Limo-client

ME15 modem configuration via limo-client

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1.) Limo-client

1.1) Download and Installation Process of Limo-client:

To install limo-client contact KoCoS Measurement & Control (Pty) Ltd and we will share a link where you will be able to download limo-client and install it.

After the download un-zip the file and double click the limo-client_setup.exe file to start the installation process.

1.2) Connection Process:

After the installation of limo-client, connect the LiMo modem to the PC or Laptop via a micro USB cable.

To see if you have connection to the modem open the command prompt and ping 192.168.111.254.

Note: (If there is no ping contact KoCoS for support.)

When you can ping the modem you can open Limo-client and you should see the Figure 1.

Limo-Client Ver. 0.9.2	
192.168.111.254	<u></u>
	a

Figure 1

To connect to the modem you will have to enter the IP address of the modem in the address bar. The default address of ne modem over the USB connection is 192.168.111.254.

When you have entered the IP address in the address bar click on the Blue Connector button next to the address bar to establish a connection.

When connection is successful you will see a menu bar appear populated with Modem, Meter, Cloud services and Scheduling buttons in it.

Note:	(If not	loaded	as	<u>specified</u>	above	there	is a	conne	ction	issue	and	you sl	hould	<u>check</u>	the
	conn	ection v	vith	a ping o	r conta	ct Ko	CoS	for Su	pport	.)					

1.3) Limo-client Layout



Figure 2

Limo-client has a simple layout to work with and to understand.

The menu has two options: Configuration or Commissioning

The Configuration Menu consists of 4 categories: Modem, Meter, Cloud Service and Scheduling.

Modem: Here the user will be able to enable and configure the modems services.

Meter: Here the user will add meters and configure their properties.

Cloud Service: Here the user will add a cloud service the modem will push the data to.

Schedules: Here the user will configure the desired schedule the modem will read and post data to the configured cloud services.

When the user clicks on a menu item it will populate the Treeview with the related items of the button clicked in the menu.

The user will then be able to click on the Treeview item and the viewer will be populated with the corresponding view for the user to edit and save the properties of the object chosen in the Treeview.

1.4) Ethernet Options

To setup the Ethernet the user will have to navigate to <u>Configuration Menu > Modem</u>.

Limo-Client Ver. 0.9.2			
192.158.111.254	8		Ť
Modem Meter	Cloud Service Schedules]	
 Device Manager General Device Options General Options State Socket Service Reading Poster General Options Strings Power Monitor Settings Setial Port Profiles StMS SIMS SIM SIMS SIM SIMS SIMS SIMS SIM SIM SIM <> GPRS Profile SIM <> GPRS Profile SIM SIM <> GPRS Profile SIM SIM <> GPRS Profile SIM SIM	Ethemet Options Property DNS Servers JP Address Static Routes Mode Netmask Gateway Static DNS DHCP Pool Start DHCP Pool End DHCP Server Enabled Save Changes	Value 8.8.8.8 192168.222.254 0.pool.ntp.org 1 Static 255:25.255.0 192168.222.1 True 10 10 100 False	

Figure 3

To enable the Ethernet on the device navigate to Configuration Menu > General Device Options.

If you changed the properties of the socket service on each screen on the viewer before you navigate away you must click on the Submit / Save button

Note: (for the changes to take effect the modem will have to be rebooted.)

The Ethernet options use basic TCP/IP setup options:

Mode: DHCP or Static, default Static. IP Address: Default 192.168.222.254. Netmask: Default 255.255.255.0. Gateway: Default 192.168.222.1. Static DNS: TRUE or FALSE, default TRUE. DNS Servers: Comma separated list of servers. Default 8.8.8.8. Copyright 07/2016 Doc. AN-0108-01 Rev. 01 KoCoS Measurement & Control (Pty) Ltd Tel. +27(0)21 9820016 Fax. +27(0)21 9820230

NTP Servers:

Comma separated list of servers. Default 0.pool.ntp.org.

Static Routes:

Array of JSON objects in the form of [{"network": "10.0.0.0", "netmask": "24", "gateway": "10.0.0.1"}, {{"network": "172.2.0.0", "netmask": "16", "gateway": "172.2.0.1"}]].

