Cold
Symbol 14	:	Steam (light blue)
Symbol 15	:	Bus / System (dark magenta)
Symbol 16	:	Compressed air (dark green)
Symbol 17	:	Heating cost allocator (green)

- Please click "Save" Or "Save and close" button to save all configuration options.

Data backup and export:

➤ “Data & Export” tab is having the following features:



Backup of individual property

- Click on “Backup Folder” and select desired location for backup.
- Click “Start backup” to perform property devices’ data backup.
- Backup will be saved in the selected backup folder with date stamp.
- In this section, backup will be done only for the opened property.

Data Exporting

- Click “Export Data (Last Readout)” to export last available readout data for all devices with description.
- The exported excel file sorting order can be selected before starting export process (By primary address, identification number, description).
- Click “Export device data” to select a device file and export all available data reads (all previous read history) for a selected device.
- Data exporting option will be available in main property window also (Right click menu) for easy exports. Please refer Data export section for details.
- Click “Save and close” button to update and exit from configuration window.

8 Data exports

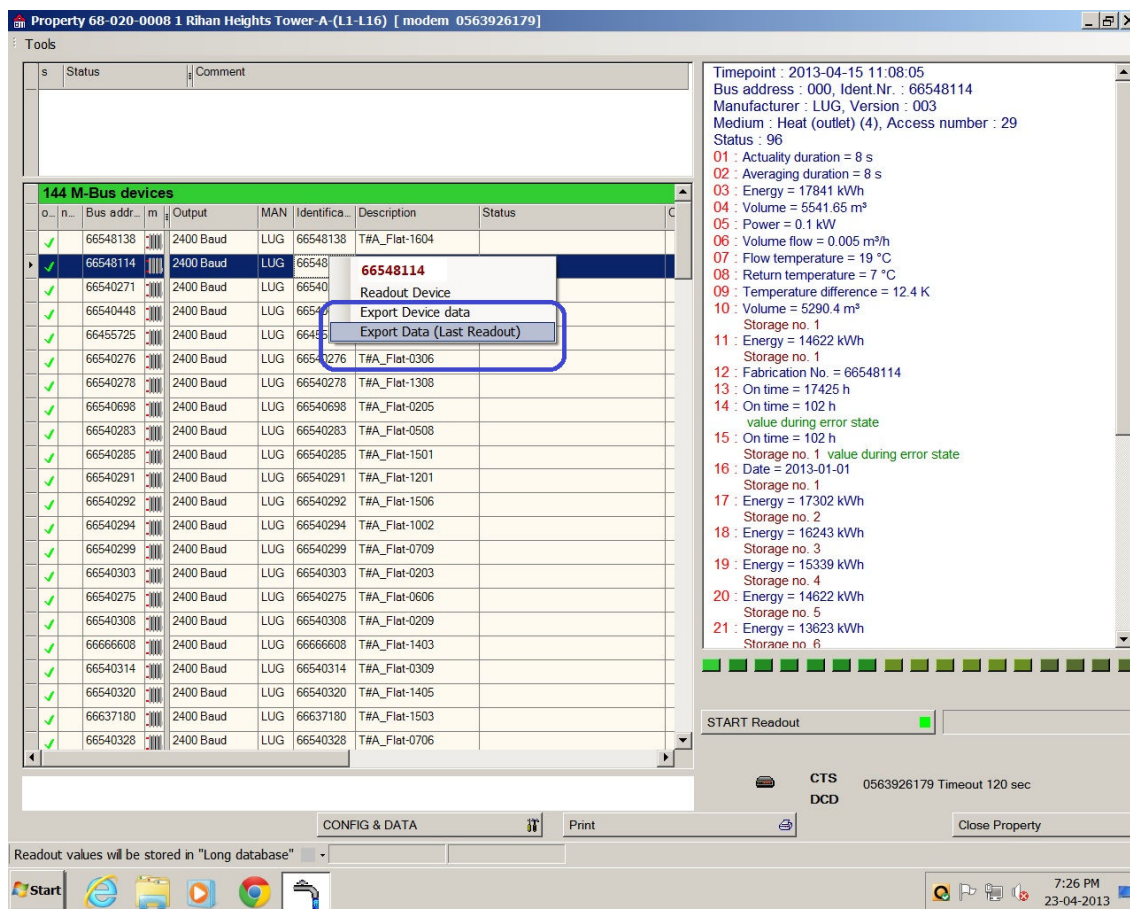
Data exports includes export of device data to an excel file based on below options.

