CET

iMeter 5

Power Quality Analyzer

www.cet-global.com

iMeter 5

iMeter 5 is one of CET's latest Advanced Modular PQ Analyzer designed for the compliance monitoring market as it offers unsurpassed functionality by combining Class 0.2S Accuracy and advanced PQ Features in an industry-standard compact DIN96 form factor with a stunning, high resolution, color IPS LCD display and highly sensitive touch buttons. The iMeter 5 complies with such standards as IEC 62053-22: 2020 Class 0.2S, IEC 62052-31: 2015, IEC 61000-4-30 Ed. 3.1 Class S / Class A Compliant, IEC 61000-4-15, IEC 61000-4-7, EN 50160, IEEE Std 519-2022. Furthermore, the iMeter 5 offers up to 4GB memory, 4xDI, 2xDO, dual 10/100BaseT Daisy Chain Ethernet ports, an RS-485 port and an RJ45 port for modular I/O expansion. It can be easily integrated into Building Management Systems, Power Quality Monitoring Systems as well as Substation Automation Systems with Modbus TCP/RTU, BACnet/IP, SNMP, IEC 61850, IEC 60870-5-104 and other protocols. These features make the iMeter 5 a vital component of various systems for different applications.

Typical Applications

- Class 0.2S Revenue Metering
- PQ monitoring for Mains and Critical Feeders
- HV, MV and LV Applications
- Data Centers, Semiconductor Fabs, Heavy Industries, Renewable Energy
- 7x24 Automated Manufacturing Facilities
- IEC 61850 support for Substation Automation and Smart Grid
- Retrofit Applications with optional Class 1 Split-Core Current Probes

Basic Features

- IEC 62053-22 Class 0.2S kWh metering with Multi-Tariff TOU
- True RMS @ 512 samples/cycle sampling
- 512MB (Classic Model), 2GB (Class S Model) or 4GB (Class A Model) on-board log memory
- Industrial-grade, 3.5" High-Resolution Color IPS LCD @ 320x240
- Device Operating Time (Running Hours)
- Time Sync. via NTP, IRIG-B, or GPS 1PPS output
- 32 Programmable Setpoints
- Dual 10/100BaseT Daisy Chain Ethernet and 1xRS-485 ports as well as 1xRJ45 port for modular I/O expansion

Display & Web Interface

- True RMS Real-time, Harmonics, Power and Energy Measurements
- Phasor Diagram, Harmonics & Interharmonics Histogram
- Real-time WFC of 3-phase U & I @ 128 samples/cycle x 4 cycles
- Event WF Display @ max. 512 samples/cycle & ITIC/SEMI F47 Curves
- Trend Curves for Daily/Monthly Energy Consumption, DR, SDR, AER/IER and RMS Recording Logs
- Max. & Min. Logs
- Deviation, Sequence Components & Unbalance
- Demands and Multi-Tariff TOU
- Device and SOE Logs, PQ Counters and I/O Status
- Device Configuration and Diagnostics

Multi-Tariff TOU Capability

- Two independent sets of TOU Schedule
  - Up to 12 Seasons
  - 90 Holidays or Alternate Days and 3 Weekdays
  - 20 Daily Profiles, each with 12 Periods in 0-60min programmable intervals
  - 8 Tariffs, each providing the following information:
    - kWh/kvarh Import/Export and kVAh
    - P & Q Import/Export Max. Demands
    - Register rollover at 100,000,000,000.000 kXh
- Switching between two TOU schedules manually or according to pre-programmed time
- 12 Historical Logs for Energy and Max. Demand

Power Quality Features

- Optional IEC 61000-4-30 Ed. 3.1 Class S/Class A compliant
- EN 50160 and IEEE Std 519-2022 Reporting
- Dips, Swells, Interruptions, Transients, Rapid Voltage Change, Inrush Current, Mains Signalling Voltage and Flicker monitoring
- Real-time Waveform Capture (WFC), Waveform Recording (WFR) & Disturbance Waveform Recording (DWR) in COMTRADE File format
- Disturbance Direction Indicator for Dips, Swells and Interruptions
- Statistical Data Recording and ½ cycle RMS Recording

Advanced Modular

Power Quality Metering

PQ Parameters as per IEC 61000-4-30 Ed. 3.1 Class S/Class A Compliant

- Power Frequency
- Magnitude of the Supply Voltage
- Flicker
- Supply Voltage Interruptions, Dips and Swells
- Supply Voltage and Current Unbalance
- Voltage and Current Harmonics and Interharmonics
- Mains Signalling Voltage on the Supply Voltage
- Rapid Voltage Change
- Measurement of Over Deviation and Under Deviation Parameters
- Magnitude of Current
- Current Harmonics and Interharmonics
- Current Unbalance
- 2kHz to 9kHz Conducted Emission Measurements

