Procedure to download the inbuilt Data logging from LM1360 using USB Port along-with MARC Software

Rishabh presents the Power meters with inbuilt Data-logging feature using 8MB internal Memory storage. This works on FIFO basis. User can configure the data logging function in the unit as per the requirements. Selection of required Parameters and the time span to record the next readings is programmable in the unit itself. This saves the memory locations from getting quickly occupied and user can save max no of readings for the selected parameters. This helps to record the data without any type of communications such as RS485 MODBUS, ETHERNET, etc.

Inbuilt Data-logging facility is available in LM 1350, LM 1360, Rish Master 3440i DL, Rish EM DC, Rish EM DC DL models.

Part 1: Data-Logging configuration in the meter.

Refer the operating manual to configure the settings for activating the Data-logging function in the units. Please refer below links and details for the same:

Manual: https://rishabh.co.in/uploads/product/LMXX_REV_F_1_or_5A.pdf

Website Path: Go to rishabh.co.in - Products - Multifunction Meters - RISH LM 1360 / 1350 -Load Manager - Manual - LMXX_REV_F_1_or_F.pdf

Refer section 3.2.6 and program the units accordingly.

Upon setting the parameters, unit will start saving the records as per programmed. Accumulated data will be stored in internal device Memory of 8MB. Memory once full, it will work on FIFO (First In First Out) basis.

Part 2: MARC SOFTWARE Installation

Please download the MARC Software from the web media using below link:

https://rishabh.co.in/uploads/Software/marc%20Configuration%20Utility.zip

Website Path: Goto rishabh.co.in - Products - Accessories - marc Configuration Utility - Software Link : **marc Configuration Utility**

Zip file with name as "**marc Configuration Utility**" of 64.774MB will be downloaded in the PC/LAPTOP. Extract the files and install the MARC Software in the PC/LAPTOP and save the short cut on the desktop. Below symbol will appear on the desktop, once installed successfully.
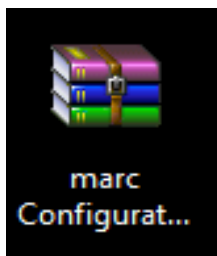
 ← Symbol of Zip file for MARC Software

Short cut Symbol on the DESKTOP ⟹
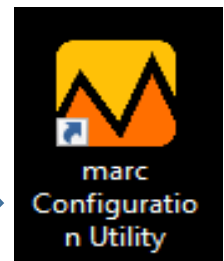
Part 3: Communication between LM 1360 USB Port & MARC software

1. Required Tools: Data transfer cable (MINI USB to USB), LM 1360 unit with Datalogger, PC/LAPTOP with MARC software installed.

2. Connect the Power Meter LM 1360 with the PC / LAPTOP using the MINI USB to USB type Data transfer cable (Data cable of any smart mobile phone) in which the software is installed.

