

Product data sheet

Specifications



ION7650, wDispl, 5MB 1024s, 5A
240VAC/300VDC 50Hz -
RS+T2+E+F+M - 20I+3R+8O

M7650B0C0B5D7N0A

⚠ Discontinued on: Jul 21, 2023

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Main

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|---------------------------|--------------------------------|
| Range | PowerLogic |
| Device Short Name | ION7650 |
| Product Or Component Type | Energy and power quality meter |

Complementary

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| Power Quality Analysis | harmonic distortion voltage sag and swell detection waveform capture compliance monitoring dip and swell, transient disturbance direction detection programmability (logic and math functions) setpoint learning up to the 63rd harmonic |
| Device Application | Demand and power factor control Co-generation and IPP monitoring Load curtailment Energy pulsing and totalisation Tariff metering Equipment monitoring and control Instrument transformer correction |
| Type Of Measurement | Current Voltage Frequency Apparent power total Power factor total Apparent power per phase Power factor per phase Active power total Active power per phase Reactive power total Reactive power per phase |
| Supply Voltage | 110...300 V DC 85...240 V AC 47...63 Hz |
| Network Frequency | 50 Hz |
| [In] Rated Current | 5 A |
| Type Of Network | 3P 1P + N 3P + N |
| Power Consumption In Va | 20 VA |
| Maximum Power Consumption In Va | 45 VA |
| Display Resolution | 320 x 240 pixels QVGA |
| Display Type | Backlit LCD |

Disclaimer: 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

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|-----------------------------|---|
| Sampling Rate | 512 samples/cycle |
| Measurement Current | 0...5 A |
| Input Type | Current 0.005...20 A (impedance 0.002 Ohm) |
| Measurement Voltage | 100...600 V AC phase to phase 57...347 V AC phase to neutral |
| Frequency Measurement Range | 42...69 Hz |
| Number Of Inputs | 16 digital 120 V DC 4 analog 0...20 mA |
| Measurement Accuracy | Current 0.1 % 1...5 A Voltage 0.1 % 57...288 V Energy 0.2 % |
| Accuracy Class | Class 0.2S energy conforming to IEC 62053-22 |
| Number Of Outputs | 3 relay 4 solid state 4 analog |
| Communication Port Protocol | Telnet DNP3 at <= 115.2 kbits/s ION at <= 115.2 kbits/s Modbus at <= 115.2 kbits/s TCP/IP at 10/100 Mbit/s |
| Communication Port Support | RJ45: ETHERNET RS485 Infrared RJ11: modem SUB-D 9: RS232 SC: fiber optic |
| Data Recording | Min/max of instantaneous values Data logs Time stamping GPS synchronisation Sequence of event recording Trending/forecasting Event logs |
| Transmission Rate | 10/100 Mbit/s <= 115.2 kbits/s <= 57.6 kbits/s |
| Memory Capacity | 10 MB |
| Web Services | Web server |
| Tamperproof Of Settings | Protected by access code |
| Compatibility Code | ION7650 |

Environment

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|-------------------------------|--|
| Electromagnetic Compatibility | Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Electrostatic discharge conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields conforming to IEC 61000-4-3 1.2/50 µs shock waves immunity test conforming to IEC 61000-4-5 Conducted and radiated emissions B conforming to CISPR 22 |
| Mounting Mode | Flush-mounted |
| Mounting Support | Enclosure door |
| Type Of Installation | Indoor installation |
| Overvoltage Category | III |
| Ip Degree Of Protection | IP30 back: conforming to IEC 60529 IP50 front face: conforming to IEC 60529 |
| Relative Humidity | 5...95 % |
| Pollution Degree | 2 |

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|---------------------------------------|-------------|
| Ambient Air Temperature For Operation | -20...70 °C |
| Ambient Air Temperature For Storage | -40...85 °C |
| Operating Altitude | 0...2000 m |
| Standards | IEC 61010-1 |
| Width | 192 mm |
| Depth | 174 mm |
| Height | 192 mm |
| Net Weight | 1.9 kg |

Packing Units

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|------------------------------|----------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 26.0 cm |
| Package 1 Width | 26.0 cm |
| Package 1 Length | 44.0 cm |
| Package 1 Weight | 2.959 kg |

Sustainability

Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)

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| Eu Rohs Directive | Compliant EU RoHS Declaration |
| China Rohs Regulation | China RoHS declaration |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| California Proposition 65 | WARNING: This product can expose you to chemicals including: Dichloromethane (Methylene chloride) and Bisphenol A (BPA) which is known to the State of California to cause Carcinogen and Reproductive harm. For more information go to www.p65warnings.ca.gov |