CET
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Technology

# iMeter 8
## Advanced Power Quality Analyzer


CE

- True RMS @1024 Samples/Cycle
- IEC 62053-22 Class 0.2S Compliant
- IEC 61000-4-30 Class A Ed.3 Compliant
- IEC 61000-4-15 Flickermeter
- PQ Disturbance Detection
- Disturbance Waveform Recording
- Comprehensive SDR and Energy Logs
- Dual Ethernet and 2xRS-485
- Modbus RTU/TCP, HTTPS, SNTP, SMTP
- Extended Temperature Range
- Extended Warranty
- 7” TFT Color Dot-Matrix LCD Display
- 8GB Log Memory
- EN50160 Compliance Reporting
- IEC 61000-4-7 Harmonics/Interharmonics
- ½ cycle RMS Recorder
- WF Recording in COMTRADE format
- 2-150kHz C. E. Measurements
- IEC 61850 Support
- Optional Split-Core Current Probes
- Industrial Grade Components
- Standard Tropicalization

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The iMeter 8 is CET's Advanced PQ Analyzer designed for the compliance monitoring market as it offers un-surpassed functionality by combining Class 0.2S accuracy and advanced PQ features in a 192x192x182.4mm housing with a High-Resolution, Color Dot-Matrix LCD display. The iMeter 8 complies with such standards as IEC 62053-22 Class 0.2S, IEC 61000-4-30 Ed.3 Class A Compliant, IEC 61000-4-15, IEC 61000-4-7, EN50160 as well as IEC 61850 for Substation Automation. Further, it offers a large logging capacity with 8GB of on-board memory, extensive I/O, multiple Time Sync. methods, 2x100BaseT Ethernet and 2xRS-485 ports. In addition, it optionally provides 2xAO and 1xAI for different applications. These features likely make the iMeter 8 one of the most advanced PQ Analyzer for an intelligent Power Quality Monitoring System.

## *Typical Applications*

- PQ monitoring at HV, MV and LV Utility Substations
- Data Centers, Semiconductor Fabs, Heavy Industries
- 7x24 Automated Manufacturing Facilities
- Dips, Swells, Interruptions, Transients, Flickers and Harmonics monitoring
- Mains and critical feeder monitoring
- IEC 61850 support for Substation Automation and Smart Grid
- Retrofit applications with Split-Core Current Probe (SCCP)

## *Basic Features*

- IEC 62053-22 Class 0.2S kWh metering with Multi-Tariff TOU
- True RMS @ 1024 samples/cycle sampling
- 8GB on-board log memory
- 7'' High-Resolution Color Dot-Matrix Display @ 800x480
- Time Sync. via SNTP, IEEE 1588 (PTP), IRIG-B or GPS 1PPS output
- 256 Standard Setpoints and 16 High-Speed Setpoints
- Dual 100BaseT Ethernet and two RS-485 ports

## *Power Quality Features*

- IEC 61000-4-30 Edition 3 Class A Compliant
- IEC 61000-4-15, IEC 61000-4-7 and EN50160 Reporting
- 2kHz to 150kHz Conducted Emission Measurements
- Disturbance Direction Indicator
- Disturbance Waveform Recording
- Data Recording, Statistical Data Recording and ½ cycle RMS Recording
- Fault Capture up to 2,000V peak to peak
- Waveform Recording in COMTRADE and PQDIF file format (Compatible with the PQ View software)

## *Front Panel Display and Web Interface*

- True RMS Real-time, Harmonics, Power and Energy Measurements
- Demands and Multi-Tariff TOU
- Max. & Min. Logs
- Sequence & Unbalance
- Real-time WF Capture of 3-phase Voltages and Currents
- Event Waveforms and ITIC/SEMI F47 Curves
- Harmonics & Interharmonics Histogram and Phasor Diagrams
- Device and SOE Logs, PQ Counters and I/O Status
- Device Configuration and Diagnostics

## *Power Quality Metering*

### PQ Parameters as per IEC 61000-4-30 Ed.3 Compliant

- Power Frequency
- Magnitude of the Supply Voltage and Current
- Flicker
- Transients, Dips/Swells and Interruptions
- Supply Voltage Unbalance and Current Unbalance
- Mains Signalling Voltage on the Supply Voltage
- Rapid Voltage Changes
- Measurement of Over and Under Deviation Parameters
- Harmonics and Interharmonics Measurements for Voltage and Current
- 2kHz to 150kHz Conducted Emission Measurements

### Harmonic and Interharmonic Measurements

- K-Factor for Current, Crest Factor for Current and Voltage
- U and I THD, TOHD, TEHD, TIHD, TOIHD, TEIHD and TH (RMS)
- U and I Individual Harmonics (%HD and RMS) from 2nd to 63rd #
- U and I Individual Interharmonics (%IHD and RMS) from 1st to 63rd #
- Total Harmonic P, Q, S and PF
- Harmonic P, Q, S and PF from 2nd to 63rd in RMS
- Harmonic Phase Angle from 2nd to 63rd #
- U and I DC Components
- Total Harmonic kWh, kvarh Import/Export/Net/Total
- Total Harmonic kWh, kvarh Import/Export from 2nd to 63rd