3. Refer to the Operating Manual of LM 1360 & program the Serial (Communication) Parameters in the unit LM 1360 by entering in the Set Up Mode. Program the below settings in the unit:
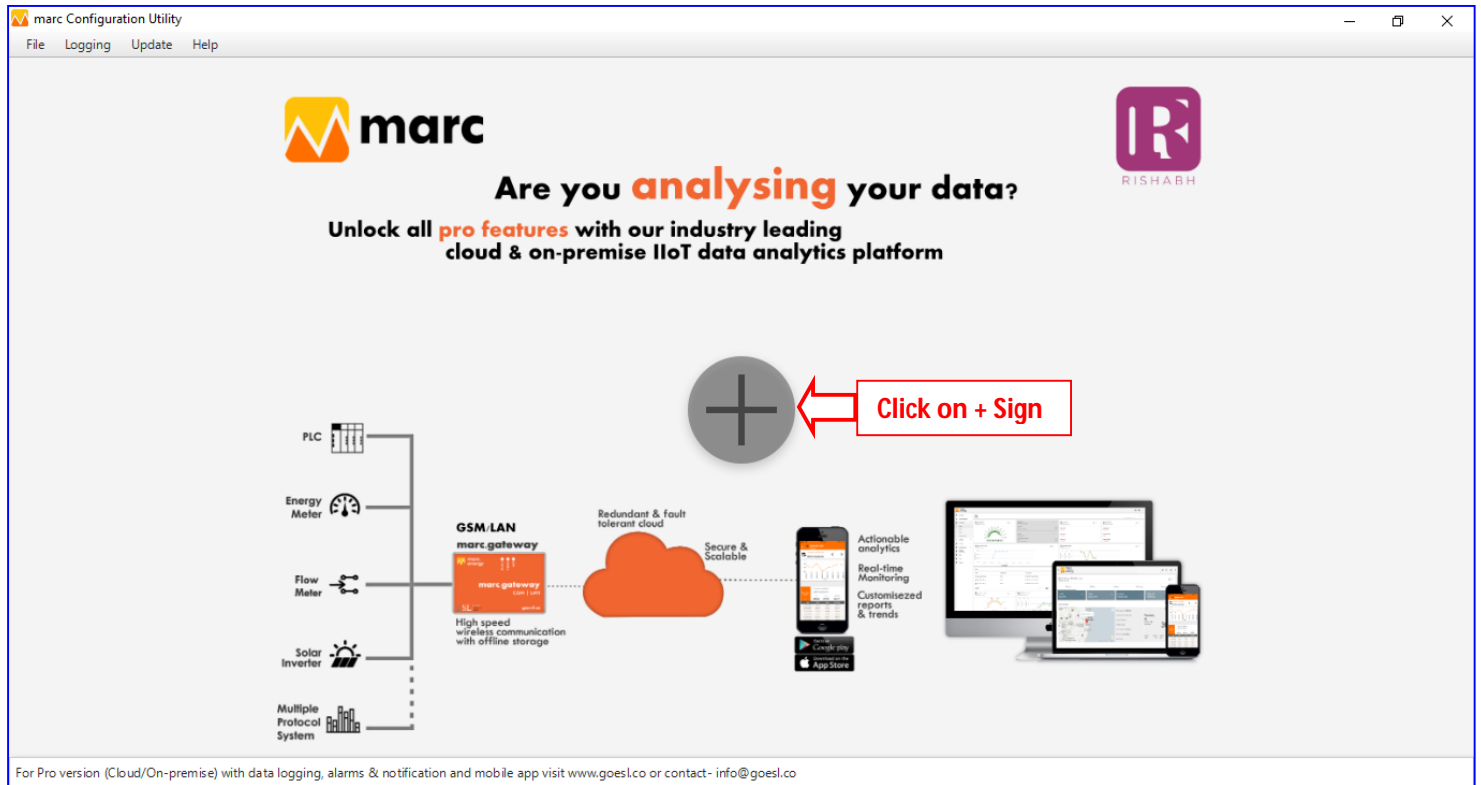
    Addr: 001

    bAud rAtE: 57.6K

    PrtY: no 1

4. The Unit LM 1360 is now ready to communicate with MARC software through USB to download the accumulated Data.

5. Open MARC Software by double clicking on the marc Configuration Utility symbol, stored on the desktop. Below screen will be displayed:


6. Click on the '+' sign displayed at the centre of the software screen (As shown in above image). Below screen will be pop up showing the setting parameters for communication. Select Serial Communication type (TCP/IP is another option). Select the COM PORT used. Keep rest parameters as it is. These are the same which are configured in the unit.

Software / PC will smartly detect the COM PORT to which the USB Cable is connected. Else, user need to select the COM Port manually.

For manual selection, goto DESKTOP and double click on it - right click on MY COMPUTER (or THIS PC) - select '**Manage**' - select "**Device Manager**' - select / click on '**Ports (COM & LPT)** and it will display the COM PORT used. Select the same port in above setting field.