Default []. Note that the netmask is the number of bits and not the dotted format.

1.5) RS232/RS485 Socket Service Setup

To setup the RS232/RS485 Socket Service the user will have to navigate to <u>Configuration Menu ></u> <u>Modem</u>.

imo-Client Ver. 0.9.2			
2.168.111.254			
M			6
Configuration Commissioning			
Modem Meter	Cloud Service Schedules		
		<u> </u>	_
Davies Messer	Depart Confect Constan		
Constal Device Ontions	RS232 Socket Service		
Ethernet Ontions	Property	Value	
- Wifi Options	Parity	None	
- GSM Supervisor Options	Stop hits	1	_
- GPRS Supervisor Options	Data bits	8	_
- VPN Options	Raudrate	9600	
- Wifi Access Point Options	baudrate	9000	_
- Wifi Client Options	Host	Server1.com	_
- Border Router Options	Enabled	Faise	
- IP Router Options	Service Type	Server	_
 Power Monitor Options 	TCP Port	5000	_
- Logger Options	Id Sending	SimId	_
Link Monitor Options	Re-connect Timeout	30	_
- Dynamic DNS Options	Idle Timeout	60	_
General Meter Daemon Ontions	Heartbeat Timeout	120	_
- RS232 Socket Service	Heartbeat Message	<esc>alive</esc>	
- RS485 Socket Service	Echo Message	<esc>echo</esc>	
Reading Poster	Application Protocol	Transparent	
Meter Multiplexer			
System Monitor			
- General System Monitor Settings			
 Voltage Monitor Settings 			
 Power Monitor Settings 			
Meter Comms Monitor Settings			
Serial Port Profiles			
- RS-232 9600 8N1			
- RS-232 9600 7E1			
- RS-485 9600 8N1			
RS-485 9600 7E1			
SIMS			
- MINAD			
SIM <> GPRS Profile			
	Save Changes		

Figure 4

The Socket Service is used if the user wants to setup the Communications to access the meter directly through the Modem.

If the user changed the properties of the socket service on each screen on the viewer before you navigate away you must click on the Submit / Save button

Note: (for the changes to take effect the modem will have to be rebooted.)

The RS232/RS485 Socket Service properties are set as follow:

Enabled:

Enables the service.

Parity:

RS232 port parity.

Stop bits:

RS232 stop bits.

Baudrate:

RS232 port baudrate.

Host:

Host to connect to when in client mode.

Service Type:

Client or Server. When in server mode, the daemon will listen for connections on this port. In client mode the daemon will connect to the remote host.

TCP Port:

TCP port to listen on or connect to.

Id Sending:

SimId or SerialNumberWithIndex. The daemon will send an identifier when in client mode and the connection is established. SimId is the ID of the active SIM. For SerialNumber WithIndex the identifier starts with the modem serial number, ends with an index (1 for RS232, 2 for RS485) and is padded with zeros to a length of 20.

Re-connect Timeout:

Time between connections when in client mode.

Idle Timeout:

Daemon will drop connection if idle for this time.

Heartbeat Timeout:

Daemon will drop connection if no heartbeat received for this time.

Heartbeat Message:

The daemon will reset the heartbeat timer when it receives this message.

Echo Message:

On receipt of this message, the daemon will send the identifier again.

1.6) Serial Port Profile Setup

To setup a serial port profile the user will have to navigate to <u>*Configuration Menu > Modem*</u> and click on one of the Serial Port profiles.

192.158.111.254
Modem Meter Cloud Service Schedules
Chrice Manager General Device Options With Options OPPorty VNN Options Statistic Options Statistic Statistic Statististic

Figure5

There are a few pre defined serial port profiles configured on the modem.

These Serial Port profiles are the most commonly used on the meters.

The user is able to change the existing Serial Port profiles or to add new define Serial Port profiles



To add a new Serial Port profile click on the PLUS button in the treeview next to Serial Port Profiles.

