The web-enabled PowerLogic ION8600 is used to monitor electrical distribution networks, service entrances and substations. It enables businesses to manage complex energy supply contracts that include power quality guarantees. Low-range current accuracy makes it ideal for independent power producers and cogeneration applications that require the accurate bi-directional measurement of energy. It is well suited to load curtailment, equipment monitoring and control and energy pulsing and totalization applications. Integrate it with PowerLogic ION EEM enterprise energy management software, PowerLogic ION Enterprise operations software or other energy management and SCADA systems.

PowerLogic ION8600 Power and Energy Meter Features

Feature set C includes:
- 9S, 39S, 3S, 36S, 76S socket and switchboard cases
- True RMS 3-phase voltage, current, power and meets stringent ANSI revenue metering standards including ANSI C12.20 0.2 and Class 2, 10, & 20
- Power quality: sag/swell, individual, even, odd, total harmonics to the standard and symmetrical components
- 2MB log/event memory, min/max for any parameter, historical logs up to 32 channels, timestamp resolution to 0.001 seconds and GPS time synchronization
- Transformer/line loss compensation and Instrument transformer correction
- Communications: Fiber, Ethernet, Serial, Modem, Internet and Ethernet to serial gateway and ION, DNP 3.0, Modbus RTU, Modbus TCP and MV-90 protocols
- Dial-out capability when memory is near full
- Multi-user, multi-level security with control and customized access to sensitive data for up to 16 users
- Data push capability through SMTP (email)
- 65 setpoints — math, logic, trig, log, linearization formulas
- Password protection and anti-tamper seal protection
- Built-in I/O: 4 KYZ digital outs and 3 A digital ins, an optional external I/O expander provides additional I/O

Feature set B adds the following to feature set C:
- Harmonics: individual, total even, total odd up to the 63rd
- 4MB standard memory
- Historical logs up to 32 channels
- Modbus RTU Master on serial ports
- Cycle setpoint minimum response time

Feature set A adds the following to feature sets C and B:
- Waveform capture up to 256 samples/cycle, PQ compliance monitoring, flacker to ENS0160, IEC 6100-4-7/4-15 (also configurable to IEEE 519-1992, IEEE159, SEMI) CBEMA/ITIC
- Transient detection to 65us at 60Hz
- Harmonics: magnitude, phase and inter-harmonics to the 40th
- 10MB standard memory
- Max 96 cycles of waveform logs and 800 channels of historical logs

Table 4.5: Typical PowerLogic ION8600 Power and Energy Meter Ordering Configurations

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog No.</th>
<th>$ Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ION8600, feature set A, 9S socket base, 5A nominal current inputs, auxiliary power pigtail 65-120Vac/80-160Vac, 60 Hz, communications card with: 10baseT Ethernet — RS-232/485 — Optical, RS-485</td>
<td>S8600AOCC0B6E0A0A</td>
<td>6252.00</td>
</tr>
<tr>
<td>ION8600, feature set B, 9S socket base, 5A nominal current inputs, auxiliary power pigtail 65-120Vac/80-160Vac, 60 Hz, communications card with: 10baseT Ethernet — Optical, RS-485</td>
<td>S8600BC0C0B6E0A0A</td>
<td>4700.00</td>
</tr>
<tr>
<td>ION8600, feature set C, 9S socket base, 5A nominal current inputs, auxiliary power pigtail 65-120Vac/80-160Vac, 60 Hz, communications card with: RS-232/485, RS-485, Optical port, standard I/O</td>
<td>S8600CC0C0B6A0A0A</td>
<td>2609.00</td>
</tr>
</tbody>
</table>

PowerLogic ION7550 and ION7650 Power and Energy Meters

Used at key distribution points and sensitive loads, the web-enabled PowerLogic ION7550 and PowerLogic ION7650 meters combine a wealth of advanced features from power quality analysis capabilities, revenue accuracy and multiple communications options, through web compatibility, and control capabilities. Both are compatible with PowerLogic ION EEM enterprise energy management software, PowerLogic ION Enterprise operations software can be integrated with other energy management or building control systems through multiple communication channels and protocols.

The meters are ideal for compliance monitoring, disturbance analysis, cost allocation and billing, demand and power factor control and equipment monitoring and control. The meters have a high visibility, adjustable front panel display that can depict TOU, harmonics, event logs, phasers, and instantaneous power parameters. They meet stringent ANSI C12.20 0.2, Class 10 & 20 revenue metering standards.

PowerLogic ION7550 and ION7650 Power and Energy Meter Features

The PowerLogic ION7550 includes:
- 3.5" x 4.5" (87 x 112 mm) backlit LCD display
- True RMS 3-phase voltage, current, and power that meets stringent ANSI C12.20 0.2, Class 2, 10, & 20
- Power quality: sag/swell, harmonics - individual, even, odd, total to the 63rd, waveform capture at 256 samples/cycle
- 5MB log/event memory (10MB optional), waveform logging up to 96 cycles, up to 800 channels historical, min/max, timestamp resolution to 0.001 seconds, GPS time synchronization and historical trends through front panel
- Communications: fiber, Ethernet, serial, internal modem, optical port, and a gateway functionality, ION, DNP 3.0, Modbus RTU - master & slave, Modbus TCP and MV-90
- Dial-out capability when memory is near full
- Data push capability through SMTP (email)
- Password protection and anti-tamper seal protection enhance meter security
- Multi-user, multi-level security with control and customized access to sensitive data for up to 16 users
- 65 configurable _cycle setpoints for single, multi-condition and dial out on alarm and math, logic, trig, log, linearization formulas
- 9S, 39S, 3S, 36S, 76S socket and switchboard cases
- Transformer/line loss compensation and Instrument transformer correction
- Communications: Fiber, Ethernet, Serial, Modem, Internet and Ethernet to serial gateway and ION, DNP 3.0, Modbus RTU, Modbus TCP and MV-90 protocols
- Dial-out capability when memory is near full
- Data push capability through SMTP (email)
- Password protection and anti-tamper seal protection
- Built-in I/O: 4 KYZ digital outs and 3 A digital ins, an optional external I/O expander provides additional I/O

Feature set B adds the following to feature set C:
- Historical logs up to 32 channels
- Modbus RTU Master on serial ports
- Cycle setpoint minimum response time

Feature set A adds the following to feature sets C and B:
- Waveform capture up to 256 samples/cycle, PQ compliance monitoring, flacker to ENS0160, IEC 6100-4-7/4-15 (also configurable to IEEE 519-1992, IEEE159, SEMI) CBEMA/ITIC
- Transient detection to 65us at 60Hz
- Harmonics: magnitude, phase and inter-harmonics to the 40th
- 10MB standard memory
- Max 96 cycles of waveform logs and 800 channels of historical logs

Table 4.6: Typical PowerLogic ION7550/7650 Power and Energy Meter Ordering Configurations

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog No.</th>
<th>$ Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ION7550, feature set A, 9S socket base, 5A nominal current inputs, auxiliary power pigtail 65-120Vac/80-160Vac, 60 Hz, communications card with: 10baseT Ethernet — RS-232/485 — Optical, RS-485</td>
<td>S7550AOCC0B6E0A0A</td>
<td>6318.00</td>
</tr>
<tr>
<td>ION7550, feature set B, 9S socket base, 5A nominal current inputs, auxiliary power pigtail 65-120Vac/80-160Vac, 60 Hz, communications card with: RS-232/485, RS-485, Optical port, standard I/O</td>
<td>S7550BC0C0B6A0A0A</td>
<td>5589.00</td>
</tr>
<tr>
<td>ION7550, feature set C, 9S socket base, 5A nominal current inputs, auxiliary power pigtail 65-120Vac/80-160Vac, 60 Hz, communications card with: RS-232/485, RS-485, Optical port, standard I/O</td>
<td>S7550CC0C0B6E0A0A</td>
<td>9279.00</td>
</tr>
</tbody>
</table>

Note: *Please refer to powerlogic.com for the most complete and up-to-date list of feature availability. Some features are optional.*