Harmonic and Interharmonic Measurements

- U and I THD, TOHD, TEHD, TIHD, TOIHD, TEIHD and TH (RMS)
- Current TDD, TDD Odd and TDD Even
- U and I Individual Harmonics (%HD and RMS) from 2nd to 63rd #
- K-Factor for Current, Crest Factor for Current and Voltage
- U and I Individual Interharmonics (%IHD and RMS) from 1st to 63rd#
- Fundamental U, I, P, Q, S Phase Angle and Displacement PF
- Harmonic Phase Angle from 2nd to 63rd
- U and I DC Components

#%HD and %IHD can be configured as % of Fundamental, % of U/I nominal or % of RMS

Sequence and Unbalance

- Zero, Positive and Negative Sequence Components
- U and I Unbalance based on Zero and Negative Sequence Components

Dips, Swells, Interruptions Recording

- Dips, Swells and Interruptions detection @ 10ms (½ cycle at 50Hz)
- Trigger for DO, SOE Log, DR, WFR, DWR, RMSR, iTrigger and Alarm Email
- Configurable DO trigger for the Start or End of a PQ disturbance
- Display of Event specific WFR, DWR and/or RMSR as well as the associated ITIC/SEMI F47 plot on the Front Panel and Web Interface
- ITIC/SEMI F47 Alarm trigger for DO and iTrigger upon the detection of PQ disturbances that are outside of the respective tolerance curves

Transients Recording

- Transients capture as short as 40us for sub-cycle disturbances such as capacitor switching and resonance phenomena
- Trigger for DO, SOE Log, WFR, DWR, RMSR, iTrigger and Alarm Email
- Display of Event specific WFR, DWR and/or RMSR on the Front Panel and Web Interface

Rapid Voltage Change (RVC)

- Detection of a quick transition in RMS Voltage between two steady-states

Inrush Current Monitoring

- Monitoring of the ½ cycle RMS Current and capturing of the Current waveforms associated with events such as motor starting and transformer being energized

Disturbance Direction Indicator

- Determine if a PQ Event is located upstream or downstream
- Pinpoint if the cause of the event is external or internal

PQ Event Counters

- Dips, Swells, Interruptions, Transients, Rapid Voltage Change, Inrush Currents, Mains Signalling Voltages and Total PQ Event Counters

Metering

Basic Measurements (1-second update)

- 3-phase U, I, P, Q, S and PF as well as I4 (Measured Neutral Current), In (Calculated Neutral Current), Ung (Neutral-to-Ground Voltage), Frequency and IR (Calculated Residual Current)

High-Speed Measurements

- 3-phase U, I, P, Q, S and PF as well as I4 @ ½ cycle
- Frequency @ 1 cycle

Energy

- Per-phase kWh, kvarh Import/Export/Net/Total and kVAh Total
- Total RMS kWh, kvarh Import/Export/Net/Total and kVAh Total
- Total Fundamental kWh, kvarh Import/Export/Net/Total
- Total Harmonic kWh, kvarh Import/Export/Net/Total and Harmonic kWh, kvarh Import/Export from 2nd to 63rd

Demands

- Present and Predicted Demand for 3-phase U, U Avg., I, I Avg., I Fund.,P, Q, S, PF as well as I4, I4 Fund.
- Max. Demands for 3-phase I, I Fund., UII & I Avg., as well as Power of This Month & Last Month (or Since Last Reset & Before Last Reset)
- Demand Synchronization with DI
- Max./Min. per Demand Interval

Data and Event Recorders

Non-Volatile Log Memory

- Up to 4GB on-board Log memory

SOE Log

- 512 FIFO events time-stamped to ±1ms resolution
- Setpoint event, I/O operation, Dip, Swell, Interruption, Transient, Rapid Voltage Change, Inrush Current, Mains Signalling Voltage, iTrigger, etc.
- Record the characteristic data for Setpoint events as well as WFR, DWR, RMSR, ITIC and SEMI F47 Curve for PQ events

Device Log

- 512 FIFO entries time-stamped to ±1ms resolution
- Power On/Off, Setup changes, Time Sync., Device Operations and Self-diagnostics

