



## LEVELTHE PLAYING FIELD

The ION 7650 features industry-leading capabilities and many other advanced features that make it ideal for power quality monitoring, grid level metering and compliance monitoring. Easy to use, reliable and cost-effective. It is an enhanced model of the ION 7600, designed to include expanded onboard memory, enhanced communications options and high resolution sampling.

ION 7650 POWER DISTRIBUTION UNITS



## KEY FEATURES

- Exceeds Class 0.2 revenue accuracy
- True RMS 3-phase voltage, current and power
- Instantaneous 3-phase voltage, current, frequency, and power factor
- Energy: bi-directional, absolute, net, time-of-use, and loss compensation
- Demand: rolling block, predicted, and thermal
- Up to 1024 samples per cycle
- Harmonics: individual and total harmonic distortion up to the 63rd
  (511th using ION Enterprise software)
- Sag/Swell
- Waveform recording
- Transient detection
- Number of Nines (power availability)
- Symmetrical components
- K-Factor for voltage and current inputs
- Crest Factor using ION Enterprise software
- Communications
- Web server, MeterM@il® allow distribution of metered data and alarms over the Internet
- Optional built-in modern with ModernGate<sup>™</sup> to allow modern access for 31 other devices
- 10Base-T or 10Base-FL Ethernet port option with EtherGate<sup>™</sup> for direct data transfer from Ethernet to as many as 31 RS-485 devices
- Two RS-485 ports, one switchable to RS-232
- ANSI C12.18 Type 2 optical port
- Modbus™ RTU on multiple serial connections
- ModbusTCP on Ethernet ports
- DNP 3.0 on multiple serial connections
- DNP 3.0TCP on Ethernet ports
- Modbus Master support
- On-Board Data Logging

- The maximum number of cycles for contiguous waveform capture is 214,000 (based on 16 samples/cycle x 96 cycles and the largest capacity of meter memory
- Transient detection up to, 17µs (60Hz), and 20µs (50Hz)
- Scheduled or event-driven logging for hundreds of parameters
- Sequence-of-events & min/max logging
- Setpoints for Control and Alarms
- Setpoint on any parameter or condition
- I second or \_ cycle operation
- Inputs and Outputs
- 8 digital inputs for status/counter functions
- 7 relay outputs for control/pulse functions
- Optional analog inputs and outputs