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

### Conducted Emissions in the 2kHz to 150kHz range

- Real-time amplitude (150/180-Cycle) and the Max., Min., Avg. and CP95 values (in 1-min interval) for a total of 106 frequency segments for the 2-9kHz and 9-150kHz range are available via the Web Interface
- Display of the Daily Heat Map for the Max., Min., Avg. and CP95 values on the Web Interface

### Sequence and Unbalance

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

### Dips, Swells, Interruptions and Transients Recording

- Transients capture as short as 20us at 1024 samples @ 50Hz for sub-cycle disturbance such as capacitor switching and resonance phenomena
- Dips, Swells & Interruptions detection @ 10ms (½ cycle at 50Hz)
- Trigger for DO, SOE Log, WF Recording, Disturbance Waveform Recording, RMS Recording and Alarm Email
- Display of ITIC or SEMI F47 plot as well as the Event Waveform on the Front Panel and Web Interface

### Rapid Voltage Changes (RVC)

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

### 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 Dip Event is located upstream or downstream
- Pinpoint if the cause of the event is external or internal

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

- Real-time WFC @ 128 samples/cycle x 4 cycles via Front Panel and Web Interface
- WFR with max. 128 entries
- Simultaneous capture of 3-phase Voltage and Current Inputs
- No. of Cycles x Samples/Cycles with programmable pre-fault cycles: 375x1024, 750x512, 1500x256, 3000x128
- Scheduled WFR with max. repetition of 10,000 times and programmable schedule from 1 to 1440 mins
- COMTRADE file format, downloadable from the on-board Web Server or FTP Server

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### Disturbance Waveform Recorder (DWR)

- 128 entries
- Simultaneous recording of all Voltage (U1-U4) and Current (I1-I5) 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

### 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 Depth @ 7200 samples per parameter
- Configurable pre-fault samples from 100 to 500
- 72 seconds of ½ cycle RMS recording @ 50Hz or 60 seconds @ 60Hz

### PQ Event Counters

- Dips, Swells, Interruptions, Transients, Rapid Voltage Changes, Inrush Current, 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 U4, I4 and I5
- kWh, kvarh Import/Export/Net/Total and kVAh Total
- Frequency

### High-Speed Measurements

- 3-phase U, I, P, Q, S and PF as well as U4, I4 and I5 @ ½ cycle
- Frequency @ 1 cycle

### Demands

- Present and Predicted Demand for 3-phase U, I, P, Q, S and PF as well as U4, I4, I5, Frequency
- Present Demand of 4-phase U & I THD/TOHD/TEHD, 4-phase Current K-Factor, U & I Unbalance, Over Deviation & Under Deviation of Voltage and Frequency, 4-phase Fundamental Current
- Max./Min. values per Demand Interval
- Maximum Demands for This Month and Last Month (or Since Last Reset & Before Last Reset)
- Demand Synchronization with DI

### Multi-Tariff TOU capability

- Two independent sets of TOU Schedules, each supporting
  - Up to 12 Seasons
  - 90 Holidays or Alternate Days and 3 Weekdays
  - 20 Daily Profiles, each with 12 Periods in 15-minute intervals
  - 8 Tariffs, each providing the following information:
    - kWh/kvarh Import/Export and kVAh
    - P & Q Import/Export Maximum Demands time-stamped
    - Register rollover at 100,000,000,000.000 kXh
  - 12 Historical Logs for Energy and Max. Demand

## *Data and Event Recorders*

### Non-Volatile Log Memory

- 8GB on-board Log Memory

### Data Recorder (DR) Log

- 8 Standard DR Logs
- Recording Interval from 1s to 40 days for Standard DR Log
- Up to 32 Parameters for each DR Log with programmable sources such as Real-time Measurements, Harmonics, Unbalance and Demand Measurements
- Configurable Depth and Recording Offset
- Support FIFO or Stop-When-Full recording modes

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

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

### Statistical Data Recorder (SDR)

- 16 SDR Logs of max. 64 parameters each
- Recording of the Max., Min., Avg. and 95$^{th}$ percentile for Real-time Measurements including U, I, P, Q, S, PF, Freq., Power, PF, Harmonics, Deviations and Unbalances
- Recording interval from 0 minute to 60 minutes
- 30 days @ 1-minute, 300 days @ 10-minute, 450-day @ 15-minute
- PQDIF file format, downloadable from the on-board FTP Server
- 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

### SOE Log

- 1024 FIFO events time-stamped to ±1ms resolution
- Setpoint events, I/O operations, Dips, Swells, Interruptions, Transients, Rapid Voltage Changes, Inrush Current, Mains Signalling Voltages, etc.
- Record the time and characteristic data of the Setpoint and PQ event

### Device Log

- 1024 FIFO entries time-stamped to ±1ms resolution
- Power On/Off Records, Setup changes, Time Sync., Device Operations and Self-diagnostics

## *Setpoints*

### PQ Setpoints

- Transients
- Dips, Swells, Interruptions
- Rapid Voltage Changes
- Inrush Current
- Trigger DO, SOE Log, WFR, DWR, RMSR or Alarm Email