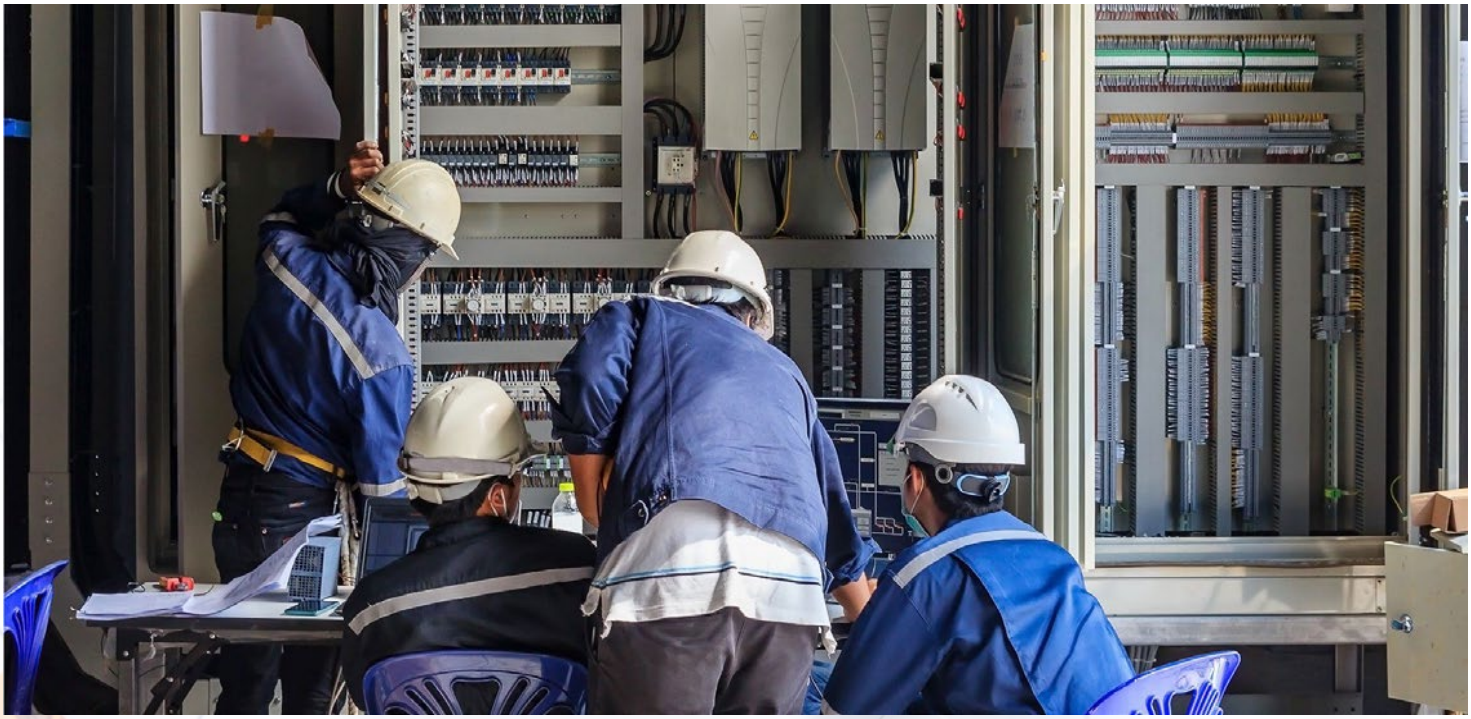
Statistical Data Recorder (SDR)

- 4 SDR Logs of max. 64 parameters each
- Recording of the Max., Min., Avg. and 95th percentile values for real-time measurements including U, I, P, Q, S, PF, Freq., Harmonics, Deviations and Unbalances
- Recording Interval from 1 to 60 minutes
- Configurable depths for recording up to 450 days at 15-min interval
- Downloadable via free software
- Support FIFO or Stop-When-Full mode

Max./Min. Recorder (MMR)

- 4 Max./Min. Recorders of 20 parameters each
- RMS/Fundamental/Harmonic/Interharmonic Measurements, Demands, Deviations, Unbalances and Flicker
- Two transfer modes:
  - Manual: Max./Min. Since Last Reset & Before Last Reset
  - Auto: Max./Min. of This Month & Last Month

Power Quality Analyzer



Trend Curve for DR, SDR, IER and AER

- Trend display of recorded DR, SDR, IER and AER logs at selectable interval via built-in web interface
- Ability to export the logs in tabular form

Data Recorder (DR)

- 8 DR Logs of max. 32 parameters each
- RMS/Fundamental/Harmonic/Interharmonic Measurements, Demands, Deviations, MSV, Unbalances and Flicker
- Configurable Recording Offset and Interval from 1s to 40 days
- Configurable Recording Depth with Max. @ 120,000 records
- Support FIFO or Stop-When-Full mode
- BEC 2021 Compliant Data Recording for 3 years at 15-minute interval

Interval Energy Recorder (IER) and Accumulative Energy Recorder (AER)

- Both IER Log and AER Log support the recording of Per-phase and Total RMS kWh, kvarh Import/Export/Total/Net and kVAh Total, Total Fundamental and Total Harmonic kWh, kvarh Import/Export
- Recording Interval from 1 minute to 65535 minutes
- Max. Recording Depth @ 65535 records records for each group
- Support FIFO and Stop-When-Full mode