Refer image below showing USB Serial Port (COM 3). This is the same selected above.
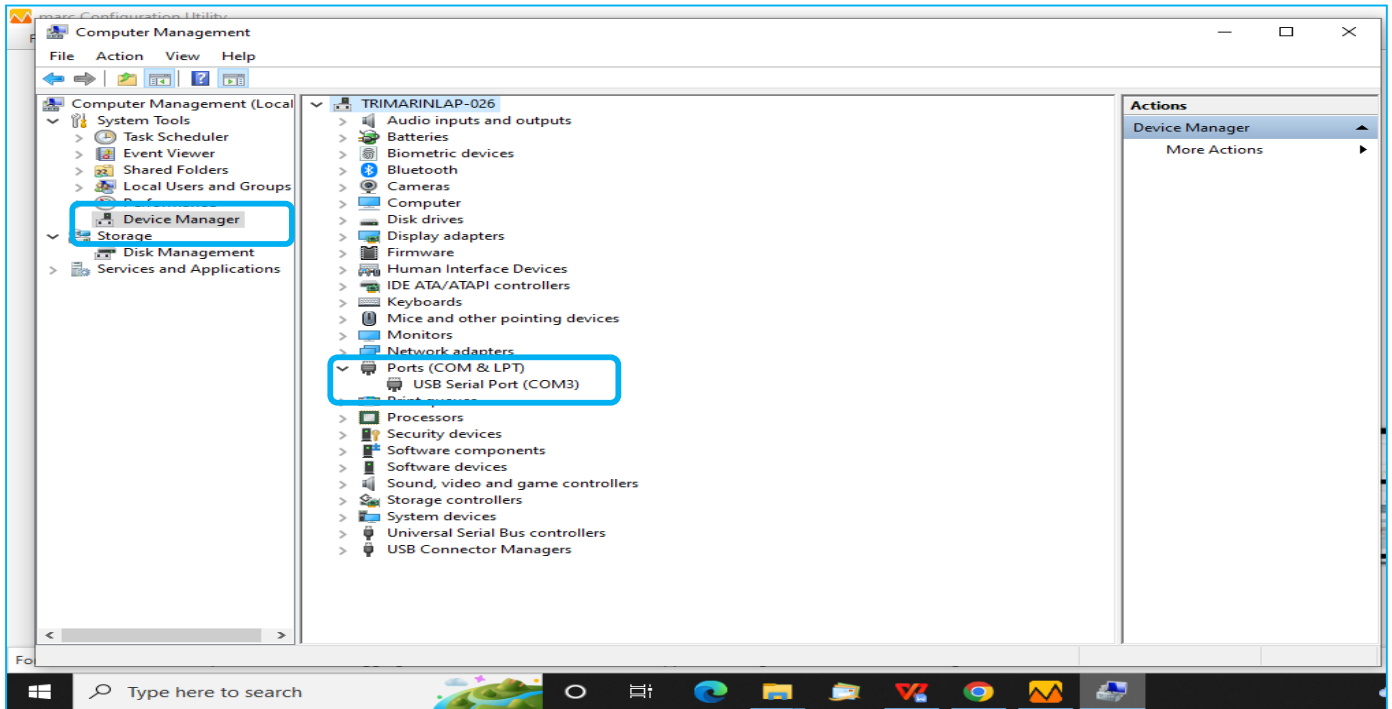