- 1.) In the loaded viewer enter the description of the new serial port profile.
- 2.) Click on the Submit button to add the new serial port profile.

Limo-Client Ver. 0.9.2		
192.168.111.254	9	ی ک
Configuration Commissioning Modem Meter	Cloud Service Schedules	
Device Manager General Device Options	RS232 2400 8N1	
- Ethernet Options	Property	Value
- Wifi Options	Parity	None
GSM Supervisor Options	Stop bits	1
VPN Options	Serial Port	RS-232
- Wifi Access Point Options	Data bits	8
- Wifi Client Options	Baudrate	9600
Border Router Options		
IP Router Options		
- Power Monitor Options		
Link Monitor Options		
Dynamic DNS Options		
▼ Meter Daemon		
- General Meter Daemon Options		
- RS232 Socket Service		
- R5485 Socket Service		
Meter Multiplever		
System Monitor		
General System Monitor Settings		
- Voltage Monitor Settings		
- Power Monitor Settings		
Meter Comms Monitor Settings		
Serial Port Profiles		
RS232 2400 8N1		
- RS-232 9600 8N1		
- RS-232 9000 7E1		
RS-485 9600 7E1		
▼ SIMS		
- SIM		
- MIM1		
- MIM2		
GPKS Profiles		
Internet		
SIM <> GPRS Profile	Course of the second se	
	Save changes	

Figure7

When the serial port profile is added you will see it is added to the Treeview under the Serial Port Profiles.

To change properties of the Serial Port profile click on the gears button next to the Serial Port profile name.

If the user would like to remove the Serial Port from the list you must click on the bin button next to the Serial Port profile name.

If you changed the properties of the Serial Port profile in the viewer before you navigate away you must click on the Submit / Save Changes button.

The Serial Port profile properties are set as follow:

Serial Port:

RS232 or RS485

Parity:

Communication port parity.

Stop bits:

Communication port stop bits.

Data bits:

Communication port data bits

Baudrate:

RS232 port baudrate.

1.7) GPRS Profile Setup

To setup a GPRS profile the user will have to navigate to <u>*Configuration Menu > Modem*</u> and click on one of the GPRS profiles.

no-Client Ver. 0.9.2			
168.111.254			l l l l l l l l l l l l l l l l l l l
onfiguration Commissioning			
Matan	Claud Service Schedule		
Modem	Cloud service Schedule		
General Device Options	lest1		
- Ethernet Options	Property	Value	
- Wifi Options	DNS Servers		
GSM Supervisor Options	Default Route	True	
GPRS Supervisor Options	APN	internet	
Wife Assess Baint Ontions	NTP Servers	0.pool.ntp.org	
With Access Point Options	Auth	None	
Border Bouter Options	Password		
- IP Router Options	Static Routes	0	
- Power Monitor Options	Peer DNS	True	
- Logger Options	Username		
Link Monitor Options			
Dynamic DNS Options			
Meter Daemon			
General Meter Daemon Options			
RS232 Socket Service			
Roding Porter			
Meter Multiplever			
System Monitor			
General System Monitor Settings			
- Voltage Monitor Settings			
- Power Monitor Settings			
Meter Comms Monitor Settings			
Serial Port Profiles			
- RS232 2400 8N1			
- RS-232 9600 8N1			
- RS-232 9600 7E1			
- RS-485 9600 8N1			
- RS-485 9600 7E1			
SIMS			
SIM AT			
MIMI			
GDPS Drofiler			
Tarti			
Internet			
	Com Channel		
SIM <> GPRS Profile	Save unanges		

Figure8

There is a default GPRS profiles configured on the modem called *Internet*.

This GRRS profile is setup by default for the public APN.

The user is able to change to change this GPRS profile but is advised to create a new GPRS profile for custom APN setup.