Daily/Monthly Energy Consumption Trend Curve

- 36 Monthly and 31 Daily Energy Consumption Trend Display for kWh, kvarh Import/Export and kVAh Total on Front Panel and Web Interface
- Ability to export the Energy Log in tabular form via the web interface
- FIFO Recording Mode

Disturbance Waveform Recorder (DWR)

- 128 entries
- Simultaneous recording of all Voltage (U1-U3) and Current (I1-I4) Inputs
  - Initial Fault: 35 cycles @ 512 samples/cycle
  - Extended Fault: Up to 150 cycles @ 16 samples/cycle
  - Steady State: Up to 360s of 1-cycle absolute peak values
  - Post Fault: 15 cycles @ 512 samples/cycle

Real-Time Waveform Capture (WFC) and Waveform Recorder (WFR)

- Real-time WF Capture @ 128 samples/cycle x 4 cycles
- WFR with max. 128 entries
- Simultaneous capture of 3-phase Voltage and 4-phase Current Inputs
- Programmable formats and pre-fault cycles including 640 x 16, 320 x 32, 160 x 64, 80 x 128, 40 x 256, 20 x 512 (No. of Cycles x Samples/Cycle)
- Scheduled WFR with max. repetition of 10,000 times and programmable schedule from 1 to 1440 minutes
- COMTRADE file format, downloadable from the on-board Web Server or FTPS Server

RMS Recorder (RMSR)

- 128 entries
- 8 channels max., selectable U, I, P, Q, S, PF, Frequency, Freq. Deviation
- Recording Interval from 0.5 to 60 cycles
- Recording Width @ 7200 samples per parameter
- Configurable pre-fault samples from 100 to 500
- 72 seconds of ½ cycle RMS recording @ 50Hz or 60 seconds @ 60Hz

iTrigger

- Cross trigger DO, SOE Log, WFR, DWR, RMSR and Alarm Email with other iMeter devices within the same local area network (LAN)
- Group ID and MAC Address provided as the trigger source

IEEE Std 519-2022 Report

- 365 Daily Reports for statistical evaluations on Voltage and Current Harmonics based on 99th percentile very short time (3 s) values
- 52 Weekly Reports for statistical evaluations on Voltage Harmonics (95th percentile) and Current Harmonics (95th and 99th percentile) short time (10 min) values
- Programmable settings for Report Mode, PCC Voltage, Max. Short Circuit Current, etc.

iMeter 5

Inputs and Outputs

Digital Inputs

- 4 channels, volts free dry contact, 24VDC internally wetted
- 1000Hz sampling for status monitoring with programmable debounce
- Pulse counting with programmable weight for each channel for collecting WAGES (Water, Air, Gas, Electricity, Steam) information
- Demand Synchronization
- Tariff switching based on DI status

Digital Outputs

- Standard 2 channels Form A Mechanical Relays for general purpose control and alarming
- Optional 2 SS Relays for Energy pulsing applications

Modular I/O Expansion

- RJ45 connector for modular I/O expansion such as AI, AO, DI, DO, Residual Current (Ir) and Temperature (TC) Inputs

Communications

Ethernet Port (P1, P2)

- Dual 10/100BaseT Daisy-Chain Ethernet Ports with RJ45 connector
- Selectable IP Addressing Mode–DHCP and Static
- White List for Client Access Control
- Protocols supported: Modbus TCP, HTTP/HTTPS, NTP, SMTP, SNMP, FTP/FTPS, RSTP, MQTT, BACnet/IP, IEC 61850 and IEC 60870-5-104
- Built-in password protected Web Server with multiple user accounts and pre-defined roles for easy data viewing, setup configuration and firmware upgrade
- Simultaneous client connections for 5xModbus TCP and 5xIEC 61850

RS-485 (P3)

- One optically isolated RS-485 port with Baud Rate from 1.2 to 38.4 kbps
- Support Modbus RTU, Ethernet Gateway and Modbus Master

Setpoints

PQ Setpoint

- Transients, Dips, Swells, Interruptions, ITIC Alarm, SEMI F47 Alarm, Rapid Voltage Change, Inrush Current
- Trigger DO, DR, SOE Log, WFR, DWR, RMSR, iTrigger and Alarm Email

Control Setpoint

- 32 Control Setpoints can be configured with extensive monitoring sources including U, I, Freq., P, Q, S, PF, Demands, Harmonics, Unbalances, Deviations, Flickers, Phase Reversal/Loss, TC and AI, etc.
- Configurable thresholds and time delays
- Trigger DO, DR, SOE Log, WFR, DWR, RMSR, iTrigger and Alarm Email