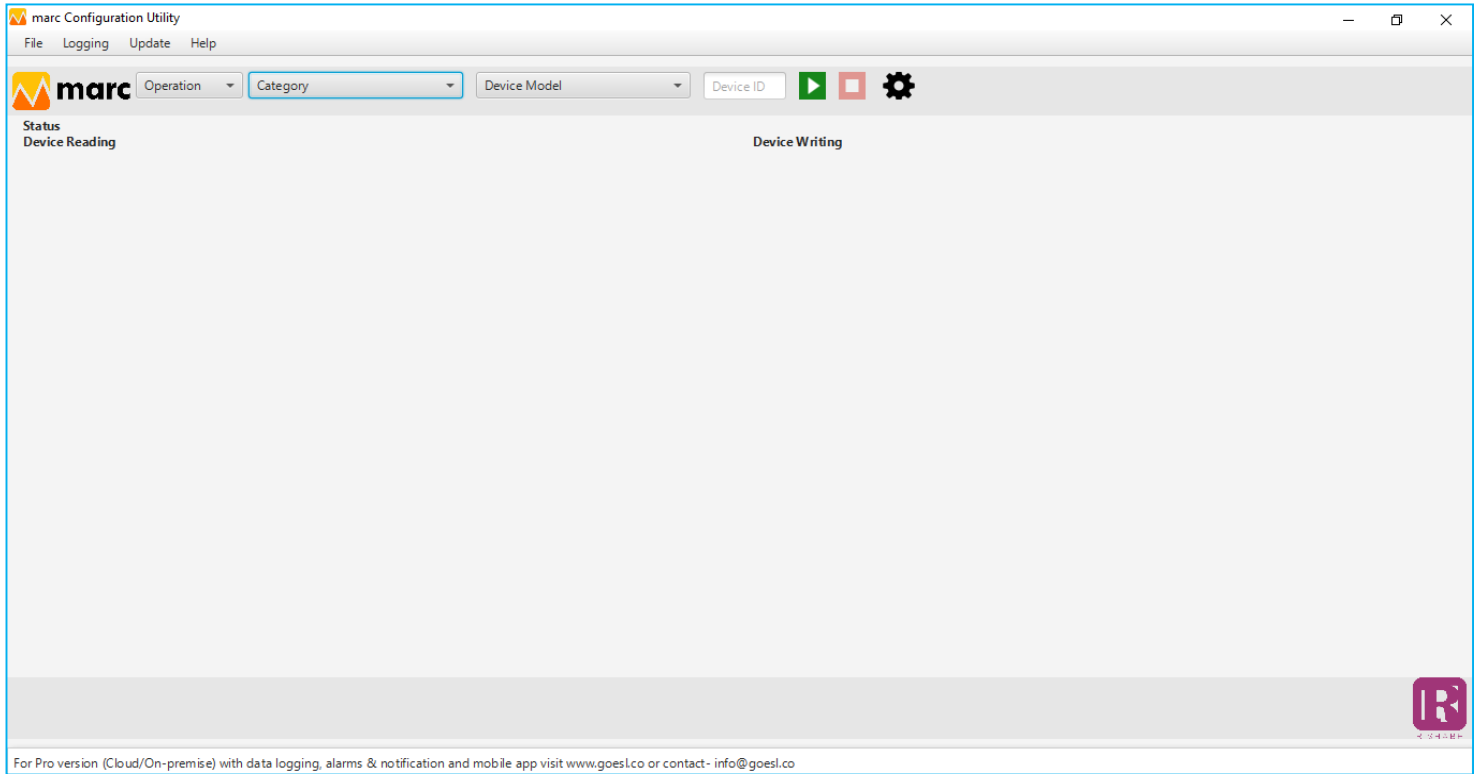
7. Click on "**Next**"
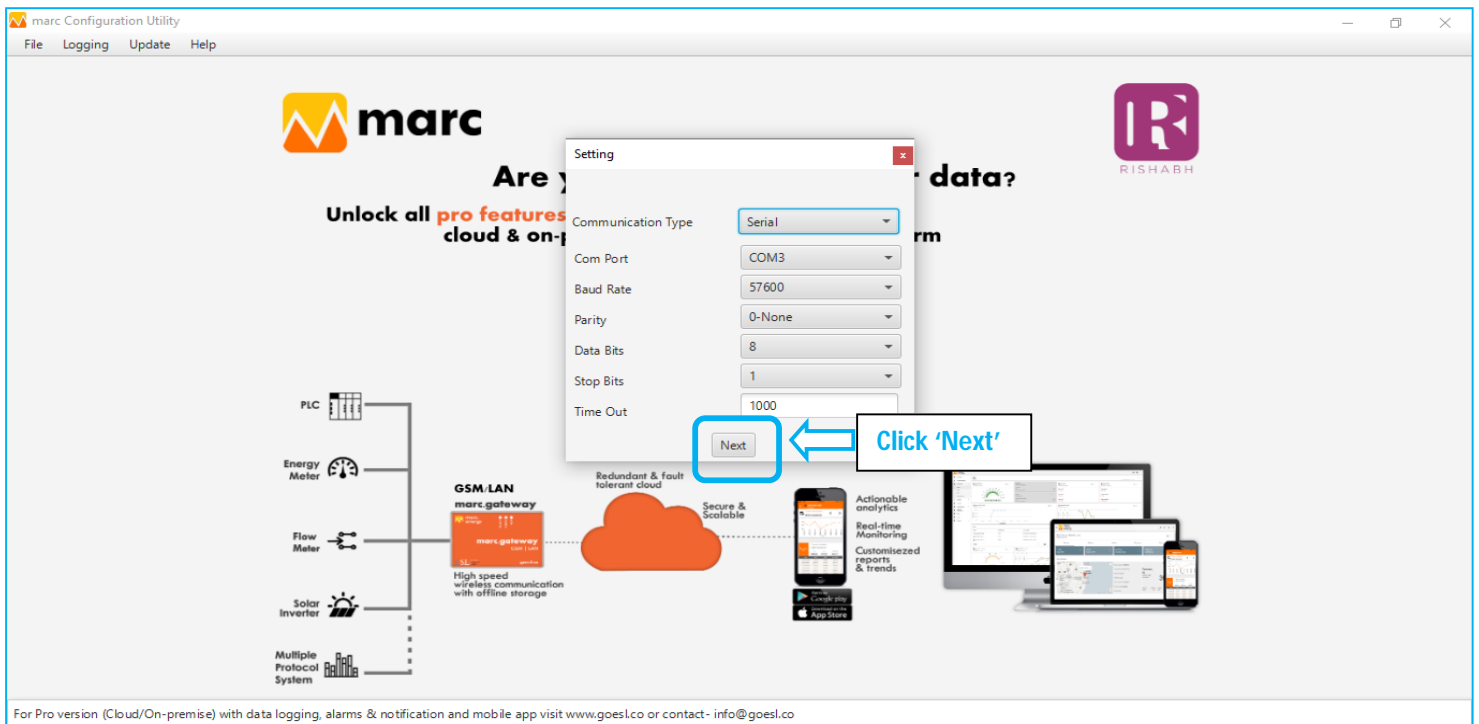
8. Below window will appear on the PC/LAPTOP Screen:

