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.



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"

M marc Configuration Utility File Logging Update Help			- 5)
			R
	Setting		
Are	3	· data?	
Unlock all <mark>pro feature</mark> cloud & on	S Communication Type	Serial 👻 rm	
	Com Port	COM3 -	
	Baud Rate	57600 👻	
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	Data Bits	8 -	
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PLC PLC	Time Out	1000	
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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)

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File Logging Update Help		
Marc Operation - Category - Device Model - Device ID 🕨 🗖 🏠		
Status Device Reading Device Writing		
		R
For Pro version (Cloud/On-premise) with data logging, alarms & notification and mobile app visit www.goesl.co or contact- info@goesl.co		

9. Upon selecting device model in the above window, below screen will POP UP:

rc Configuration Utility Logging Update Help	LM Data Logger Device ID: 1	×	_	Ø	1	
marc Read -	RISH LM 1350/1360 DL	arc				
us ice Reading	Event Based Time Based Load Profile					
	Select Parameter Go					
Parameter	Va	/alue	Action			
Volts 1			Write			
Volts 2	Select Time Based		Write			
Volts 3			Write			
Current 1	-		Write			
Current 2	-		Write			
Current 3	-		Write			
Watt 1			Write			
Watt 2			Write			
Watt 3			Write			
VA 1			Write			
VA 2	-		Write			
VA 3			Write			
VAR 1			Write			
VAR 2			Write			
VAR 3			Write			
		R				

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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

ading Parameter Va Volts 1 Volts 2 Volts 3 Current 1 Current 2 Volts 1 Volts 3	ent Based Time Based Load Profile		alu	e Action Write
eading Eve Parameter Va Volts 1 - Volts 2 - Volts 3 - Current 1 - Current 2 -	vent Based Load Profile		'alu	e Action Write
Parameter Va Volts 1 - Volts 2 - Volts 3 - Current 1 - Current 2 -	Go Progress		ralue	e Action Write
Parameter Va Volts 1 - Volts 2 - Volts 3 - Current 1 - Current 2 -			falu	e Action Write
Volts 1 - Volts 2 - Volts 3 - Current 1 - Current 2 -				Write Write
Volts 2 - Volts 3 - Current 1 - Current 2 -			_	Write
Volts 3 - Current 1 - Current 2 -				
Current 1 - Current 2 -				Write
Current 2 -				Write
	m	narc Configuration Utility	×	Write
Current 3 -		This operation may take some time.		Write
Watt 1 -		Please Select Baud Rate as 57600 for faster download		Write
Watt 2 -		Do you want to continue:		Write
Watt 3 -		OK Ca	ncel	Write
VA 1 -		\smile		Write
VA 2 -				Write
VA 3 -				Write
VAR 1 -				Write
VAR 2 -				Write
VAR 3 -				Write

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.

ading	Ev	vent Based Tin Go Progra	me Based Load Pr	ofile		550/1500 DE					
Parameter	Va	Logging Parame	eter Count : 5.0						^	alue	Action
Volts 1	- [Date	Time	Volts 2	Volts 3	Current 1	Freq	system voltag			Write
Volts 2	-	28-6-2022	7.28	238.74	238.77	0.0	50.04	239.59			Write
Volts 3	-	28-6-2022	7.38	238.68	238.71	0.0	50.06	239.59			Write
Current 1		28-6-2022	7.48	238.68	238.71	0.0	50.05	239.59			Write
Current 2		28-6-2022	7.58	238.67	238.7	0.0	50.1	239.59			Write
current z	-	28-6-2022	8.08	238.73	238.75	0.0	50.02	239.59			Wite
Current 3	-	28-6-2022	8.18	238.56	238.6	0.0	50.55	239.59			Write
Watt 1	-	28-6-2022	8.28	238.8	238.83	0.0	50.3	239.59			Write
Watt 2	-	28-6-2022	8.38	238.25	238.29	0.0	50.01	239.59			Write
Watt 3	-	28-6-2022	8.48	238.38	238.41	0.0	50.09	239.59			Write
VA 1		28-6-2022	8.58	238.11	238.14	0.0	50.15	239.59			Write
		28-6-2022	9.08	237.67	237.7	0.0	50.01	239.59			
VA 2	-	28-6-2022	9.18	238.32	238.35	0.0	50.05	239.59			Write
VA 3	-	28-6-2022	9.28	238.37	238.4	0.0	50.04	239.59			Write
VAR 1	-	28-6-2022	9.38	238.4	238.43	0.0	49.99	239.59			Write
VAR 2	-	28-6-2022	9.48	220.22			-0.01	239.59			Write
VAR 3		Export to Exce	1	Click to o the data	download file in PC	and save /LAPTOP			,		Write

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.

Marc Co	onfiguration Utility											-	٥	×
File Lo	gging Update Help													
<mark>/ /</mark> n				RISH LM 1350/136	i0 DL 👻 1									
Status - O	Communicating eading			г										
beneen			1		Insert devi	ce ID: 1	and click							<u>^</u>
	Parameter	Value			on GREEN	arrow s	/mbol	Old Value	Action	New Value	Action			
	Volts 1	238.273		L				-	Read		Write			
	Volts 2	238.239					PT-Secondary	-	Read		Write			
	Volts 3	238.279		Procent param	neters		CT-Primary	-	Read		Write			
	Current 1	0.0	K I	roadings will b			CT-Secondary	-	Read		Write			
	Current 2	0.0		readings will b	e uispiayeu		Demand Integration Time	-	Read		Write			
	Current 3	0.0	, L				Energy Output	-	Read		Write			
	Watt 1	0.0					System Type	-	Read		Write			
	Watt 2	0.0					Pulse Width of Relay	-	Read		Write			
	Watt 3	0.0					Node Address	-	Read		Write			
	VA 1	0.0					Reset Parameters	-	Read		Write			
	VA 2	0.0					Number of Poles	-	Read		Write			
	VA 3	0.0					Rs485 Setup Code	-	Read		Write			
	VAR 1	0.0					Pulse Divisor	-	Read		Write			
	VAR 2	0.0					Energy DigitReset Count	-	Read		Write			
	VAR 3	0.0				🔏 marc Confi <u>c</u>	uration Utility	-	Read		Write			
For Pro ver	sion (Cloud/On-premise) with	data logg	ing, alarms & notific	cation and mobile app visit www	w.goesl.co or contact									R

- 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.