Digital Input Setpoint

- Provides Control Output Actions in response to changes in DI status
- Trigger DO, DR, SOE Log, WFR,DWR, RMSR, iTrigger and Alarm Email

Time Synchronization

- Battery-backed Real-time clock @ 6ppm (≤ 0.5s/day)
- Time Sync. with auto-selection among Modbus RTU, NTP, GPS 1PPS, and IRIG-B

System Integration

PecStar® iEMS

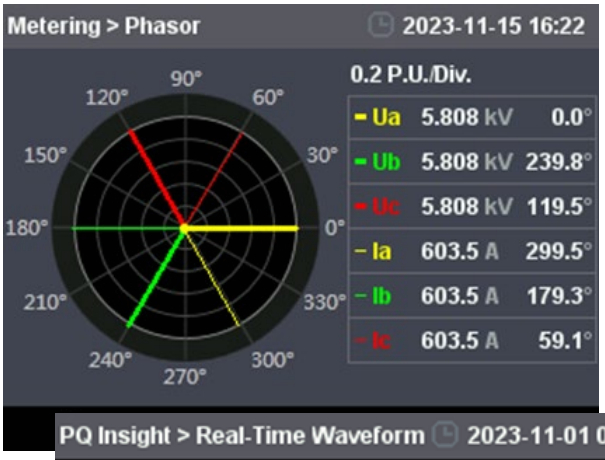
- The iMeter 5 is supported by CET's PecStar® iEMS
- The iMeter 5 can be easily integrated into other 3rd party systems because of its support of multiple communication ports as well as different industry standard protocols such as Modbus and IEC 61850

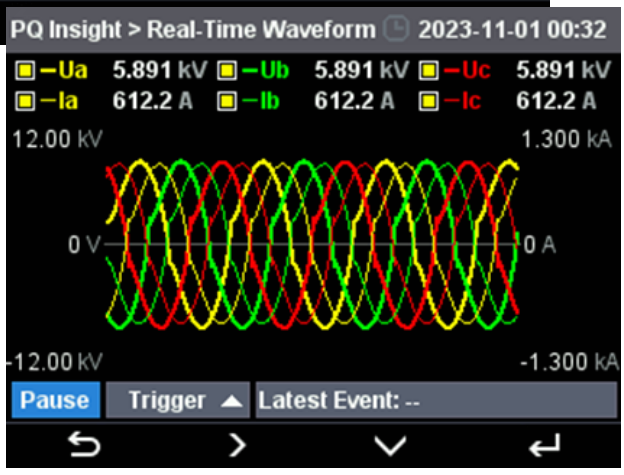
iPQ Explore

- Compact, password protected free software for simultaneous connection with multiple iMeter series Analyzers
- Support configurations for all Setup parameters
- Display of Real-time Measurements, PQ Events and Waveforms
- Ability to export the IER, AER, DR and SDR Logs as well as EN 50160 and IEEE Std 519-2022 Reports

3rd Party System Integration

- Easy integration into Substation Automation or Utility SCADA systems via Modbus RTU, Modbus TCP or IEC 61850
- The on-board, password protected Web Server provides user-friendly access to its data and supports the configuration for most Setup parameters via a web browser without the use of proprietary software
- The password-protected FTPS Server enables downloading of logged C.E. Measurement data, IEEE Std 519-2022 Daily and Weekly reports in Excel files and waveform records in COMTRADE files without special software





Feature Differences

Features/Model	Classic (PQA)	Class S (PQI-S)	Class A (PQI-A)
Memory Size	512MB	2GB	4GB
IEC 61000-4-30 Compliant	--	Class S	Class A
Interharmonics	--	■	■
Flicker (Pst, Plt)	--	■	■
Rapid Voltage Change	--	■	■
Transient	--	■	■
Inrush Current	--	■	■
Mains Signalling Voltage	--	--	■
2kHz-9kHz C. E.	--	--	■
Individual Harm. Energy	--	--	■
U & I DC Component	--	■	■
EN 50160 Report	--	■	■
IEEE 519-2022 Report	--	■	■
Statistical Data Recording	--	■	■
IEC 61850	--	■	■
GPS & IRIG-B Time Sync.	--	■	■
iTrigger	--	■	■
DWR	--	--	■

