# iMeter 8 Quick Start Guide

## Version 1.01

#### Package Contents

- a. iMeter 8 with all mounting brackets and plug-in connectors installed
- b. Factory Test Report
- c. CD with iMeter 8 User Manual
- d. Quick Start Guide (this document)

### Meter Overview



Front View

Rear View – 8xDI, 4xDO, 2xAI and 1xAO

Serial Number and Warning Label

Α	Mounting Bracket Slot	G	Current Input terminals	М	GPS terminals
В	Front Panel	Н	Voltage Input terminals	N	Pulse Output terminals
С	TFT Color LCD	I	AI terminals	0	Alarm terminals
D	Enclosure	J	AO terminals	Р	DO terminals
E	LED Indicators	К	10/100BaseT Ethernet Ports	Q	DI terminals
F	Buttons	L	RS-485 terminals	R	Power Supply terminals

#### Using the Front Panel Buttons

The Front Panel Display has been designed with a 9-button user-friendly interface that allows users to view the measurements and perform basic configuration. There are five options in the **Main Menu**: **<Metering>**, **<Power Quality>**, **<PQ Insight>**, **<Event>**, and **<Setup>**. Each option includes multiple sub-menus for Measurements, Events or Setup Parameters. The following table provides an overview of the Front Panel Buttons. **The default password is 000001.** 

Buttons	Metering/Power Quality/PQ Insight/Event Menu	Setup Menu						
	In the Main Menu, the <4> and <>> buttons are used to move the cursor between different icons (Categories). The <a></a>							
	and $\langle \mathbf{\nabla} \rangle$ are ignored. The current cursor position is indicated by the highlighted <b>Category</b> 's description.							
	When inside a Category and under a particular Sub-Menu, the arrow	• Before a parameter is selected, use the <◀>,						
	buttons are used to navigate between Pages.	<▶>, <▲> and <▼> buttons to navigate						
<_>>	<ul> <li>Pressing &lt;▲&gt; or &lt;▼&gt; shifts the cursor up/down in the sub-menu column.</li> </ul>	around and select the desired parameter for modification.						
<▼>	<ul> <li>Pressing &lt;◀&gt; or &lt;▶&gt; moves backward or forward to display</li> </ul>	• If a numeric parameter is already selected,						
	different parameters.	pressing <▲> or <▼> increments or						
	• Pressing <▲> or <♥> scrolls the individual harmonic or	decrements a numeric value.						
	interharmonic measurements from 1 <sup>st</sup> to 63 <sup>rd</sup> in the Power	• If an enumerated parameter is already						
	Quality/Harmonics or Interharmonic sub-menu.	selected, pressing <▲> or <▼> goes back or						
	• In the WFR page, using <◀> or <▶> to select the target area and	advances to last or next enumerated value in						
	pressing $< \blacktriangle >$ or $< \nabla >$ to zoom in or out of the waveform.	the selection list.						
<reset></reset>	Pressing this button resets the LED indicators.							
<home></home>	Pressing this button goes back to the main page.							
	• Before a Category/Sub-menu or operation is selected, pressing							
	<enter> enters the highlighted Category/Sub-menu or execute the</enter>							
	chosen operation.	• After changing the parameter, pressing <b><enter></enter></b> saves the new setting into memory.						
<enter></enter>	• In the Metering/RMS or Metering/Fundamental summary page,							
	press <b><enter></enter></b> to refresh or freeze the screen.							
	• When in a record or event page, e.g. an EN50160 record page, press							
	<enter> to display the details page.</enter>							
	• When inside a data display page, pressing <b><fn></fn></b> switches between							
_	the Large Font and Summary page.							
<fn></fn>	In the Metering/Max., Metering/Min. or Power Quality/2-150kHz	N/A						
	<b>C.E.</b> page, use the <b><fn></fn></b> button to scroll between pages to show the							
	different parameters							
<esc></esc>	Pressing <b><esc></esc></b> returns to the previous level menu or page.	<ul> <li>Pressing <esc> cancels the entered value.</esc></li> </ul>						
<fn> + <enter></enter></fn>	Press this key combination to capture the current screen.							

#### **Mounting the Meter**

- Remove the mounting brackets from the meter
- Fit the meter through a 186mmx186mm cutout
- Re-install and tighten the mounting brackets against the panel to secure the meter



## Wiring Diagrams



#### **Basic Setup Parameters**

Menu in <setup></setup>	Parameters	Description	<b>Options/Range</b>	Default
Password	Password	Enter Password	The password digits cannot be identical or sequential.	"000001"
Basic > Wiring	Mode	The Wiring Connection of the meter	3P3W/3P4W/DEMO	3P4W
Basic > PT/CT	ULL Nominal	ULL Nominal Voltage on the Secondary Side	1 to 1,500V	415V
	I Nominal	Nominal Current	1 to 10,000A	5A
	PT Primary	PT Nominal Primary Voltage	1 to 1,000,000V	100V
	PT Secondary	PT Nominal Secondary Voltage	1 to 1,500V	100V
	CT Primary	CT Nominal Primary Current	1 to 30,000A	5A
	CT Secondary	CT Nominal Secondary Current	1 to 50A	5A
	Enable P1	Enable Ethernet Port 1	Yes/No	Yes
	IP Addr. P1	Ethernet Port 1 IP Address	-	192.168.0.100
Comm	Sub. Mask P1	Ethernet Port 1 Subnet Mask	-	255.255.255.0
Comm. > Ethornot (D1 /D2)	Gateway	Ethernet Port Gateway Address	-	192.168.0.1
Ethernet (P1/P2)	Enable P2	Enable Ethernet Port 2	Yes/No	Yes
	IP Addr. P2	Ethernet Port 2 IP Address	-	192.168.1.100
	Sub. Mask P2	Ethernet Port 2 Subnet Mask	-	255.255.255.0
Comm. > RS-485 (P3&P4)	Protocol	RS-485 Ports Protocol	Modbus, EtherGate, None	Modbus
	Baud Rate	Data rate in bits per second	1200/2400/4800/ 9600/19200/38400bps	9600
	Parity	RS-485 Ports Parity	None, Odd, Even	Even
	Stop Bit	RS-485 Ports Stop Bit	1, 2	1
	Unit ID	RS-485 Ports Unit ID	1-247	100/101
	EtherGate IP Port	EtherGate IP Port	20000 to 60000	20000/20001