Limo-Client Ver. 0.9.2	N	
Configuration Commissioning	5	-
Modem Meter	Cloud Service Schedules	
Device Manager		
General Device Options	New GPRS Profile	
Wifi Options GSM Supervisor Options	GPRS Profile Name:	
- GPRS Supervisor Options - VPN Options		
Wifi Access Point Options Wifi Client Options	Submit	
Border Router Options		
Power Monitor Options		
- Link Monitor Options		
Dynamic DNS Options		
General Meter Daemon Options		
- RS232 Socket Service		
RS485 Socket Service		
Meter Multiplexer		
▼ System Monitor		
- General System Monitor Settings		
Voltage Monitor Settings		
Meter Comms Monitor Settings		
▼ Serial Port Profiles +		
RS232 2400 8N1		
- RS-232 9600 8N1		
- RS-232 9600 7E1		
RS-485 9600 8INI RS-485 9600 7F1		
▼ SIMS		
- SIM		
- MIM1		
GDRS Profiler		
Internet		
- Localization		
SIM <> GPRS Profile		

To add a new GPRS profile click on the PLUS button in the treeview next to GPRS Profiles. 1.) In the loaded viewer enter the description of the GPRS profile.

2.) Click on the Submit button to add the new GPRS profile.

no-Client Ver. 0.9.2			
168.111.254	\otimes		
infiguration Commissioning			
Modem Meter	Cloud Service Schedules		
2			
General Device Options	lesti		
- Ethernet Options	Property	Value	
- Wifi Options	DNS Servers		
- GSM Supervisor Options	Default Route	True	
- GPRS Supervisor Options	APN	internet	
- VPN Options	NTP Servers	0.pool.ntp.org	
Wifi Access Point Options	Auth	None	
Rorder Router Options	Password		
- IP Router Options	Static Routes	0	
Power Monitor Options	Peer DNS	True	
- Logger Options	Username		
- Link Monitor Options			
Dynamic DNS Options			
Meter Daemon			
General Meter Daemon Options			
- RS232 Socket Service			
- RS485 Socket Service			
- Reading Poster			
- Meter Multiplexer			
System Monitor			
- General System Monitor Settings			
Voltage Monitor Settings			
Power Monitor Settings			
Savial Dart Drafiles			
R5252 2400 8NI			
RS-232 9000 8NL			
PS-485 9600 7E1			
RS-485 9600 7F1			
SIMS			
- SIM			
- MIM1			
MIM2			
GPRS Profiles			
Test1			
Internet			
Internet			
Localization	Save Changes		

When the GPRS profile is added you will see it is added to the Treeview under the GPRS Profiles.

To change properties of the GPRS profile click on the gears button next to the GPRS profile name.

If the user would like to remove the GPRS from the list you must click on the bin button next to the GPRS profile name.

If the user changed the properties of the GPRS profile in the viewer before you navigate away you must click on the Submit / Save Changes button.

The GPRS Profile properties are set as follow:

DNS Servers:

Comma separated list of dot notation IPv4 addresses.

APN:

APN name.

Auth:

APN Authentication type None, PAP or CHAP

Password:

APN Authentication password

Username:

APN Authentication username

Defualt Route: True or False NTP servers: Comma separated list of servers. Default 0.pool.ntp.org. Peer DNS: True or False Static Routes: Array of JSON objects in the form of [{"network": "10.0.0.0", "netmask": "24", "gateway": "10.0.0.1"}, {{"network": "172.2.0.0", "netmask": "16", "gateway": "172.2.0.1"}}]. Default []. Note that the netmask is the number of bits and not the dotted format.

1.8) Meter Setup

To setup a meter the user will navigate to <u>Configuration Menu > Meter</u>.

Limo-Client Ver. 0.9.2	
192.168.111.254	3
Configuration Commissioning	
Modem Meter C	loud Service Schedules
T Man	
▼ Elster	New Meter
⊢A1140	
- A1700	Manufacturer
— AS220	
- AS230	Elster
- AS3000	
- AS3500	Model:
ASI440	A1140
83521	
- 83522	Serial Number:
83332-3	
▼ Schneider	
PM710	Submit
- PM800	
- PM1200	
PM2000	
▼ Kamstrup	
Omnipower-1ph	
Omnipower-3ph	
MercuryInstruments	
MiniAt	
▼ Socomec	
130-1	
- 132-1	
- 13-3	
- 160-1	
- 160-3	
▼ EDMI	
- MK10A	
- MKIDE	
▼ LandisGyr	
ZMD	
▼ Strike	
EnermaxPlus	
▼ Inepro	

Figure11

To add a new meter click on the PLUS button in the treeview next to Meters.