### Control Setpoints

- 256 standard and 16 High-Speed Setpoints
- Extensive monitoring sources including U, I, P, Q, S, Demand, Harmonics, Unbalances, Deviations, Flickers, Phase Reversal/Loss, AI, etc.
- Configurable thresholds and time delays
- Trigger DO, SOE Log, WFR, DWR, RMSR or Alarm Email

### Digital Input Setpoints

- Provides control output actions in response to changes in Digital Input status
- Trigger DO, SOE Log, WFR, DWR, RMSR or Alarm Email

## *Inputs and Outputs*

### Digital Inputs

- Standard 8 or optional 16 channels
- Standard volt free dry contact with 24VDC Internal Excitation
- Optional 110VAC/DC or 220VAC/DC External Excitation
- 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 and Tariff Switch based on DI Status

### Digital Outputs

- Standard 4 or optional 8 channels Mechanical Relays for general purpose control or alarming
- Standard 4 SS Relays for Energy pulsing applications

### Analog Inputs (Optional)

- Two channels 0/4-20mA DC input with programmable zero and full scales that can be used to measure external transducer signal

### Analog Output (Optional)

- One Channel 0/4-20mA DC output with programmable zero and full scales

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## Communications

### Ethernet Ports (P1, P2)

- Dual 10/100BaseT Ethernet Ports with RJ45 connector
- Protocols supported: Modbus TCP, HTTPS, SNTP, SMTP, FTP and IEC 61850
- Built-in password protected Web Server for easy data viewing, setup configuration and firmware upgrade
- Simultaneous client connections for 12xModbus TCP & 12xIEC 61580

### RS-485

- Dual optically isolated RS-485 port with baud rate from 1.2 to 38.4 kbps
- Support Modbus RTU and Ethernet Gateway

## Time Synchronization

- Battery-backed Real-time clock @ 6ppm (≤ 0.5s/day)
- Time Sync. via Modbus RTU/TCP, SNTP, IEEE 1588 (PTP)
- Optional GPS/IRIG-B outputs

## System Integration

### PecStar iEMS

- The iMeter 8 is supported by CET's PecStar iEMS
- In addition, the iMeter 8 can be easily integrated into other 3rd party systems because of its support of multiple communications ports as well as different industry standard protocols such as Modbus and IEC 61850.

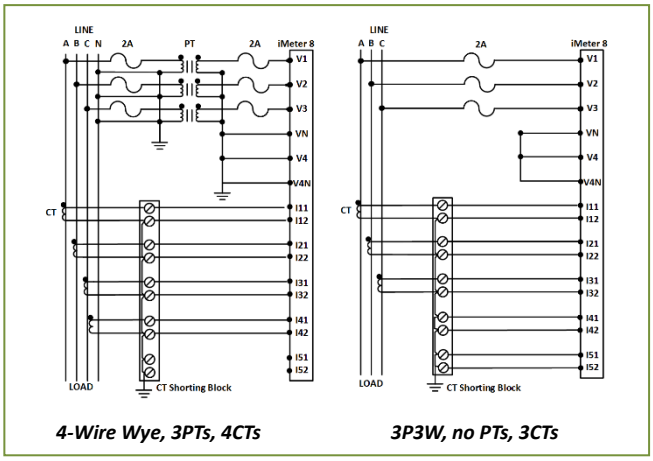
### DiagSys

- Display of Real-time Measurements, PQ Events, Waveforms and Statistical Trend charts
- Export of IER, AER and SDR Logs as well as EN 50160 Reports
- Generation and Export of self-defined PQ Analysis 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 on-board, password protected FTP Server allows logged data in CSV format and waveform records in PQDIF or COMTRADE format to be downloaded without any special software. The downloaded files can be subsequently viewed using software that supports the industry standard PQDIF and COMTRADE file formats