➤ Export data (Last readout)

This will export last available readout data for all devices of selected property.

➤ Export device data

This will export all available data for a selected device including all previous reads.



The screenshot displays the AMR software interface. The main window shows a table of 144 M-Bus devices. The table has columns for 'o.n.', 'Bus addr.', 'm', 'Output', 'MAN', 'Identifica.', 'Description', and 'Status'. The device with ID 66548114 is selected, and a context menu is open over it, showing options: 'Readout Device', 'Export Device data', and 'Export Data (Last Readout)'. The right-hand panel displays details for the selected device, including Timepoint (2013-04-15 11:08:05), Bus address (000), Ident.Nr. (66548114), Manufacturer (LUG), Version (003), Medium (Heat (outlet) (4)), Access number (29), and Status (96). Below these details are 21 numbered readout items, such as '01: Actuality duration = 8 s', '02: Averaging duration = 8 s', '03: Energy = 17841 kWh', etc. At the bottom of the right panel, there is a 'START Readout' button and a status indicator. The bottom of the main window shows a 'CONFIG & DATA' tab, a 'Print' button, and a 'Close Property' button. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock (7:26 PM, 23-04-2013).

Below are the different ways to do data exports in software:

- By using right click menu in each property windows
- By using "Data & Export" tab in configuration window of each property
- By using right click menu in main window
- By using main menu item "Export to Excel" in main window

Sample Data Exports:

Book1 - Microsoft Excel

68-020-0008 1 Rihan Heights Tower-A-(L1-L16)

No	Description	Bus address	Identification no.	Serial No.	Timepoint	Energy	Volume	Power	Volume flow
1	T#A_Flat-0101	0	66540367	66540367	15-4-13 11:11:52	14873.00	3089.56	9.60	0.60
2	T#A_Flat-0102	0	66540380	66540380	15-4-13 11:12:43	10438.00	2676.36	0.00	0.00
3	T#A_Flat-0103	0	66540415	66540415	15-4-13 11:14:21	29451.00	7377.34	0.00	0.00
4	T#A_Flat-0104	0	66548010	66548010	15-4-13 11:22:01	33095.00	12704.30	8.20	1.07
5	T#A_Flat-0105	0	66540330	66540330	15-4-13 11:10:23	14751.00	4735.12	0.00	0.00
6	T#A_Flat-0106	0	66540381	66540381	15-4-13 11:12:49	22079.00	4572.62	3.20	0.21
7	T#A_Flat-0107	0	66540374	66540374	15-4-13 11:12:10	13335.00	3785.08	0.00	0.00
8	T#A_Flat-0108	0	66540439	66540439	15-4-13 11:14:54	8894.00	4217.98	0.00	0.00
9	T#A_Flat-0109	0	66540331	66540331	15-4-13 11:10:29	19611.00	6579.42	3.40	0.65
10	T#A_Flat-0201	0	66540402	66540402	15-4-13 11:13:30	10384.00	3095.19	0.00	0.00
11	T#A_Flat-0202	0	66540410	66540410	15-4-13 11:13:49	14403.00	5712.08	2.10	0.23
12	T#A_Flat-0203	0	66540303	66540303	15-4-13 11:09:32	15239.00	6919.07	2.40	0.22
13	T#A_Flat-0204	0	67229114	67229114	15-4-13 11:11:07	1271.00	94.62	0.00	0.00
14	T#A_Flat-0205	0	66540698	66540698	15-4-13 11:08:44	8533.00	2870.07	7.00	0.61
15	T#A_Flat-0206	0	66540708	66540708	15-4-13 11:19:34	12095.00	3971.75	0.00	0.00
16	T#A_Flat-0207	0	66540362	66540362	15-4-13 11:11:33	7284.00	3627.15	0.00	0.00
17	T#A_Flat-0208	0	66540411	66540411	15-4-13 11:13:56	9539.00	4174.87	0.00	0.00
18	T#A_Flat-0209	0	66540308	66540308	15-4-13 11:09:44	14521.00	5649.96	3.70	0.28
19	T#A_Flat-0301	0	66540345	66540345	15-4-13 11:11:00	6886.00	1220.40	0.00	0.00
20	T#A_Flat-0302	0	66540370	66540370	15-4-13 11:11:58	7521.00	2709.97	0.00	0.00
21	T#A_Flat-0303	0	66540344	66540344	15-4-13 11:10:53	12886.00	7232.80	0.00	0.00
22	T#A_Flat-0304	0	66548027	66548027	15-4-13 11:22:06	25589.00	11289.37	3.60	0.76
23	T#A_Flat-0305	0	66540332	66540332	15-4-13 11:23:11	10847.00	1837.61	4.10	0.40
24	T#A_Flat-0306	0	66540276	66540276	15-4-13 11:08:32	13075.00	4458.91	5.00	0.35
25	T#A_Flat-0307	0	66540694	66540694	15-4-13 11:19:21	7499.00	2528.98	0.00	0.00
26	T#A_Flat-0308	0	66540552	66540552	15-4-13 11:16:43	13752.00	4967.47	0.30	0.53

