

NPP915

Power monitoring 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.

NPP915 is a novel power monitoring IED for any demanding metering and power monitoring applications. The NPP915 offers a unique combination of high accuracy power and energy measurement of class 0.2S with dynamic measurement range up to 250A secondary current. Freely configurable data logging, programmable logic and disturbance recorder features allows for variety of power quality monitoring applications.

The NPP915 communicates using various protocols including IEC 61850 substation communication standard.



- Accuracy class 0.2 according to IEC 62053-22
- Frequency independent measurement - patented frequency tracking algorithm guarantees measurement accuracy at 6-75Hz
- Power quality analysis- harmonics, THD and disturbance recording
- Powerful disturbance recorder with up to 64 samples per cycle sampling rate
- Dynamic measuring range up to 250A secondary - effective disturbance recording when coupled to protection CT
- Programmable logic functions
- Extensive data logging capability

ANSI CODES

86

OUR TRADEMARKS



CHARACTERISTICS

Measuring and monitoring

- Phase and residual currents (IL1, IL2, IL3, IO1, IO2)
- 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-)

Control

- Lock out relay [86]
- 8 setting groups

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

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

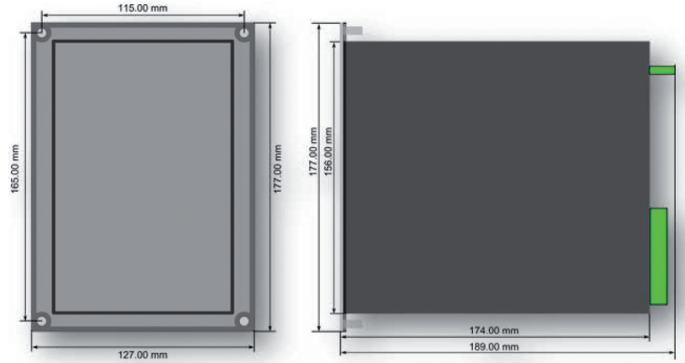
- RJ45 Ethernet 100Mb (rear port) + RS485
- Double LC fibre Ethernet 100Mb HSR/PRP (rear port)
- Double Ethernet RJ45 - 100Mb HSR/PRP (rear port)
- RS232 + serial fibre PP/PG/GP/GG (option)
- Double RJ45 Ethernet 100Mb (rear port)
- Double ST fibre Ethernet 100Mb (rear port)

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).