## Typical Wiring Diagrams

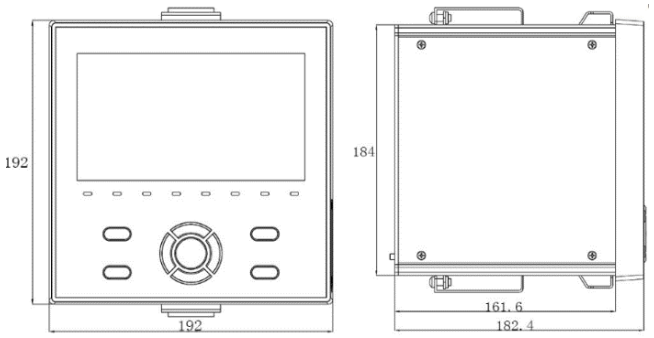



*4-Wire Wye, 3PTs, 4CTs* *3P3W, no PTs, 3CTs*

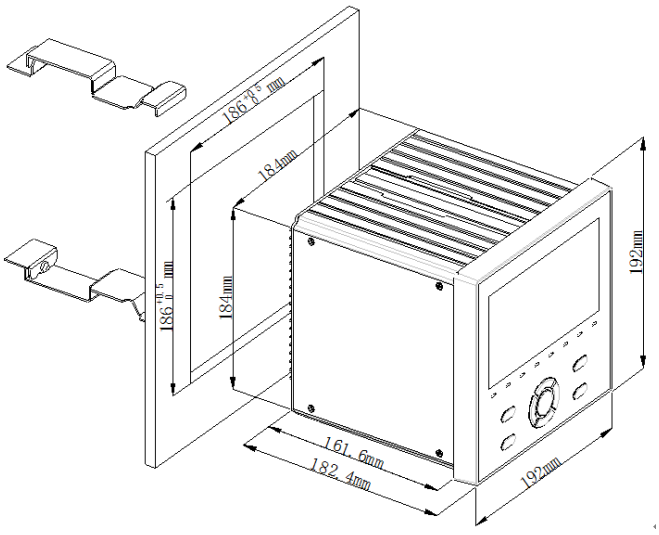
## Accuracy

| Parameters | Accuracy | Resolution |
|---|---|---|
| Voltage (U) | ±0.1% | 0.001V |
| I1, I2, I3 | ±0.1% | 0.001A |
| | SCCP Option: ±0.1% + Error of SCCP | |
| I4 | ±0.1% | |
| I5 | ±0.5% | |
| P, Q, S | ±0.2% | 0.001kX |
| | SCCP Option: ±0.5% | |
| kWh, kVAh | IEC 62053-22 Class 0.2S | 0.1kXh |
| | SCCP Option: IEC 62053-21 Class 1 | |
| kvarh | IEC 62053-24 Class 0.5S | 0.1kvarh |
| | SCCP Option: IEC 62053-24 Class 1 | |
| PF | ±0.2% | 0.001 |
| | SCCP Option: ±0.5% | |
| Frequency | ±0.003 Hz | 0.001Hz |
| Harmonics | IEC 61000-4-7 Class A | 0.001 |
| K-Factor | IEC 61000-4-7 Class A | 0.001 |
| Phase Angle | ±0.2° | 0.1° |
| | SCCP Option: ±0.2° + Phase Error of SCCP | |
| U Unbalance | ±0.1 % | 0.01% |
| I Unbalance | ±0.5% | 0.01% |
| Pst, Plt | ±5% | 0.01% |

## Device Views and Mounting Diagram




**Front View** **Side View**




**Installation**

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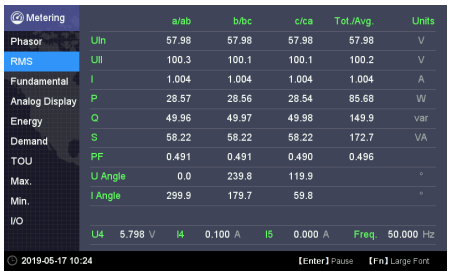
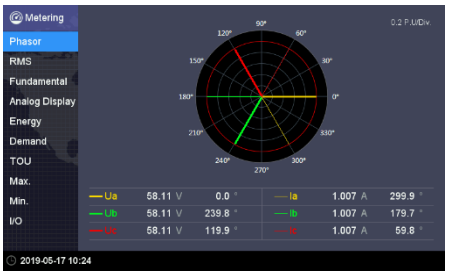
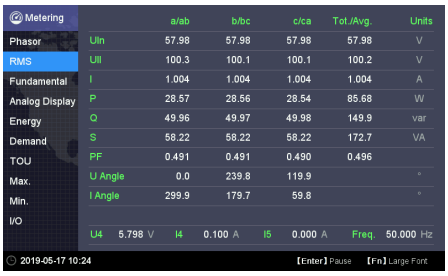
## *Front Panel User Interfaces*