Book1 - Microsoft Excel

68-020-0008 1 Rihan Heights Tower-A-(L1-L16)

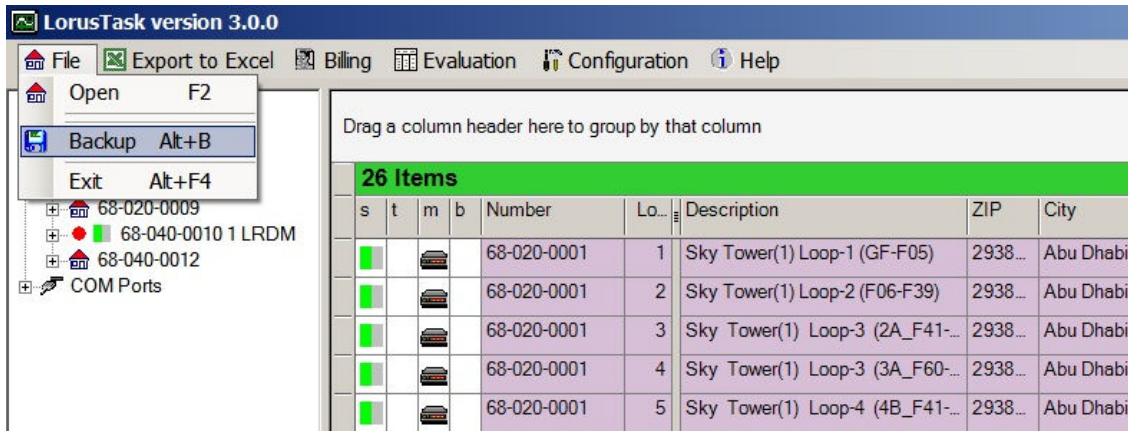
Code	Timepoint	LUG V003 66548138	Heat (outlet) Status	Actuality duration s	Averaging duration s	Energy kWh	Volume m ³	Power kW	Volume flow m ³ /h	Flow temperature °C	Return temperature °C	Temperature difference K	Vol m ³
5 E1	28-11-11 11:27:38	CO		8	8	264	1700.97	0.00	0.01	29	30	0.6	
6 E1	28-11-11 11:48:31	CO		8	8	264	1700.97	0.00	0.01	29	30	0.6	
7 E1	28-11-11 14:13:45	CO		8	8	264	1701.00	0.00	0.01	30	30	0.6	
8 E1	7-12-11 11:50:29	0		8	8	531	1788.11	2.70	0.33	15	8	7.2	
9 E1	7-12-11 12:16:40	0		8	8	532	1788.26	2.60	0.31	15	8	7.3	
10 E1	11-12-11 12:23:21	CO		8	8	573	1792.89	0.00	0.01	25	25	0.3	
11 E1	11-12-11 12:31:30	CO		8	8	573	1792.89	0.00	0.00	25	25	0.3	
12 E1	11-12-11 14:12:43	CO		8	8	573	1792.89	0.00	0.00	24	25	0.3	
13 E1	11-12-11 15:31:17	60		8	8	573	1792.89	0.00	0.00	25	25	0.1	
14 E1	14-12-11 11:20:10	0		8	8	585	1802.11	1.60	1.32	26	25	1.0	
15 E1	14-12-11 11:29:41	0		8	8	585	1802.31	1.50	1.32	26	25	1.0	
16 E1	4-1-12 10:44:40	CO		8	8	1331	2310.01	0.00	0.00	24	24	0.1	