Select below parameters from Drop down windows:

A) Operation: Select READ (another option is Write)

B) Category: Select Multifunction Meter with Data Logger (Another option is Multifunction Meter)

C) Device Model: Select RISH LM 1350/1360 DL (Another options are Rish master 3440i DL, RISH EM DC / RISH EM DC DL)

9. Upon selecting device model in the above window, below screen will POP UP:
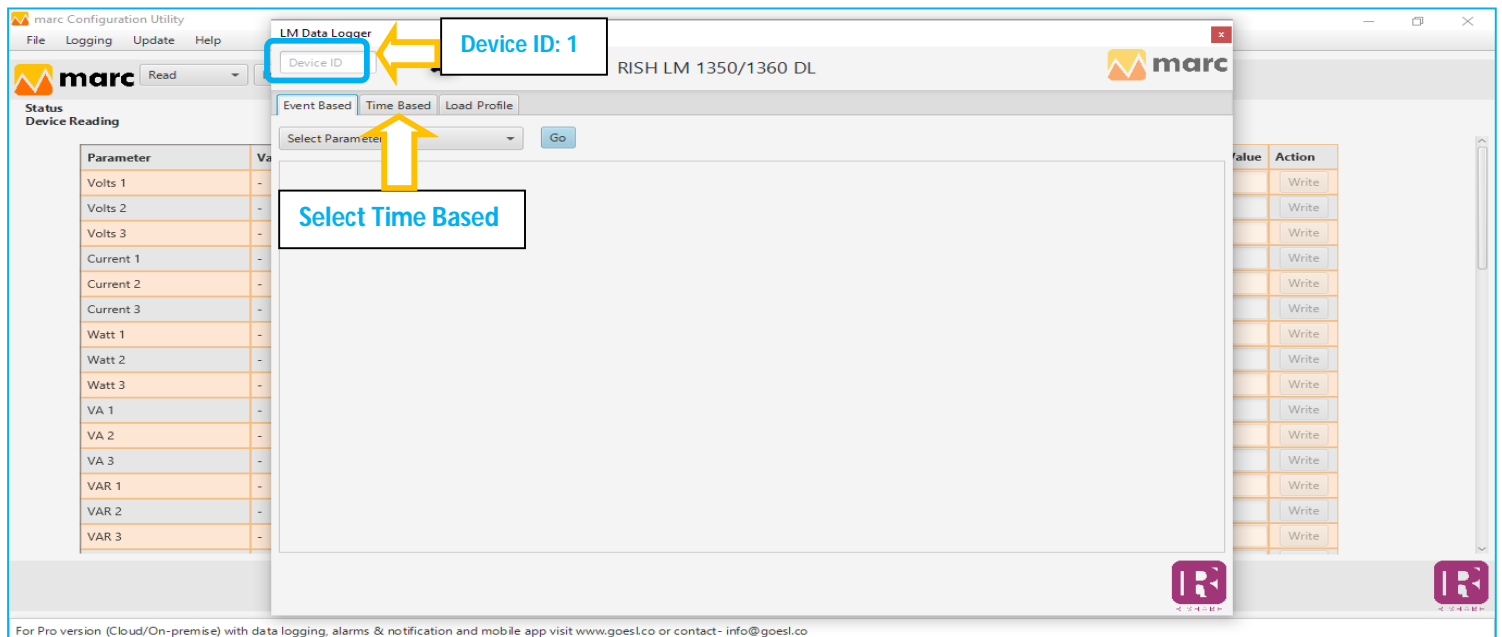
Insert **Device ID as 1**, select **Time Based** and click on **GO**. Below screen will appear.

Click on OK ensuring that the Baud Rate in the software as well as in the device is same I.e. 57.6K

After clicking OK, Next window will appear which shows all the recorded values of the selected parameters in the device internal memory, alongwith the time stamping.