**Basic Measurement**

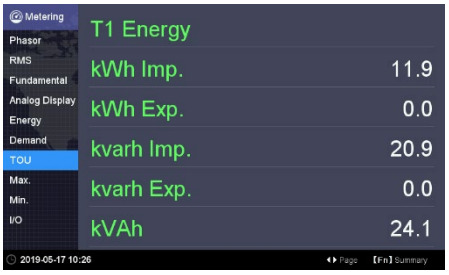



**Phasor Diagram**

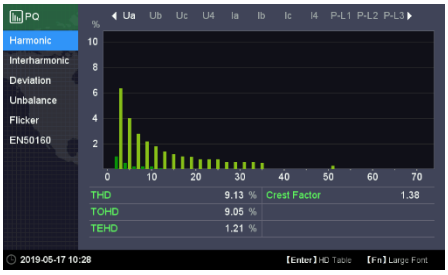



**RMS**


**Energy Display**

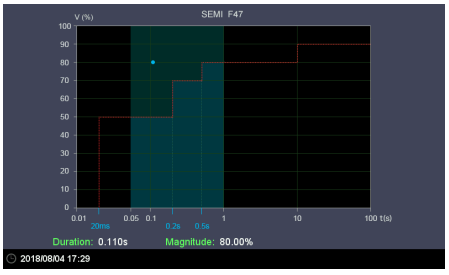



**Large Character TOU Energy Display**




**Harmonics**


**Harmonic Energy Measurements**

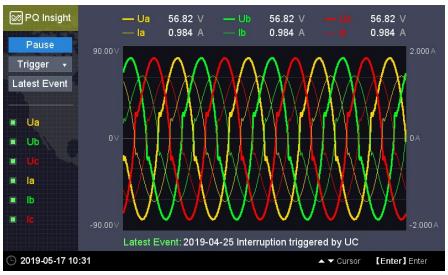



**SEMI F47 Plot**

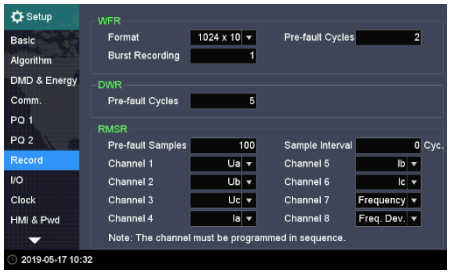

**Events**


**Power Quality**

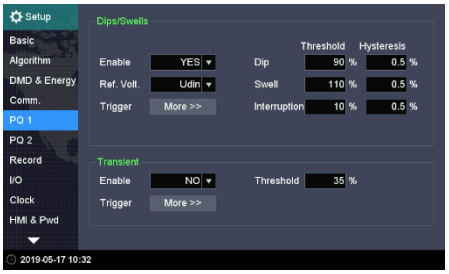

**EN 50160 Report**




**Real-Time WF Capture**




**Record Setup**




**PQ Setup**


**Comm. Setup**

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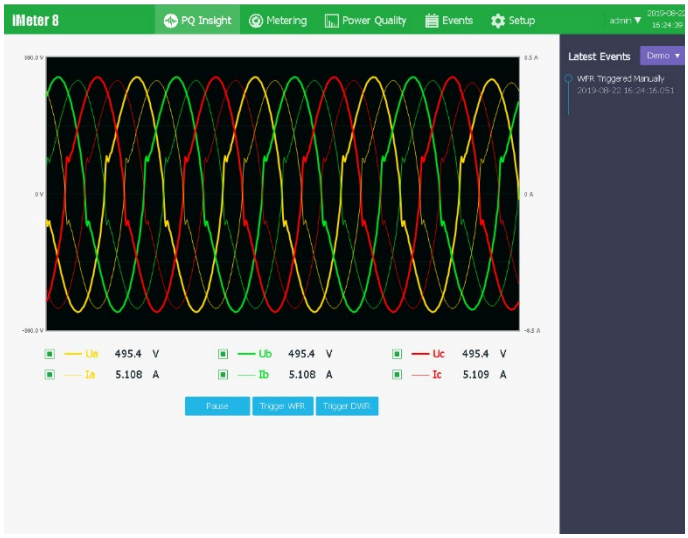
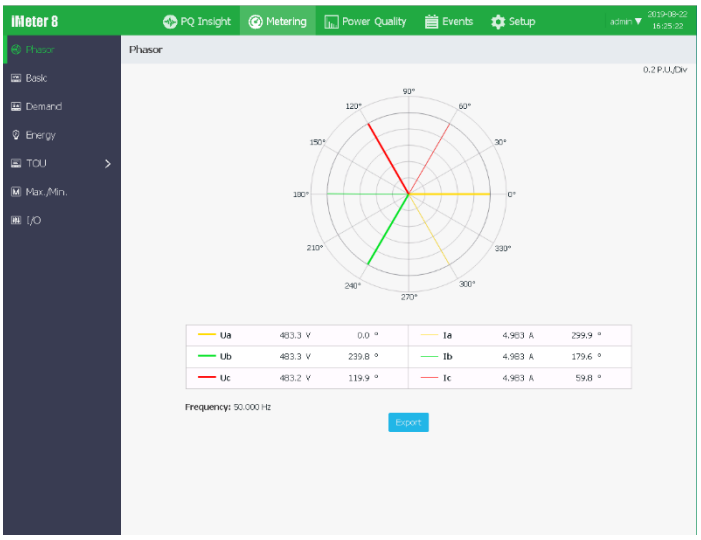
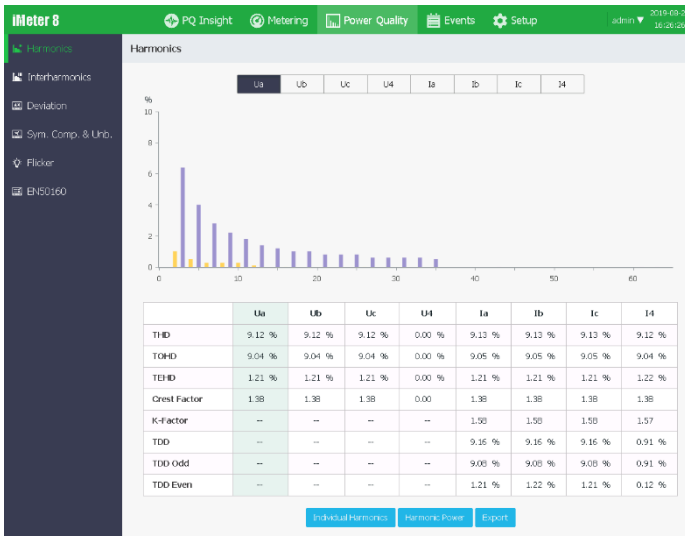
## *Web Interfaces*