9 Backup options

There are two different methods to take the backup of property data:

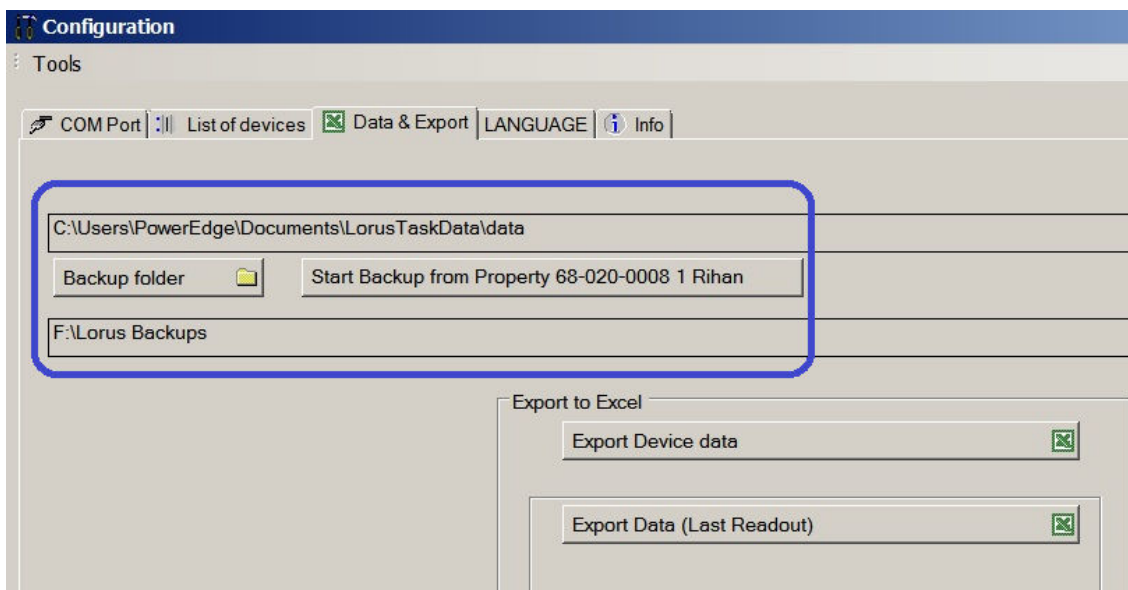
➤ By using main menu item "File - Backup"

- This option will take backup of all existing properties in main window.
- By doing backup with this option, it may take some time to finish depend upon property data size and number of properties.



➤ By using "Data & Export" tab of configuration window in each property

- This option is to do the backup of individual property.
- Backup folder can be changed by using "Backup folder" button.



