

# METSEION7404A

Power quality meter, PowerLogic ION7400,  
Advanced, transducer and remote display, 512  
MB, 512 s/c



## Main

|                           |                    |
|---------------------------|--------------------|
| Range                     | PowerLogic         |
| Product name              | PowerLogic ION7400 |
| Device short name         | ION7403            |
| Product or Component Type | Power meter        |

## Complementary

|                         |  |
|-------------------------|--|
| Power quality analysis  | <p>EN 50160 2010 compliance report<br/>IEEE 519 2014 compliance report<br/>IEC 61000-4-30 class A power quality measurement<br/>Up to the 63rd harmonic<br/>Harmonic distortion<br/>Waveform capture<br/>EN 50160 2010 voltage sag and swell detection<br/>IEC 61000-4-30 class A programmability (logic and math functions)<br/>IEC 62586 power quality monitoring<br/>IEC 61000-4-15 flicker<br/>IEC 61000-4-15 disturbance direction detection<br/>Rapid voltage change</p> |
| Device Application      | <p>Revenue billing<br/>WAGES metering<br/>Data aggregation<br/>Power monitoring</p>  |
| Type of measurement     | <p>Current total<br/>Voltage total<br/>Frequency per phase, rms<br/>Active and reactive power total<br/>Apparent power total<br/>Power factor total<br/>Active and reactive power per phase, rms<br/>Apparent power per phase, rms<br/>Power factor per phase, rms<br/>Active and reactive energy<br/>Apparent energy per phase, rms</p>   |
| Supply voltage          | <p>90...415 V AC 45...65 Hz +/- 10 %<br/>110...415 V DC +/- 10 %</p>   |
| Network Frequency       | <p>50 Hz<br/>60 Hz</p>   |
| Line Rated Current      | <p>1 A<br/>5 A<br/>10 A</p>  |
| Poles description       | <p>3P + N<br/>3P<br/>1P + N</p>  |
| Power Consumption in VA | 18 VA 415 V AC   |
| Display Type            | Remote LCD display   |
| Display Resolution      | 320 x 240 pixels QVGA  |
| Sampling rate           | 512 samples/cycle  |
| Measurement current     | 50...10000 mA  |

|                             |   |
|-----------------------------|---|
| Analogue input type         | Voltage (impedance 5 MOhm)<br>Current (impedance 0.3 mOhm)  |
| Measurement voltage         | 57...400 V AC 42...69 Hz between phase and neutral<br>100...690 V AC 42...69 Hz between phases  |
| Frequency measurement range | 42...69 Hz  |
| Number of inputs            | 3 digital 30 V AC<br>3 digital 60 V DC  |
| Measurement accuracy        | Current +/- 0.1 %<br>Voltage +/- 0.1 %<br>Active energy +/- 0.2 %   |
| Accuracy class              | Class 0.2S active energy IEC 62053-22<br>Class 0.2 active energy ANSI C12.20<br>Class 0.2 active power IEC 61557-12<br>Class 0.5S reactive energy IEC 62053-24<br>Class 0.5 power factor IEC 61557-12<br>Class 0.2 voltage IEC 61557-12<br>Class 0.2 current IEC 61557-12<br>Class 0.2 frequency IEC 61557-12<br>Class 0.2 active energy IEC 61557-12 |
| Number of Outputs           | 1 pulse   |
| Information displayed       | Voltage<br>Current<br>Frequency<br>Power<br>Energy consumption<br>Harmonic distortion   |
| Communication port protocol | Modbus RTU 115 kbauds - 2-wire<br>ION 115 kbauds - 2-wire<br>DNP3<br>IEC 61850<br>Modbus TCP/IP<br>Ethernet Modbus TCP/IP daisy chain 10/100 Mbit/s<br>RSTP 801.1d 2004<br>DLMS   |
| Communication port support  | ETHERNET<br>Screw terminal block RS485<br>Mini B USB USB  |
| Communication Network Type  | IPv6 (internet protocol)  |
| Data recording              | Time stamping<br>Trending/Forecasting<br>Waveform logs<br>Sequence of event recording<br>Min/Max of instantaneous values<br>Harmonics logs<br>Data logs<br>Sag and swell logs<br>GPS synchronisation<br>Event logs<br>Alarm logs<br>64 data recorders   |
| Memory capacity             | 512 MB  |
| Web services                | Customizable home page<br>File upload/download via FTP<br>File upload/download via SFTP<br>Web server<br>Alarm notification by e-mail<br>Viewing of captured waveform (FTP)<br>Viewing of captured waveform (web)<br>HTTPS server   |
| Communication Service       | SMTP e-mail notification<br>NTP time synchronization<br>RSTP support<br>DHCP<br>PTP time synchronization  |
| Cybersecurity               | Enable/Disable communication ports<br>Port hardening<br>Syslog protocol support<br>Password protection<br>Robust security logs  |
| Mounting Mode               | Flush-mounted<br>Clip-on  |
| Mounting support            | DIN rail meter device<br>Framework remote display   |