Remember, this is the data of selective parameters only, along-with the programmed time span.
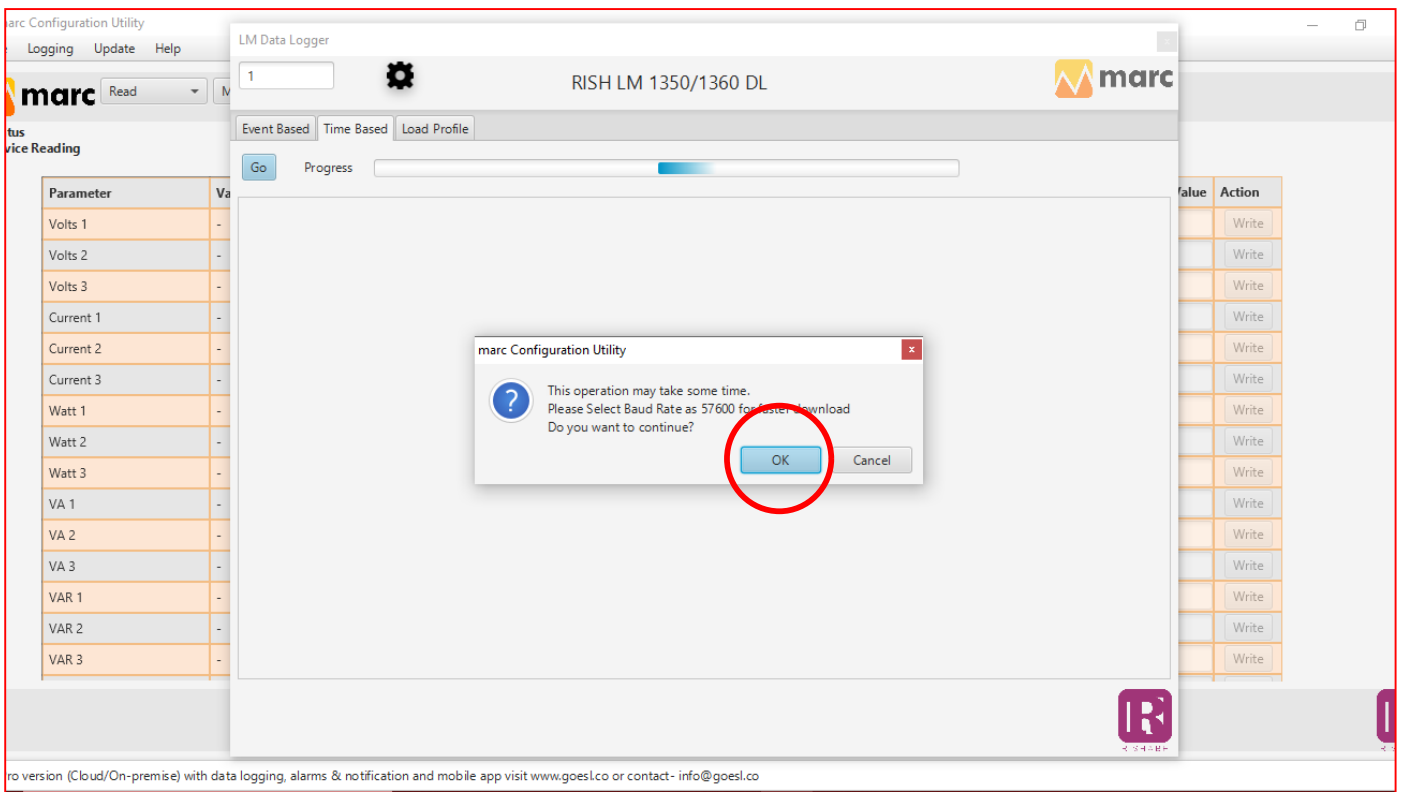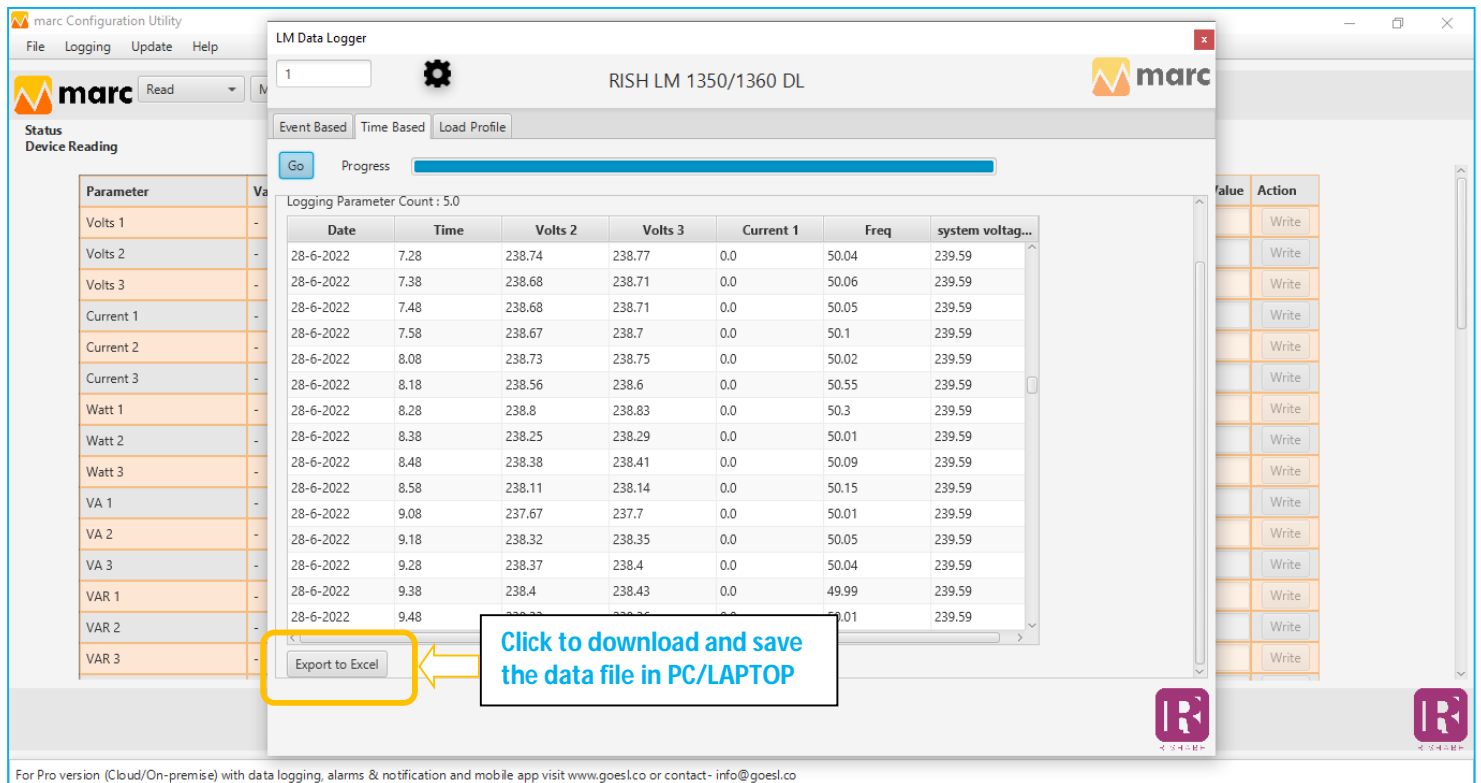