In the loaded viewer choose the manufacturer of the meter and then the modem from the corresponding dropdown boxes.

Enter the Serial number of the meter you are adding.

To add the meter click on the Submit button.

Limo-Client Ver. 0.9.2		
192.168.111.254		
Configuration Commissioning		
Modem Meter Clou	ud Service Schedules	
1		
▼ Meters +	Meter Configuration	
↓ 12345678 @ [#] ₩	Serial Profile Periodic metrics Load Profile metrics	
- AS220 - AS230	Serial Port Profiles: RS-232 9600 8N1	
AS3000 AS3500	Properties:	
└─ AS1440 ▼ Echelon	Property Serial Number	Value 12345678
- 83521 - 83522	Address	001
	Password	FEDC0003
PM710		
- PM800 - PM1200		
PM2000 iFM3155		
▼ Kamstrup		
Omnipower-1ph Omnipower-3ph		
MercuryInstruments MiniAt		
▼ Socomec		
- I30-1 - I30-3		
- B3-1		
- 133-3 - 160-1		
□ 160-3		
- MK10A		
✓ MK10E ▼ MerlinGerin		
PM9C		
	Save	
Strike EnermaxPlus		

Figure12

When the meter is added you will see it is added to the Treeview under the specified manufacturer and model.

To change the communication properties and metrics to be read of the meter click on the gears button next to the meter.

If you would like to remove the meter from the list you must click on the bin button next to the meter.

If you changed the properties of the meter on each screen on the viewer before you navigate away you must click on the Submit / Save button.

If you added all the meters and configured them you should always reboot the modem before the modem will start communicating with them.

The Meter properties are set as follow:

Serial Port Profile:

Dropdown list containing all the Serial Port Profiles configured on the modem. **Serial Number:**

Meter Identifying description.

Address:

Outstation number or modbus address

Password:

Password needed to authenticate communications with the meter.

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1.9) Testing Meter Setup

To test the meters that where setup navigate to <u>Commissioning Menu > Meter > Read Meter</u>.

· Elino-client ver 0.5.2		10				
192.168.111.254	9					ť
Configuration Commissioning						
Meter Modem						
Produktor	Meter:					
- Kedu Meter	12345678					•
	Metrics:					
		All			None	_
	DateTime	IbAng	Q3varh	USER1		
	ExportWh	🗌 Ic	Q4varh	VAh		
	Frequency	IcAng	Qa	🗌 Va		
	HistExportWh#1	ImportWh	Q6	VaAng		
	HistImportWh#1	MD1	Qc	Vb		
	HistMD1#1	PFa	Qtot	VbAng		
	HistQ1varh#1	PFb	Sa Sa	Vc		
	HistTOU1#1	PFc	Sb	VcAng		
	HistTOU2#1	PFtot	sc 🗌			
	HistTOU3#1	Pa	SerialNumber			
	HistTOU4#1	РЬ	Stot			
	HistVah#1	Pc	TOU1			
	Па	Ptot	TOU2			
	IaAng	Q1varh	тоиз			
	Пь	Q2varh	TOU4			
				Read		

Figure13

In the viewer as seen in Figure13 select the meter from the drop down box you would like to read.

Select the metrics you would like to read or just click on the ALL button and the click on the Read button.