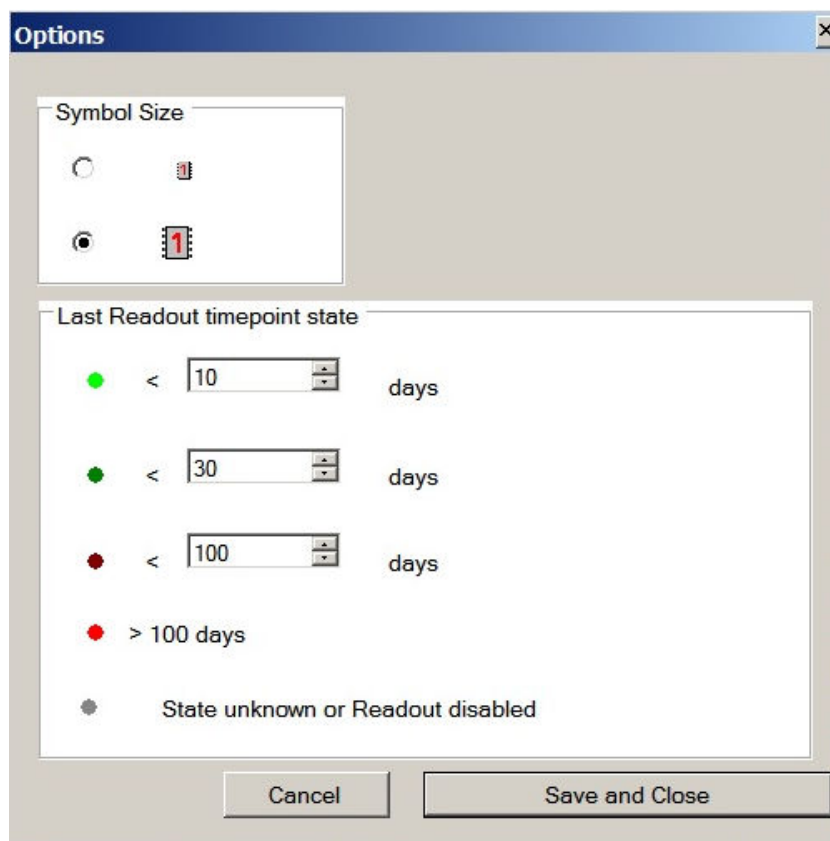
10 Configuration Menu

“Configuration” menu includes following items as described below:

1. Options (for symbol size and status display of devices)
2. Readout scheduler (for automatic readout of properties)
3. Password settings (for start/termination of software)

10.1 Display options:

- Select symbol size for displaying properties in main window and devices in property windows. Small and big symbol sizes are available.



- Select days to show various colours in main window on each property grid.
- Colours will be shown by comparing last readout data time point with number of days provided.

10.2 Automatic readout scheduler:

Readout Scheduler is useful to schedule automatic readouts of devices at various timing. Configure automatic readouts for each property as per below available options.

Modus	Property Nu...	Loop	BusSwitc...	Description	COM...	Connection type
	68-020-0001	1	0	Sky Tower(1) Loop-1 (GF-F...	2	COM2
	68-020-0001	2	0	Sky Tower(1) Loop-2 (F06...	2	COM2
	68-020-0001	3	0	Sky Tower(1) Loop-3 (2A_F...	2	COM2
	68-020-0001	4	0	Sky Tower(1) Loop-3 (3A_F...	2	COM2
	68-020-0001	5	0	Sky Tower(1) Loop-4 (4B_F...	2	COM2
	68-020-0002	1	0	Sun Tower2_Loop-1a (GF L...	2	COM2
	68-020-0002	2	0	Sun Tower2_Loop-1 (F06-F...	2	COM2
	68-020-0002	3	0	Sun Tower2_Loop-2 (F18-F...	2	COM2
	68-020-0002	4	0	Sun Tower2_Loop-3 (F40-F...	2	COM2
	68-020-0008	1	0	Rihan Heights Tower-A(L1...	2	COM2
Daily	68-020-0008	2	0	Rihan Heights Tower-A(L1...	2	COM2
	68-020-0008	20	0	Rihan Heights Tower#A ET...	2	COM2
	68-020-0008	3	0	Rihan Heights Tower-B	2	COM2
Daily	68-020-0008	30	0	Rihan Heights Tower#B ET...	2	COM2
	68-020-0008	4	0	Rihan Heights Tower-C	2	COM2
Daily	68-020-0008	40	0	Rihan Heights Tower#C ET...	2	COM2
	68-020-0008	5	0	Rihan Heights Tower-D	2	COM2
Daily	68-020-0008	50	0	Rihan Heights Tower#D ET...	2	COM2
	68-020-0008	6	0	Rihan Heights Tower-E	2	COM2
Daily	68-020-0008	60	0	Rihan Heights Tower#E ET...	2	COM2
	68-020-0009	1	0	Guardian - RT	2	COM2 OnBoard > Modem_11
	68-020-0009	2	0	Guardian - OT	2	COM2 OnBoard > Modem_11
	68-040-0010	1	0	LRDM	2	COM2 103 > Modem_10Bit_C
	68-040-0012	1	1	Lake Shore Tower(Y2) L1	2	COM2
	68-040-0012	2	2	Lake Shore Tower(Y2) L2	2	COM2
	68-040-0012	3	3	Lake Shore Tower(Y2) L3	2	COM2

Short interval mode (15, 30, 60, 120 minutes intervals)

- The configured properties will be read in each selected interval of an hour.
- For example; 15 Min configuration will read the property at timings like 0:00, 0:15, 0:30, 0:45, 1:00 etc.
- This option is useful for properties with less number of devices (for testing).

Long interval mode

- Daily : Readout will happen daily at selected start time
- Weekly : Readout will happen weekly on selected day and at selected time
- 10 Days : Readout will happen on 1st, 10th, 20th of each month at selected time
- Monthly: Readout will happen monthly on selected date at selected time

Global settings for all "Long interval mode" configurations:

Start time : Applicable input for all long interval modes

Day for weekly read : Applicable input for weekly read mode

Date for monthly read : Applicable input for monthly read mode

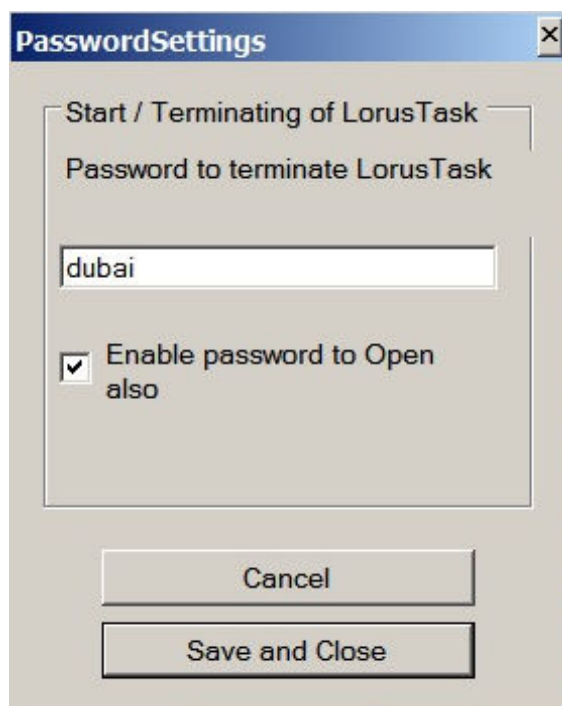
Note: The "Global settings" is applicable for all properties

- The “next readout time” will be calculated as per current system time.
- Select/deselect “Enable Readout Scheduler” to enable/disable scheduling for all the properties.
- Select “Auto-save Last Readout Data” to save last readout export automatically after each scheduler read-out.
- Click “Save and Close” button to update and exit readout scheduler.
- Click “Save and launch first readout” button to start readout one time immediately through scheduler for all configured properties.

10.3 Password settings:

This is to provide one administrator password to manage operation of software.

- Enter the password in field to control termination of software.
- By default, password will be blank. i.e., no password will be required for operation.
- Select “Enable password to Open also” option to restrict the start of software with same password.
- Once assigned a password, software will request for the password when you are trying to terminate software.
- The assigned password should be entered when you are trying to change existing password. If password is blank, software will not request for password.
- Click “Save and Close” button to save and exit from password settings.



11 ista M-Bus Devices

11.1 Ultrasonic meters:

Ultego III Eco – cold energy meter



Ultego III Perfect – cold energy meter

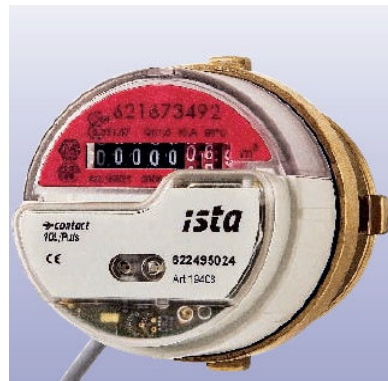


11.2 Mechanical meters:

Sensonic II – energy meter



istameter – water meter



11.3 Energy calculator:

Sensonic II Calculator (T25/T250)



11.4 M-Bus interfaces:

M-Bus Level converter (LC 250)



ista Bus switcher



12 ista Technical support

For any technical queries related to the system, please contact us:



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