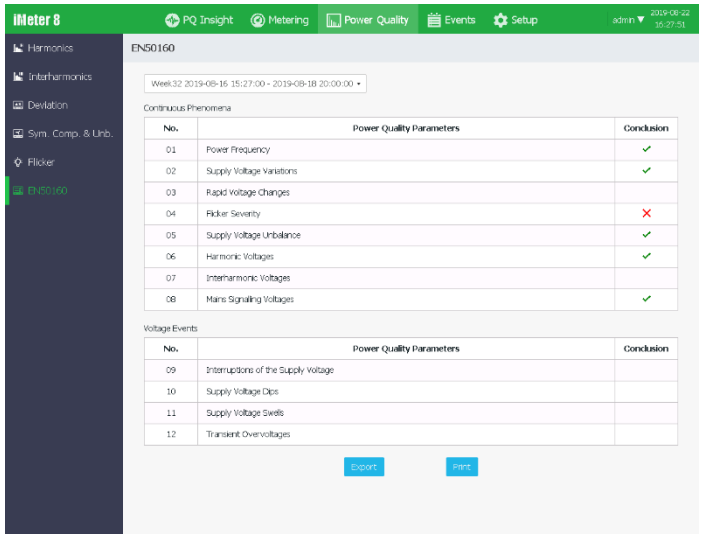

***PQ Insight with Latest Events List***




***Phasor Diagram***

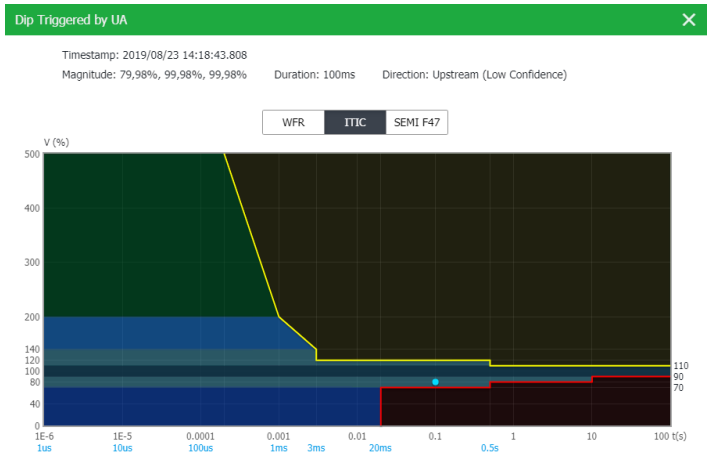



***Harmonics Histogram***




***EN50160***


***Event-associated Waveform***




***Event-associated ITIC Curve***

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## *Technical Specifications*

| | |
|---|---|
| **Voltage Inputs (V1, V2, V3, VN, V4, V4N)** | |
| Standard (Un) | 400VLN/690VLL +20% |
| Range | 1% to 200% Un for 400VLN nominal |
| Overload | 2xUn continuous, 4xUn for 1s |
| Burden | < 0.5VA/per phase |
| PT Ratio | |
| Primary | 1-1,000,000V |
| Secondary | 1-1,500V |
| V4 Primary | 1-1,000,000V |
| V4 Secondary | 1-1,500V |
| Frequency | 40Hz-60Hz @ 50Hz, 48Hz-72Hz @ 60Hz |
| **Current Inputs (I11, I12, I21, I22, I31, I32, I41, I42, I51, I52)** | |
| Standard (In) | 5A (Standard), 1A (Optional) |
| Range | 1% to 400% In |
| Starting Current | 0.1% In |
| Overload | 4xIn continuous, 20xIn for 1s |
| Burden | < 0.5VA/per phase @ 5A<br>< 0.1VA/per phase @ 1A |
| Optional SCCP Options | Split-Core Current Probe Input @ 500mV |
| *SCCP-50A-500mV* | 5A/50A (In/Imax), max. 500mV Output |
| *SCCP-200A-200mV* | 20A/200A (In/Imax), max. 200mV Output |
| *SCCP-500A-500mV* | 500A Imax, max. 500mV Output |
| *SCCP-5000A-500mV* | Selectable 500A/5000A (Imax) Rogowski Coil, max. 500mV Output |
| CT Ratio | |
| Primary | 1-30,000A |
| Secondary | 1-50A |
| I4 Primary | 1-30,000A |
| I4 Secondary | 1-50A |
| **Power Supply (L+, N-, G)** | |
| Standard | 95-250VAC/VDC ± 10%, 47-440 Hz |
| Burden | < 12W |
| Overvoltage Category | CATIII 300V |
| **Digital Inputs (COM, DI1 to DI8 or optional DI1 to DI16)** | |
| Standard | Dry contact, 24VDC internally wetted |
| Optional | 110V/220V AC/DC externally wetted |
| Sampling | 1000Hz |
| Hysteresis | 1ms minimum |
| **Form A Relay Outputs (DO1 to DO3 or optional DO1 to DO7)** | |
| Type | Form A Mechanical Relay |
| Loading | 5A @ 250VAC / 30VDC |
| **Form C Relay Outputs (Alarm 1, 2, 3)** | |
| Type | Form C Mechanical Relay |
| Loading | 8A @ 250VAC / 24VDC |
| **Pulse Outputs (E1+, E1-, E2+, E2-, E3+, E3-, E4+, E4-)** | |
| Type | Form A Solid State Relay |
| Isolation | Optical |
| Max. Load Voltage | 30VDC |
| Max. Forward Current | 100mA |
| **Optional Analog Input (AI1+, AI1-, AI2+, AI2-)** | |
| Type | 0-20 / 4-20 mA DC |
| Overload | 24 mA maximum |
| **Optional Analog Output (AO+, AO-)** | |
| Type | 0-20 / 4-20 mA |
| Loading | 500Ω maximum |
| Overload | 24 mA maximum |
| **Environmental Conditions** | |
| Operating Temperature | -25°C to 70°C |
| Storage Temperature | -40°C to 85°C |
| Humidity | 5% to 95% non-condensing |
| Atmospheric Pressure | 63 kPa to 110 kPa |
| Pollution Degree | II |
| Measurement Category | 1000V CAT III |
| **Mechanical Characteristics** | |
| Panel Cutout | 186x186 mm |
| Unit Dimensions | 192x192x182.4 mm |
| IP Rating | 52 |

