Life Is On | **Schneider Electric**

PowerLogic ION7400

Compact, 3-phase multifunction energy and power quality compliance meters ideally suited for utility feeder applications

PowerLogic™ ION7400

10/21/2015 11:48:47   ALT

Phasor Diagram

	Magnitude	Angle
Va	120.008 V	0.0
Vb	119.876 V	240.1
Vc	119.852 V	120.1
Ia	3.746 A	-19.9
Ib	4.994 A	216.9
Ic	4.250 A	95.5
I4	0.200 A	30.0

VAR   WATT

schneider-electric.us/utilitymetering

Accuracy, precision, and performance

- High quality, reliability, and accuracy: 3-phase power and energy measurements with power quality compliance monitoring, data and event logging, and alarming
- Industry-leading: ANSI Class 0.2 revenue metering and network management data
- Regulatory compliance: meets all North American requirements for utility metering
- Built-in intelligence: RTU functionality polls downstream devices such as other meters, relays or telemetry devices
- Exceptional adaptability: integrates into existing billing, SCADA and fault analysis systems
- Reduces downtime: pinpoints disturbances with patented Disturbance Direction Detection
- Provides a high degree of visibility to system data and assets that allows for cost savings, rapid response time, and informed decisions
- Cybersecurity hardened to address NERC/CIP and IEC guidelines

Integrated display

Flexible and modular

- Integrates into existing billing/SCADA systems
- 'Out of the box' connectivity with open, scalable EcoStruxure™ Power Monitoring Expert and PowerSCADA software platforms
- Extensive data access options: utility-focused HMI, ANSI Type 2 optical port, USB port, multi-protocol communications (including IRIG-B), and calibration pulsing
- Dual-port Ethernet can be looped or ring configured and allows concurrent protocols
- Digital I/O for status monitoring, alarming, and pulse metering
- Analog I/O integrates with existing legacy systems, track sensors, or fuel levels
- Modbus Master, Ethernet-to-serial gateway capabilities

Panel mount meter (bottom)

Object-oriented intelligence

- Unique, fully-functional object-oriented ION technology allows tremendous flexibility and creativity
- Modular design makes it possible to customize features or functions to suit your specific needs
- Protects your infrastructure investment, now and in the future
- Device-embedded intelligence and network connectivity improves productivity

Expandable I/O

PQ compliance reporting, PQ analysis

- Monitors and logs parameters that support multiple international PQ compliance measurement standards
- Harmonics: high resolution waveform capture and Flicker influence
- Power Quality: report by exception sag / swell and waveform events

Alarming and control

- 50+ definable alarms to log critical event data, trigger waveform recording, or perform control
- Trigger on any condition, with cycle-by-cycle and 1-second response time
- Combine alarms using Boolean logic and to create alarm levels
- Alarm notification via email text message
- Use EcoStructure Power Monitoring Expert software to categorize, trend, and evaluate conditions

DIN rail mount with remote display

Quality

ISO 9001 and ISO 14000 certified manufacturing to ensure your investment retains value and precision

Green Premium eco-mark

Confidently confirm and incorporate compliance status of our products into your environmental policies.

Schneider Electric commits to disclose reliable, comprehensive information on the environmental impacts of our products.

PowerLogic ION7400

PowerLogic™ ION7400 meters, combined with EcoStruxure Power Monitoring Expert, PowerSCADA software – or with an existing SCADA system – are key components within a comprehensive power management system

ION7400 series features

Intermediate meter		
General		
Use on LV and MV systems		●
Current accuracy (5A Nominal)		0.1 % reading
Voltage accuracy (57 V LN/100 V LL to 400 V LN/690 V LL)		0.1 % reading
Active energy accuracy		0.2 %
Number of samples/cycle or sample frequency		256
Instantaneous rms values		
Current, voltage, frequency		●
Active, reactive, apparent power	Total and per phase	●
Power factor	Total and per phase	●
Current measurement range (autoranging)		0.05 - 10A
Energy values		
Active, reactive, apparent energy		●
Settable accumulation modes		●
Demand values		
Current	Present and max. values	●
Active, reactive, apparent power	Present and max. values	●
Predicted active, reactive, apparent power		●
Synchronization of the measurement window		●
Setting of calculation mode	Block, sliding	●
Power quality measurements		
Harmonic distortion	Current and voltage	●
Individual harmonics	Via front panel and web page	63
	Via EcoStruxure software	127
Waveform capture		●
Detection of voltage swells and sags		●
Fast acquisition	1/2 cycle data	●
EN 50160 compliance checking		●
Customizable data outputs (using logic and math functions)		●
Data recording		
Min/max of instantaneous values		●
Data logs		●
Event logs		●
Trending/forecasting		●
SER (Sequence of event recording)		●
Time stamping		●
GPS synchronization (+/- 1 ms)		●
Memory (in Mbytes)		512
Display and I/O		
Front panel display		●
Wiring self-test		●
Pulse output		1
Digital or analog inputs(max)		27 digital 16 analog
Digital or analog outputs (max, including pulse output)		1 digital 8 relay 8 analog
Communication		
RS 485 port		1
Ethernet ports		2
Serial port (Modbus, ION, DNP3)		●
Ethernet port (Modbus/TCP, ION TCP, DNP3 TCP, IEC 61850)		●
Ethernet gateway		●
Alarm notification via email		●
HTTP web server		●
SNMP with custom MIB and traps for alarms		●
SMTP email		●
NTP time synchronization		●
FTP file transfer		●

For complete technical specifications, see ION7400 technical data sheet document number: PLSED310113EN

Life Is On | Schneider Electric
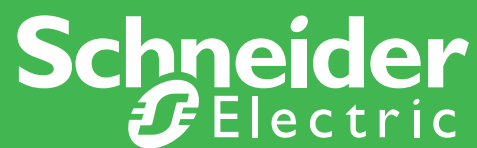
Learn more at
www.schneider-electric.us/utilitymetering