no-Client Ver. 0.9.2				- 🗆 X
168.111.254	8			<u>-''</u>
onfiguration Commissioning				
Meter Modem				
Produit				
	Meter			
- Kead Meter	12345678			-
	Metrics:			10
	All		None	
	DateTime=1610437841	✓ IbAng=0	@ Q3varh=57328.481	USER1
	ExportWh=247529.125	✓ Ic=0.2	Q4varh=1970809.395	VAh=2
	Frequency=50	CAng=0	✓ Qa=0	Va=234
	HistExportWh#1=247529	ImportWh=26206785.971	✓ Qb=0	VaAng=
	HistImportWh#1=2.62068e+07	MD1=0, 01/01/1970 00:00:00	✓ Qc=0	Vb=1.2
	HistMD1#1=0, 01/01/1970 00:00:00	PFa=1	Vtot=0	VbAng-
	HistQ1varh#1=3.15336e+06	PFb=1	✓ Sa=0	Vc=1.1
	HistTOU1#1=382.233	PFc=1	Sb=0	VcAng=
	HistTOU2#1=414.052	PFtot=1	Sc=0	
	HistTOU3#1=0	✓ Pa=0	SerialNumber = 78522922	
	HistTOU4#1=0	✓ Pb=0	Stot=0	
	HistVah#1	✓ Pc=0	V TOU1=382.233	
	✓ Ia=0.2	Ptot=0	TOU2=414.052	
	✓ IaAng=0	Q1varh=3153364.675	TOU3=0	
	✓ ib=0.2	Q2varh=3844.334	V TOU4=0	
	-			•
		Read		

A progress bar will appear and when it is finished you will see the values will appear next to the metrics you have chosen as seen in Figure14.

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1.10) Cloud Services

To setup a meter the user will navigate to <u>Configuration Menu > Cloud Service</u>.

Limo-Client Ver. 0.9.2		
192.168.111.254	>	ť
Configuration Commissioning		
Modem Meter 4	Schedules	
▼ Cloud Services	Test_P	
Periodic HTTP Post Test P	Property	alue
Load Profile HTTP Post	URL	
	HTTP Headers	
	Save Changes	

Figure15

The user will see that there are two type of Cloud Services in the Treeview Periodic HTTP Post and Load Profile HTTP Post.

The User can setup multiple cloud services so in the case of the user that wants to send the same data to two or more different Cloud Services.

The Periodic cloud services will be used for the meters that are setup and supports Periodic readings.

The Load Profile cloud services will be used for the meters that are setup and supports Load Profile readings.

The meter daemon will only read the Periodic or Load Profile readings on the schedule when there is a corresponding Cloud Services setup to read Periodic readings and Load Profile readings.

So if the meter configured under <u>Configuration Menu > Meter</u> supports Load Profile readings but, there is no Load Profile Cloud Service configured. The modem will not read and send Load Profile Data for that meter.

Limo-Client Ver. 0.9.2	
192.168.111.254	2
Configuration Commissioning	-
Modem Meter	Coud Service Schedules
Cloud Services Periodic HTTP Post	New Cloud
Load Profile HTTP Post	Cloud Name:
	Cloud Type:
	Load Profile HTTP Post
	Submit

To add a new Cloud Service click on the PLUS button in the treeview next to Cloud Services.

In the loaded viewer enter the description of the Cloud Service.

Note: (This can be any description the user want to use but, we normally like to add a "_P" for Periodic and "_LP" for Load Profile at the end of the description.)

Choose the Cloud Type from the corresponding dropdown boxes.

To add the Cloud Service click on the Submit button.

Limo-Client Ver. 0.9.2	
192.168.111.254	S 2
Configuration Commissioning	
Modem Meter	Cloud Service Schedules
	1
Cloud Services	Test_P
Test_P	Property Value
Load Profile HTTP Post	HTTP Headers
	Save Changes

When the Cloud Service is added you will see it is added to the Treeview under the specified Cloud Service type.

To change the Cloud Service properties click on the gears button next to the Cloud Service.

If you would like to remove the Cloud Service from the list you must click on the bin button next to the Cloud Service.

If the user changed the properties of the Cloud Service in the viewer before you navigate away you must click on the Submit / Save button.

If you added all the meters and configured them you should always reboot the modem before the modem will start communicating with them

The Cloud Service properties are set as follow:

URL:

The URL of the Cloud service the data will be sent to.

HTTP Headers:

The **HTTP headers** are used to pass additional information between the clients and the server through the **request** and **response**.

1.11) Cloud Services

To setup a meter the user will navigate to <u>Configuration Menu >Schedules</u>.