## *Standards of Compliance*

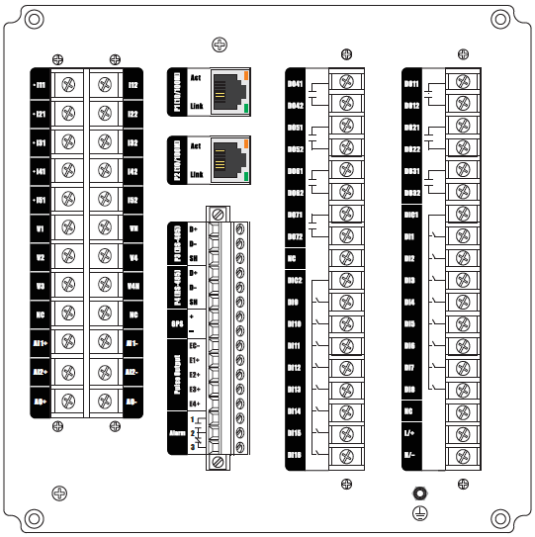
| | | |
|---|---|---|
| **Safety Requirements** | | |
| CE LVD 2014 / 35 / EU | | EN61010-1: 2010<br>EN61010-2-030: 2010 |
| Electrical Safety in Low Voltage Distribution Systems up To 1000Vac and 1500 Vdc | | IEC 61557-12: 2018 (PMD) |
| Insulation<br><br>AC Voltage: 2kV @ 1 minute<br>Insulation Resistance: >100MΩ<br>Impulse Voltage: 6kV, 1.2/50µs | | IEC 62052-11: 2003<br>IEC 62053-22: 2003<br>EN 61010-1: 2010 |
| **EMC Compatibility<br>CE EMC Directive 2014 / 30 / EU (EN 61326: 2013)** | | |
| **Immunity (EN50082-2)** | | |
| Electrostatic Discharge | | EN 61000-4-2: 2009 |
| Radiated Fields | | EN 61000-4-3: 2006+A1: 2008+A2: 2010 |
| Fast Transients | | EN 61000-4-4: 2012 |
| Surges | | EN 61000-4-5: 2014+A1: 2017 |
| Conducted Disturbances | | EN 61000-4-6: 2014 |
| Magnetic Fields | | EN 61000-4-8: 2010 |
| Voltage Dips and Interruptions | | EN 61000-4-11:2004+A1: 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 |
| Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment | | EN 55032: 2015 |
| Limits for Harmonic Current Emissions for Equipment with Rated Current ≤16 A | | EN 61000-3-2: 2014 |
| Limitation of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems for Equipment With Rated Current ≤16 A | | EN 61000-3-3: 2013 |
| Emission standard for Industrial Environments | | EN 61000-6-4: 2007+A1: 2011 |
| **Mechanical Tests** | | |
| Vibration Test | Response | IEC 255-2-1:1989 |
| | Endurance | IEC 255-2-1:1989 |
| Shock Test | Response | IEC 255-2-2 |
| | Endurance | IEC 255-2-2 |
| Bump Test | | IEC 255-2-2 |
| **Power Quality** | | |
| Voltage Characteristics of Electricity Supplied by Public Distribution Systems | | EN 50160 |
| General Guide on Harmonic and Interharmonic Measurements and Instrumentation, for Power Supply Systems and Equipment Connected Thereto | | IEC 61000-4-7 |
| Flickermeter - Functional and Design Specifications | | IEC 61000-4-15 |
| Testing and Measurement Techniques - Power Quality Measurement Methods | | IEC 61000-4-30 Ed.3<br>Class A Compliant |

