NPE915

Energy Management IED

The optimal management of electrical power systems is based in particular on the reliability, availability and communication skills of protection, measurement and automation devices.

NPE915 is an energy management IED integrating a billing level accuracy kWh metering and fault location functionality in one single equipment. By combining highly accurate measurement technology and fault detection algorithms the NPE915 can be applied for Volt & Var optimisation, tracking of power losses and reducing power outages by accurate fault location.

The NPE915 communicates to SCADA and DMS systems with various standard protocols making your power distribution grids smarter with affordable cost.

- Input for Volt & VAR optimisation
- Impedance calculation for short-circuit fault location
- Voltage presence detection
- Disturbance recorder for fault analysis
- IEC 61850, DNP 3.0, IEC 101, IEC 103, IEC 104, Modbus and SPA protocols

MONITORING - ANSI CODES

50/51	50N /51N	67	67N	27	59N	21FL
60	86					

OUR TRADEMARKS
ice
TECHNIREL

Protection & Control
ice
Our energy at your service

CHARACTERISTICS

Measuring and monitoring
- Phase and residual currents (IL1, IL2, IL3, I01, I02)
- Voltage measurements (UL1-UL3, U12-U31, U0, SS)
- Current and voltage harmonics (up to 31st)
- Current THD
- Frequency (f)
- Power (P, Q, S, pf)
- Energy (E+, E-, Eq+, Eq-)
- Current transformer supervision (CTS)
- Fuse failure (VTS)

Power quality and data logging
- Voltage and current harmonics up to 31st
- Current total harmonic distortion (THD)
- Disturbance recorder: from 400 Hz to 3.2 kHz (8 to 64 samples per cycle)
- Freely configurable data logging in flash memory

Fault location / indication
- Three-phase overcurrent, 4 stages INST, DT or IDMT [50/51]
- Earth-fault (sensitive), 4 stages INST, DT or IDMT [50N/51N]
- Directional overcurrent, 4 stages INST, DT or IDMT [67]
- Directional earth-fault, 4 stages INST, DT or IDMT [67N]
- Undervoltage, 4 stages INST, DT or IDMT [27]
- Zero sequence overvoltage, 4 stages INST, DT or IDMT [59N]
- Fault locator [21FL]

Control
- Controllable objects: 10
- Lock out relay [86]

Hardware
- Current inputs: 5
- Voltage inputs: 4
- Digital inputs: 3 (standard)
- Output relays: 5+1 (standard)

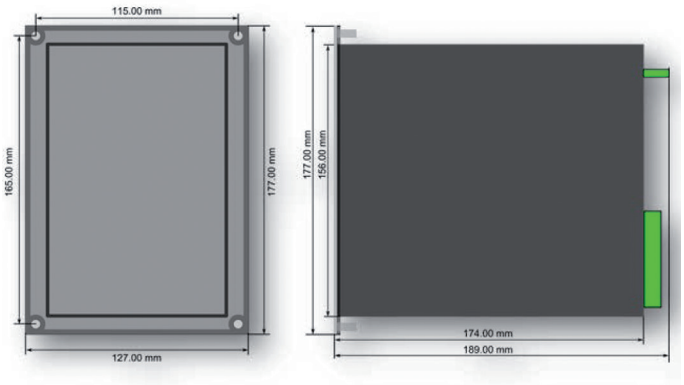
Options (3 slots)
- Digital inputs optional: +8 per card
- Digital outputs optional: +5 per card (2 cards max.)
- RTD inputs: +8 per card
- mA analog measures (1 input + 4 outputs)
- Communication medias (specified below)

Event recording
- Non-volatile disturbance records: 100
- Non-volatile event records: 10,000

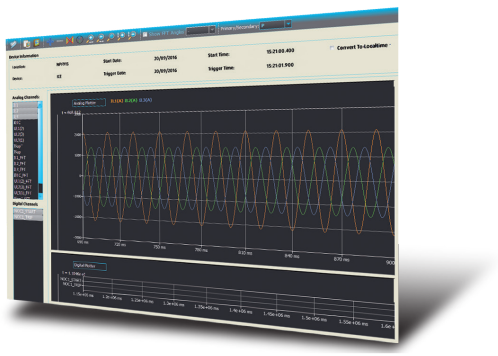
Communication medias
- RJ45 Ethernet 100Mb (rear port) + RS485
- Double LC fibre Ethernet 100Mb HSR/PRP (rear port)
- Double Ethernet RJ45 – 100Mb HSR/PRP (rear port)
- RS232 + serial fibre PP/PG/GP/GG (option)
- Double RJ45 Ethernet 100Mb (rear port)
- Double ST fibre Ethernet 100Mb (rear port)

Communication protocols standard
- IEC 61850 (including HSR & PRP)
- IEC 60870-5-103/101/104
- Modbus RTU, Modbus TCP/IP
- DNP 3.0, DNP 3.0 over TCP/IP
- SPA

Case (dimensions without protection gasket)
- H, W, D without terminal 177x127x174 mm
- H, W, D with terminal 177x127x189 mm (casing height 4U, width ¼ rack, depth 210 mm)
- H, W of front plate 177x127 mm
- H, W of cut out 160x106 mm
- Removable protection gasket width 3 mm



SMART9 - integrated software
Our user friendly SMART9 (Setting, Measurement, Analysis, Recording, Time-saving) configuration software helps the user get the best from NP900 series relays (connection from RJ45 Ethernet 100Mb front and rear port).



The specifications and drawings given are subject to change and are not binding unless confirmed by our specialists.

Protection & Control ICE
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• ISO 19443 : 2018 • ISO 9001 : 2015 and ISO 14001 : 2015 certified •