-- Not Applicable ■ Supported

Accuracy

Parameters	Accuracy		Resolution
Voltage (U)	±0.1%		0.001V
I1, I2, I3, I4	5A/1A	±0.1%	0.001A
	SCCPA	±0.1% +Error of SCCP	
P, Q, S	5A/1A	±0.2%	0.001K
	SCCPA	±0.5%	
kWh, kVAh	5A/1A	IEC 62053-22 Class 0.2S	0.1kXh
	SCCPA	IEC 62053-21 Class 1	
kvarh	5A/1A	IEC 62053-24 Class 0.5S IEC 62053-23 Class 2	0.01kvarh
	SCCPA	IEC 62053-24 Class 1 IEC 62053-23 Class 2	
PF	5A/1A	±0.2%	0.001
	SCCPA	±0.5%	
Phase Angle	±1°		0.1°
Frequency Freq. Deviation	±0.003Hz		0.001Hz
Harmonics, Interharmonics	IEC 61000-4-7 Class I		0.01%
U Unbalance	±0.1%		0.01%
I Unbalance	±0.5%		0.01%
Pst, Plt	IEC 61000-4-15 Class F1		0.001

Technical Specifications

Voltage Inputs (V1, V2, V3, VN)		
Standard (Un)	400VLN/690VLL +20%	
Range	4-800 V L-N/7-1380 V L-L	
Overload	2xUn continuous, 4xUn for 1s	
Burden	< 0.5VA/per phase	
PT Ratio	Primary	1-1,000,000V
	Secondary	1-1,500V
Measurement Category	CAT III 600V	
Frequency	40Hz-72Hz	

Power Supply (L/+, N/-)	
Standard	95-277VAC/VDC ±10%, 47-440Hz
Optional	20-60VDC
Burden	< 14VA/10W @ 250VAC/DC, < 6W @ 24VDC
Overvoltage Category	OVC III 300V

Current Inputs (-I11, I12, -I21, I22, -I31, I32, -I41, I42)		
Standard (In)	5A	
Optional (In)	1A	
Range	0.1% to 200% In	
Starting Current	0.1% In	
Overload	2xIn continuous, 4xIn for 10s, 20xIn for 1s	
Burden	< 0.75VA/per phase @ 5A	
	< 0.5VA/per phase @ 1A	
CT Ratio	Primary	1-30,000A
	Secondary	1-50A
	I4 Primary	1-30,000A
	I4 Secondary	1-50A
SCCP Options- Split-Core Current Probe Input @ max. 500mV	SCCPs (50A, 200A, 500A) Rogowski Coil (5000A max.)	

Digital Inputs (DIC, DI1, DI2, DI3, DI4)	
Standard	Dry contact, 24VDC internally wetted
Sampling	1000Hz
Hysteresis	1ms minimum

Digital Outputs (DO11, DO12, DO21, DO22)	
Type	Form A Mechanical Relay
Loading	5A @ 250VAC/30VDC

Optional Solid State Pulse Outputs (E1+, E1-, E2+, E2-)	
Type	Form A Solid State Relay
Isolation	Optical
Max. Load Voltage	30VDC
Max. Forward Current	100mA

Optional Analog Output (via Modular I/O Expansion)	
Type	0-20/4-20 mA
Loading	500Ω maximum
Overload	24 mA maximum

Terminals Max. Torque	
U & I Inputs	1.2N·m
DI, DO & RS-485	0.4N·m

Environmental Conditions	
Operating Temperature	-25°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	5% to 95% non-condensing
Atmospheric Pressure	60 kPa to 106 kPa
Pollution Degree	2

Mechanical Characteristics	
Panel Cutout	92x92 mm
Unit Dimensions	96x96x85 mm
IP Rating	54

Standards of Compliance

Safety Requirements	
CE LVD Directive 2014/35/EU	EN 61010-1: 2010 +A1: 2019 EN IEC 61010-2-030: 2021
Electrical Safety in Low Voltage Distribution Systems up to 1000Vac and 1500 Vdc	IEC 61557-12: 2018 (PMD)
Insulation	IEC 62052-31: 2015 EN 61010-1: 2010 + A1: 2019
AC Voltage Insulation Resistance Impulse Voltage	2kV @ 1 minute >100MΩ 6kV, 1.2/50µs

EMC Compatibility

CE EMC Directive 2014/30/EU (EN IEC 61326: 2021)

Immunity (EN50082-2)	
Electrostatic Discharge	EN 61000-4-2: 2009
Radiated Fields	EN IEC 61000-4-3: 2020
Fast Transients	EN 61000-4-4: 2012
Surges	EN 61000-4-5: 2014 +A1: 2017
Conducted Disturbances	EN IEC 61000-4-6: 2023
Magnetic Fields	EN 61000-4-8: 2010
Voltage Dips and Interruptions	EN IEC 61000-4-11: 2020
Ring Wave	EN 61000-4-12: 2017