*Designed For Reliability* *Manufactured To Last*

CET Electric Technology

# iMeter 8
# Advanced Power Quality Analyzer

## *Rear Panel*



**16xDI+8xDO+2xAI+1xAO**

## *Ordering Guide*

CET Electric Technology

***Version 20190808***

| Product Code | Description |
|---|---|
| **iMeter 8 Advanced Power Quality Analyzer** | |
| **Basic Fature** | |
| A | 1024 samples/cycle, 8GB On-Board Memory |
| B~ | 1024 samples/cycle, 8GB On-Board Memory<br>IEC 61000-4-30 Ed. 3 Class A Compliant with 2-150kHz Measurement |
| **Input Current** | |
| 5 | 5A |
| 1 | 1A |
| SCCPA^ | SCCP Option for use with CT Clamps with max. 500mV output. |
| **Input Voltage** | |
| 9 | 400VLN/690VLL + 20% |
| **Power Supply** | |
| 2 | 95-250VAC/DC ± 10%, 47-440Hz |
| 3 | 20-60VDC (Future Consideration) |
| **System Frequency** | |
| 5 | 50Hz |
| 6 | 60Hz |
| **I/O** | |
| A | 8xDI + 4xDO + 4xSS Pulse Outputs |
| B* | 8xDI + 4xDO + 2xAI + 1xAO + 4xSS Pulse Outputs |
| C* | 16xDI + 8xDO + 4xSS Pulse Outputs |
| **DI Excitation** | |
| N | Dry Contact (@24VDC Self-Excitation) |
| 1 | 110V AC/DC External Excitation |
| 2 | 220V AC/DC External Excitation |
| **Communications** | |
| A | 2x100BaseT + 2xRS-485 |
| **Time Sync.** | |
| A | GPS, IRIG-B |
| **Display Language** | |
| E | English |

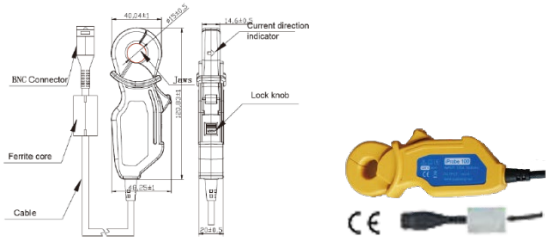
| iMeter 8 | - | A | 5 | 9 | 2 | 5 | A | N | A | A | E | iMeter 8-A5925ANAAE (Standard Model) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

*Additional charges apply

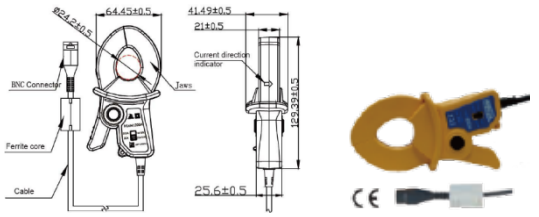
~ This option does not support I/O option of B (8xDI + 4xDO + 2xAI + 1xAO + 4xSS Pulse Outputs).

^ The SCCPA option is comptaible with the SCCP models listed in the "SCCP Option" sheet. This option does not come with any Current Clamp. Please refer to the "SCCP Option" sheet for more information and order the desired model and quantity as a separate item.

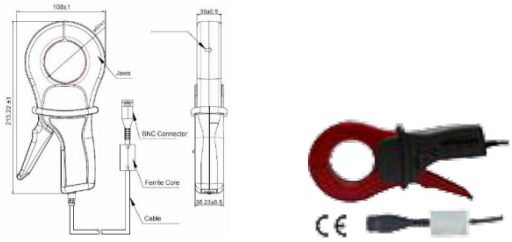
## *Optional 50A, 200A, 500A and 5000A CATIII Split-Core Current Probes for Non-Intrusive Applications.*



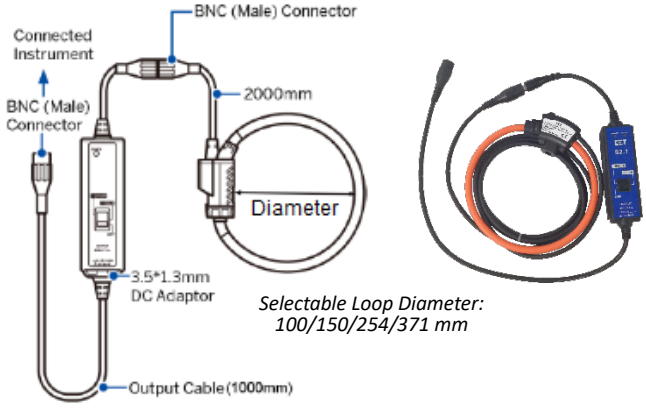

***PMC-SCCP-50A-500mV***




***PMC-SCCP-200A-200mV***




***PMC-SCCP-500A-500mV***




*Selectable Loop Diameter: 100/150/254/371 mm*

***PMC-SCCP-5kA-500mV***

***Please refer to the Technical Specifications for more information about the SCCPs and Flexible Rogowski Coil.***

**Your Local Representative**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