



## Main

|                           |   |
|---------------------------|---|
| Range                     | PowerLogic  |
| Device short name         | ION93030  |
| Product or component type | Energy and power quality meter  |
| Device application        | Power monitoring<br>WAGES metering<br>Net metering<br>Medium voltage<br>High voltage  |
| Metering type             | Demand current I1, I2, I3, I4, I5<br>Peak demand currents<br>Demand power P, Q, S<br>Peak demand power PM, QM, SM<br>Calculated active and reactive energy (+/- W.h, +/- VAR.h) |

## Complementary

|                                 |  |
|---------------------------------|--|
| Power quality analysis          | EN 50160 compliance checking<br>Conforming to IEEE 519 harmonic limit<br>Conforming to IEC 61000-4-30: class A compliance reporting<br>Conforming to IEEE 519 compliance reporting<br>Waveform capture<br>Total demand distortion<br>Total harmonic distortion<br>Up to the 63rd harmonic<br>Up to the 127th harmonic with software<br>Disturbance direction detection<br>Dip, swell and transient<br>Half cycle data acquisition<br>Transient detection (20 µs) |
| Type of measurement             | Voltage sags and swells<br>Current sags and swells<br>Voltage<br>Current<br>Frequency<br>Active and reactive power total<br>Apparent power total<br>Active and reactive power per phase<br>Apparent power per phase<br>Power factor total<br>Power factor per phase<br>Active and reactive energy<br>Apparent energy<br>Harmonic distortion (I THD & U THD)  |
| [Us] rated supply voltage       | 90...480 V AC 45...66 Hz +/- 10 %<br>90...120 V AC 400 Hz +/- 10 %<br>110...480 V DC +/- 10 %  |
| Network frequency               | 50 Hz<br>60 Hz   |
| Ride-through time               | 100 Ms 6 cycles at 60 Hz 120 V AC typical<br>400 Ms 24 cycles at 60 Hz 240 V AC typical<br>1200 ms 72 cycles at 60 Hz 480 V AC typical   |
| Type of network                 | 3P + N + E   |
| Power consumption in VA         | 38 VA at 480 V AC  |
| Maximum power consumption in VA | 80 VA at 480 V AC  |
| Display type                    | Without display  |
| Sampling rate                   | 1024 samples/cycle   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                               |   |
|-------------------------------|---|
| Input type                    | Voltage (impedance 5 MOhm)<br>Split core current transducer (impedance 200 kOhm)5 x   |
| 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   | 20...450 Hz   |
| Number of inputs              | 8 digital 30 V AC/60 V DC   |
| Measurement accuracy          | Voltage +/- 0.1 %<br>Current +/- 0.1 %  |
| Accuracy class                | Class 0.1S active energy conforming to IEC 62053-22<br>Class 0.1 active energy conforming to IEC 61557-12<br>Class 0.1 active energy conforming to ANSI C12.20<br>Class 0.5S reactive energy conforming to IEC 62053-24<br>Class 0.1 current conforming to IEC 61557-12<br>Class 0.1 voltage conforming to IEC 61557-12<br>Class 0.1 active power conforming to IEC 61557-12<br>Class 0.5 power factor conforming to IEC 61557-12 |
| Number of outputs             | 4 digital<br>2 form C relay   |
| Communication port protocol   | Modbus RTU at 2400...115200 bps - 2-wire<br>ION at 2400...115200 bps - 2-wire<br>DNP3 at 2400...115200 bps - 2-wire<br>Modbus TCP at 10/100 Mbit/s<br>ION TCP at 10/100 Mbit/s<br>DNP3 TCP at 10/100 Mbit/s<br>IEC 61850<br>Ethernet Modbus TCP/IP daisy chain at 10/100 Mbit/s<br>DHCP<br>DNS<br>DLMS  |
| Communication port support    | RS485 2 removable screw terminal block  |
| Port Ethernet                 | 10/100BASE-TX 2 RJ45  |
| Communication gateway         | Ethernet/serial   |
| Time synchronisation protocol | GPS<br>IRIG-B<br>NTP<br>SNTP<br>PTP   |
| Data recording                | Time stamping<br>Min/Max of instantaneous values<br>User-definable data logs<br>Continuous logging or snapshot<br>Trending/Forecasting<br>Event logs<br>Alarm logs<br>Configuration change<br>Power outage<br>User login/logout<br>Data logs<br>GPS synchronisation<br>Sequence of event recording  |
| Memory capacity               | 2 GB  |
| Cybersecurity                 | Syslog protocol support<br>Robust security logs<br>Port hardening<br>Enable/Disable communication ports<br>Hardware metrology lock  |
| Web services                  | Viewing of captured waveform<br>Web page<br>Pass/Fail report for IEEE 519<br>Pass/Fail report for EN 50160<br>ITIC (CBEMA) curve<br>SEMI curve<br>NEMA motor derating curve<br>Alarm notification by e-mail<br>TLS 1.2<br>Push historical data via mail   |
| Ethernet service              | DHCP client<br>Device Profile Web Services (DPWS)<br>Rapid Scanning Tree Protocol (RSTP)<br>FTP/HTTP/HTTPS  |