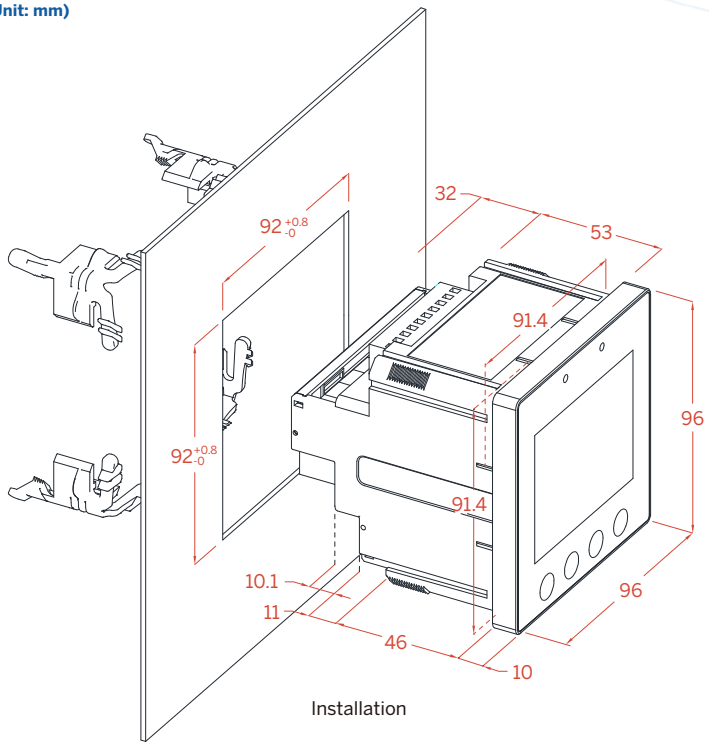
Emission (EN50081-2)	
Limits and Methods of Measurement of Electromagnetic Disturbance Characteristics of Industrial, Scientific and Medical (ISM) Radio-Frequency Equipment	EN 55011: 2016 +A11: 2020
Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment	EN 55032: 2015 +A11: 2020
Limits for Harmonic Current Emissions for Equipment with Rated Current ≤16A	EN 61000-3-2: 2019
Limitation of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems for Equipment with Rated Current ≤16A	EN 61000-3-3: 2013
Emission Standard for Industrial Environments	EN IEC 61000-6-4: 2019

Immunity (EN50082-2)	
Spring Hammer Test	IEC 62052-31: 2015
Vibration Test	IEC 62052-11: 2020
Shock Test	IEC 62052-11: 2020

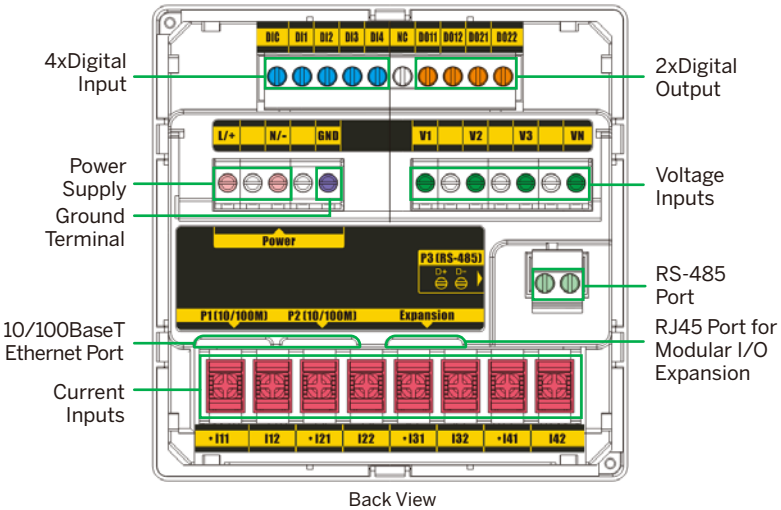
Power Quality	
Voltage Characteristics of Electricity supplied by Public Distribution Systems	EN 50160: 2022
General Guide on Harmonic and Interharmonic Measurements and Instrumentation, for Power Supply Systems and Equipment Connected Thereto	IEC 61000-4-7: 2009
Flickermeter - Functional and Design Specifications	IEC 61000-4-15: 2010
Testing and Measurement Techniques - Power Quality Measurement Methods	IEC 61000-4-30: 2021 Ed. 3.1
Power Quality Measurement in Power Supply Systems - Part 2: Functional Tests and Uncertainty Requirements	IEC 62586-2: 2021 Ed. 2.1