10. To download this file and save the same on LAPTOP/PC, click on Export to Excel symbol and select the location where the file is required to be saved.

11. Close this window and you will return to the previous window, as below:

Insert Device ID: 1 and then click on GREEN Arrow symbol next to it. This will list down all the parameters which device is reading at the real time. It will be displayed in the tabular format. Refer below image.

Status - Communicating
Device Reading

Insert device ID: 1 and click on GREEN arrow symbol

Present parameters readings will be displayed

Parameter	Value
Volts 1	238.273
Volts 2	238.239
Volts 3	238.279
Current 1	0.0
Current 2	0.0
Current 3	0.0
Watt 1	0.0
Watt 2	0.0
Watt 3	0.0
VA 1	0.0
VA 2	0.0
VA 3	0.0
VAR 1	0.0
VAR 2	0.0
VAR 3	0.0

	Old Value	Action	New Value	Action
	-	Read	Value	Write
PT-Secondary	-	Read	Value	Write
CT-Primary	-	Read	Value	Write
CT-Secondary	-	Read	Value	Write
Demand Integration Time	-	Read	Value	Write
Energy Output	-	Read	Value	Write
System Type	-	Read	Value	Write
Pulse Width of Relay	-	Read	Value	Write
Node Address	-	Read	Value	Write
Reset Parameters	-	Read	Value	Write
Number of Poles	-	Read	Value	Write
Rs485 Setup Code	-	Read	Value	Write
Pulse Divisor	-	Read	Value	Write
Energy DigitReset Count	-	Read	Value	Write
	-	Read	Value	Write

For Pro version (Cloud/On-premise) with data logging, alarms & notification and mobile app visit www.goesl.co or contact

12. Click on the RED Symbol near to GREEN Arrow, to stop the data reading.

13. Close the window to exit from the software.

14. Disconnect the DATA Cable from the PC/LAPTOP & LM 1360 Meter.