Limo-Client Ver. 0.9.2		
192.168.111.254	8	Ľ
Configuration Commissioning		
Modem Meter	Cloud Service Schedules	
▼ Schedules → Periodic schedule	Read Schedule	
Load Profile schedule	*/30 * * * *	Edit
	PostSchedule	
	*/30 * * * *	Edit
	Clouds	Meters
	Name Enabled	Serial Number Enabled
	1 Test_P	1 12345678
	Save	
		ii.

Figure18

The user will see that there are two types of Schedules in the Treeview Periodic Schedule and Load Profile Schedule. This enables the user to setup two different schedules to read the periodic readings and the load profile readings.

The modem uses a program called CRON to schedule tasks to read and to post meter data to the cloud services.

When the user click on any of the Schedules in the Treeview the user will see the viewer will be populated with the following properties:

Read Schedule:

The Read Schedule field represents a CRON time string that the modem will use to read the enabled meters in the Meters list.

Post Schedule:

The Post Schedule field represents a CRON time string that the modem will use to post the to the enabled meters in the Clouds list.

Clouds:

List of Cloud Services for Periodic or Load Profile Schedules. The user can tick the Enable box to enable it or un-tick the box to disable sending data to the cloud services.

Meters:

List of Meters that the modem will read and send data of to the Cloud Services. The user can tick the Enable box to enable it or un-tick the box to disable reading of the meters data.

Note: (For any changes to take effect the modem must be rebooted)

The Read Schedule and the Post Schedule can be edited by clicking on the Edit button next to the respective fields. To know a little more about how the CRON time string works please follow the link below.

https://support.acquia.com/hc/en-us/articles/360004224494-Cron-time-string-format

Annexure A: Default Meter Properties

The ME15 LiMo Modem support a number of meters in the field and this part of the document will cover some of the default setups the user will use when configuring a meter.

Note: (See 1.8 on page 15)

Manufacturer	Model	Serial Port Profile	Address	Password
Elster	A1140	RS232 9600 8N1	001	FEDC0003
	A1700	RS232 9600 8N1	001	FEDC0003
	AS220	RS232 9600 7E1	Device Number	30003000
	AS230	RS232 9600 7E1	001	FEDC0003
	AS3000	RS485 9600 7E1	Device Number	30003000
	AS3500	RS485 9600 7E1	Device Number	30003000
Echelon	83521			
	83522	RS232 9600 8N1	No Address	(Get Password from Supplier)
	83332-3			
Honeywell	HS100	RS485 9600 8N1	Serial Number	None
	AD120	RS485 9600 8N1	Meter ID	None
	AD1200	RS485 9600 8E1	Meter ID	None
Schneider	PM710	RS485 9600 8N1	Modbus Address	None
	PM800	RS485 9600 8N1	Modbus Address	None
	PM1200	RS485 9600 8N1	Modbus Address	None
	PM2000	RS485 9600 8N1	Modbus Address	None
	iEM3155	RS485 9600 8N1	Modbus Address	None
Smappee	Infinaty	RS-485 38400 8N1	[1]@61	None
Socomec	I30-1	RS485 9600 8N1		None
	130-3	RS485 9600 8N1		None
	133-1	RS485 9600 8N1		None
	133-3	RS485 9600 8N1		None
	160-I	RS485 9600 8N1		None
	160-3	RS485 9600 8N1		None
EDMI	MK10A	RS232 9600 8N1	Modbus Address	DLMS18
	MK10E			
MerlinGerin	PM9C			
LandisGyr	ZMD	RS485 9600 8N1	Serial Number	None
Strike	EnermaxPlus	RS485 9600 8N1	Serial Number	None
Inepro	DZT6001	RS485 9600 8N1	Last two digits of serial converted from Hex to Dec	None
	PRO1MOD			
	PRO2MOD			
	PRO38MOD			

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KoCoS	A100C-IrDA	RS485 2400 8N1	Serial Number	None
	A1100-IrDA	RS485 2400 8N1	Serial Number	None
	ElsterModbus	RS485 9600 8N1	Modbus Address	None