Device View and Dimensions

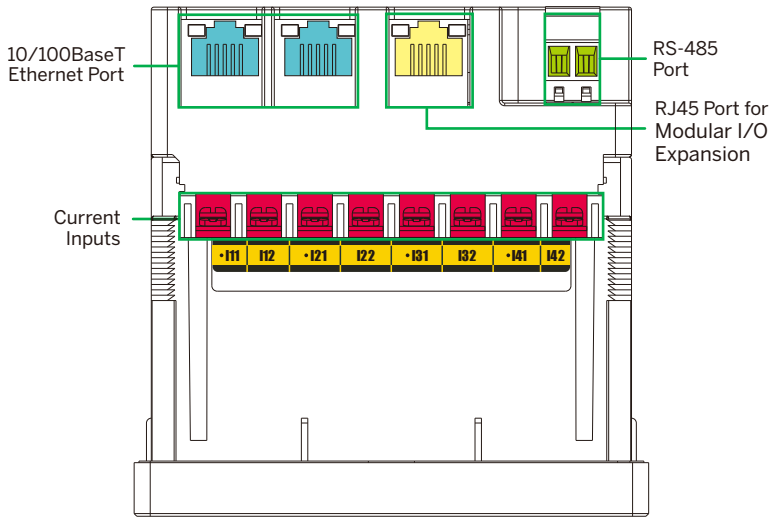
(Unit: mm)



Installation



Back View



Bottom View

Ordering Information

Product Code										Description
iMeter 5 Advanced Power Quality Analyzer										
Basic Function		P								Classic Model (PQA): IEC 62053-22 Class 0.2S Compliant, 512MB Log Memory, 3-phase True RMS Metering, Dips/Swells/Interruptions, PQ Disturbance Direction, Individual Harmonics up to 63rd, WF Recording @ 512 samples/cycle, Data Recorders, Energy Logs and Event Logs as well as Trending Curves for recorded data
		S*								Standard Model (PQI-S): Classic Model with 2GB Log Memory +Interharmonics, Flicker and Inrush Current, Transient Detection, Rapid Voltage Changes, Statistical Data Recorders, EN 50160 and IEEE Std 519-2022 Compliance Report, IEC 61000-4-30 Ed. 3.1 Class S Compliant
		A*								Advanced Model (PQI-A): Standard Model with 4GB Memory +Mains Signalling Voltage, 2kHz-9kHz Conducted Emissions, IEC 61000-4-30 Ed. 3.1 Class A Compliant
Input Current			5							5A
			1							1A
			SCCPA^							SCCP Option for use with CT Clamps with max. 500mV output (SCCPs not included)
Input Voltage				9						400VLN/690VLL +20% (Can be applied to 69VLN/120VLL, 120VLN/208VLL, 230VLN/400VLL, 240VLN/415VLL, 277VLN/480VLL, 347VLN/600VLL, 400VLN/690VLL or up to 800VLN systems
Power Supply					2					95-277VAC/DC ±10%, 47-440Hz
					3					20-60VDC
System Frequency						5				40Hz-72Hz
I/O							A			4xDI +2xDO (Form A Mechanical Relay)
							B			4xDI +2xSS Pulse Output
Communications								A		2x10/100BaseT Ethernet Port +1xRS-485 port (for Communications) 1xExpansion Port with RJ45 Connector (for connecting I/O modules)~
Display Language									E	English
iMeter 5	-	P	5	9	2	5	A	A	E	iMeter 5-P5925AAE (Basic Model)

* Additional charges apply.
^ The SCCPA option is compatible with the SCCP models listed in the "Optional SCCPs" sheet. This option does not come with any Current Clamp. Please refer to the "Optional SCCPs" sheet for more information and order the desired model and quantity as a separate item.
~ This option does not come with any Expansion I/O module. Please order the desired expansion module and quantity as a separate item ("Expansion Module" sheet to be updated).

Optional SCCPs

				
Model No.	PMC-SCCP-50A-500mV-B-A-B	PMC-SCCP-200A-200mV-B-B-B	PMC-SCCP-500A-500mV-B-B-B	* PMC-SCCP-5kA-500mV-B-C-C-371/254/150/100
Measurement Range	5A (50A Imax)	20A/200A (200A Imax)	500A (500A Imax)	500A/5000A Rogowski Coil (5000A Imax)
Max. Allowable Current	50A	260A	500A	10,000A
Output Voltage	AC 10mV/A (Max. 500mV)	AC 10mV/A @ 20A AC 1mV/A @ 200A (Max. 200mV)	AC 1mV/A (Max. 500mV)	AC 1mV/A @ 500A AC 0.1mV/A @ 5000A (Max. 500mV)
Accuracy	±0.3% rdg. ±0.02% f.s.	±0.3% rdg. ±0.02% f.s.	±0.3% rdg. ±0.02% f.s.	±2.0% rdg. (1% - 200%) In
Protection	CAT III 300V	CAT III 600V	CAT III 600V	CAT III 1000V CAT IV 600V
Diameter	15mm	24mm	50mm	371/254/150/100mm
Cable Length	3m	3m	3m	3m
Termination	BNC	BNC	BNC	BNC

* The Rogowski coil & integrator set comes with an external Power Supply.

Your Local Representative

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