|                             |   |
|-----------------------------|---|
| Communication service       | Compliant reports<br>Power quality summary<br>Energy report<br>EcoStruxure Power Events Analysis<br>SMTP e-mail notification<br>SNMP                      |
| Tamperproof of settings     | Protected by sealable cover   |
| Mounting support            | DIN rail  |
| Electrical insulation class | Class III conforming to EN/IEC 62052-11   |
| Isolation voltage           | 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 |
| Width                       | 160 mm  |
| Depth                       | 135.3 mm  |
| Height                      | 160 mm  |
| Net weight                  | 1.5 kg  |

## Environment

|                                       |   |
|---------------------------------------|---|
| Electromagnetic compatibility         | EMC immunity conforming to IEC 62052-11<br>EMC immunity conforming to IEC 61326-1<br>EMC immunity conforming to IEC 61000-6-5<br>Electrostatic discharge immunity test conforming to IEC 61000-4-2<br>Immunity to radiated fields conforming to IEC 61000-4-3<br>Immunity to fast transients conforming to IEC 61000-4-4<br>Surge immunity test conforming to IEC 61000-4-5<br>Immunity to conducted disturbances conforming to IEC 61000-4-6<br>Immunity to magnetic fields at network frequency conforming to IEC 61000-4-8<br>Immunity to conducted disturbances - test level: 2...150 kHz conforming to CLC/ TR 50579<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 55011<br>Conducted and radiated emissions class B conforming to EN 55032<br>Conducted and radiated emissions class B conforming to FCC part 15<br>Conducted and radiated emissions class B conforming to ICES-003<br>Surge withstand conforming to ANSI C37.90.1<br>Surge withstand conforming to IEEE C37.90.1 |
| IP degree of protection               | IP65 front:<br>IP30 rear:   |
| Degree of protection                  | UL type 12, front   |
| Relative humidity                     | 5...95 %  |
| Ambient air temperature for operation | -25...70 °C   |
| Ambient air temperature for storage   | -40...85 °C   |
| Installation category                 | III   |
| Operating altitude                    | 0...3000 m  |
| Standards                             | ANSI C12.20<br>ANSI C37.90.1<br>IEC 61000-4-15<br>IEC 61000-4-30<br>IEC 61010-1<br>IEC 61326-1<br>IEC 61557-12<br>IEC 61850<br>IEC 62052-11<br>IEC 62052-31<br>IEC 62053-22<br>IEC 62053-23<br>IEC 62053-24<br>IEC 62586<br>UL 61010-1  |
| Quality labels                        | ISO 9001<br>ISO 14000   |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 29.5 cm |
| Package 1 Width              | 26.4 cm |
| Package 1 Length             | 37.8 cm |
| Package 1 Weight             | 2.4 kg  |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Compliant with Exemptions   |
| Mercury free               | Yes   |
| 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 |