|                        |   |
|------------------------|---|
| Provided Equipment     | Remote display  |
| Type of Installation   | Indoor installation   |
| Installation category  | III   |
| Safety Construction    | III400...690 V conforming to IEC 61010-1:ed. 3<br>III400...690 V conforming to EN 61010-1:ed. 3<br>III347...600 V conforming to UL 61010-1:ed. 3<br>III347...600 V conforming to CSA C22.2 No 61010-1:ed. 3 |
| Standards              | IEC 62052-11<br>IEC 61557-12<br>IEC 62053-22<br>IEC 62053-24<br>IEC 61326-1<br>IEEE 1588<br>IEC 62586   |
| Product certifications | CE[RETURN]CULus[RETURN]N998   |
| Width                  | 3.56 in (90.5 mm)   |
| Depth                  | 3.57 in (90.8 mm)   |
| Height                 | 3.56 in (90.5 mm)   |
| Net Weight             | 18.62 oz (528 g)  |

## Environment

|                                       |  |
|---------------------------------------|--|
| Electromagnetic compatibility         | Electrostatic discharge conforming to IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3<br>Electrical fast transient/burst immunity test conforming to IEC 61000-4-4<br>Surge immunity test conforming to IEC 61000-4-5<br>Conducted RF disturbances conforming to IEC 61000-4-6<br>Magnetic field at power frequency conforming to IEC 61000-4-8<br>Voltage dips and interruptions immunity test conforming to IEC 61000-4-11<br>Immunity to impulse waves conforming to IEC 61000-4-12<br>Conducted and radiated emissions conforming to EN 55022<br>Conducted and radiated emissions conforming to EN 55011<br>Conducted and radiated emissions conforming to FCC part 15<br>Conducted and radiated emissions conforming to ICES-003<br>Conducted RF disturbances (2...150 Hz) conforming to CLC/TR 50579<br>Surge withstand (2...150 Hz) conforming to IEEE C37.90.1 |
| IP degree of protection               | IP30 IEC 60529   |
| Relative humidity                     | 5...95 %   |
| Ambient air temperature for operation | -13...158 °F (-25...70 °C)   |
| Ambient Air Temperature for Storage   | -40...185 °F (-40...85 °C)   |
| Operating altitude                    | 9842.52 ft (3000 m)  |

## Ordering and shipping details

|      |               |
|------|---------------|
| GTIN | 3606486874929 |
|------|---------------|

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Number of Units in Package 1 | 1                       |
| Package 1 Height             | 5.51 in (14.0 cm)       |
| Package 1 Width              | 5.51 in (14.0 cm)       |
| Package 1 Length             | 14.57 in (37.0 cm)      |
| Package 1 Weight             | 3.17 lb(US) (1.437 kg)  |
| Unit Type of Package 2       | S03                     |
| Number of Units in Package 2 | 4                       |
| Package 2 Height             | 11.81 in (30 cm)        |
| Package 2 Width              | 11.81 in (30 cm)        |
| Package 2 Length             | 15.75 in (40 cm)        |
| Package 2 Weight             | 13.89 lb(US) (6.302 kg) |

## Offer Sustainability

|                            |  |
|----------------------------|--|
| Sustainable offer status   | Green Premium product  |
| California proposition 65  | WARNING: Cancer and Reproductive Harm - <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>                   |
| REACH Regulation           | <a href="#">REACH Declaration</a>  |
| EU RoHS Directive          | Compliant with Exemptions  |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>   |
| RoHS exemption information | <a href="#">Yes</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>  |
| Circularity Profile        | <a href="#">End Of Life Information</a>  |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |