

# NPM270 Series Panel Type Energy Analyzers



# NPM270 Series

## Panel Type Energy Analyzers

The NPM270 Energy Analyzer is used to measure basic power parameters such as current, voltage, power, power factor, frequency, harmonics, and other electrical parameters, and to perform energy measurements. With its large seven-segment LED displays, it can be easily viewed from a distance, even in low-light environments.

In addition to displaying the measured parameters on the screen, they can be transmitted to SCADA and energy management systems via various communication interfaces. Supported communication interfaces and protocols include RS485 Modbus-RTU, Ethernet Modbus-TCP, Profibus, and Lon-Works.

There are also versions of devices with Ethernet input Modbus-TCP protocol that have a built-in web server. This allows for remote connection to the device using just an internet browser, without the need for any management software, enabling the viewing of real-time and historical measurements.

### Application areas

- Shopping Malls
- Organized Industrial Zones
- Electrical Panel Manufacturing
- Projects Requiring Measurement Precision
- Marinas
- Residences
- Airports
- Factories
- Resorts

### Standards

- IEC 62053-21
- IEC 60068-2-6

### Advantages

- Suitability for panel type application solutions,
- Class 0.5 and class 1 applications,
- Competitive prices,
- Compatibility with all software through Modbus RTU protocol communication,



- Direct Ethernet connection feature with Ethernet output models
- Bidirectional measurement capability,
- Proven reliability with unique design,
- Scaled display by entering the ratios of current transformers to which it is electrically connected into the interface,
- AC/DC supply capability with auxiliary supply terminal,
- Different electrical connection options for TT and TN,
- Optional multi-tariff,
- Pulse output feature,
- Wide measurement range.

### Features

- Phase to neutral voltages 100 to 289V a.c. (not for 3p3w supplies)
- Voltages between phases 173 to 500V a.c. (3p supplies only)
- Percentage total voltage harmonic distortion (THD%) for each phase to N
- Percentage current harmonic distortion for each phase
- Current on each phase
- Key factor
- Crest factor

**Power factor and Frequency and Max. Demand**

- Frequency in Hz
- Instantaneous power:
- Power 0 to 999MW
- Reactive Power 0 to 999MVAR
- Volt-amps 0 to 999 MVA
- Maximum demanded power since last Demand reset Power factor
- Maximum demand current, since the last Demand reset (three phase supplies only)

**Energy Measurements**

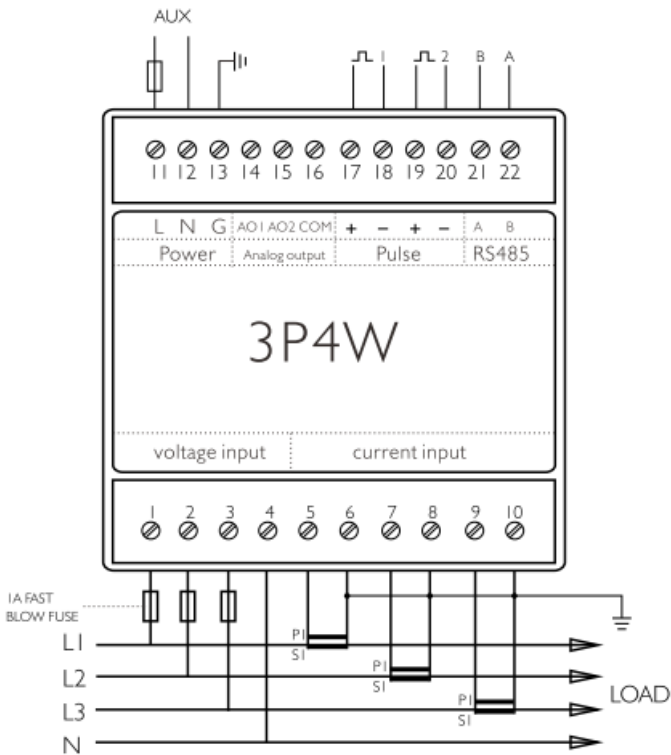
- Imported active energy 0 to 9999999.9 kWh
- Exported active energy 0 to 9999999.9 kWh
- Imported reactive energy 0 to 9999999.9 kVARh

- Exported reactive energy 0 to 9999999.9 kVARh
- Total active energy 0 to 9999999.9 kWh
- Total reactive energy 0 to 9999999.9 kVARh

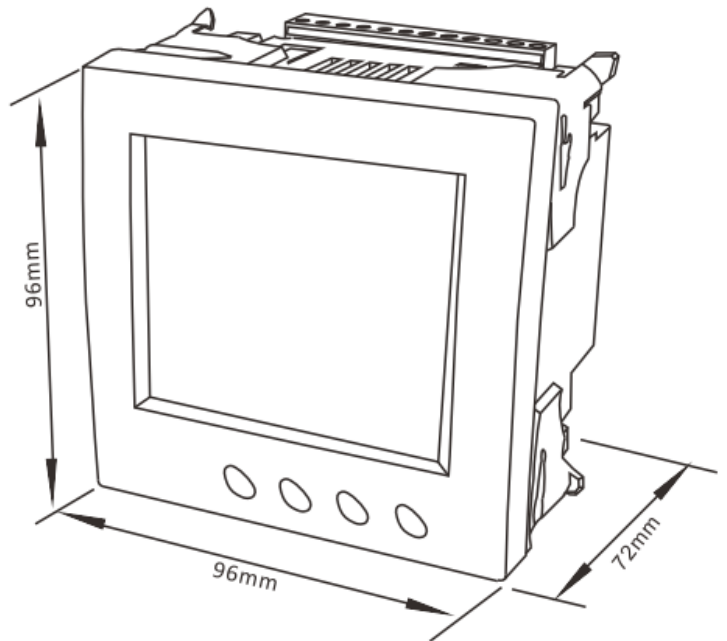
**Accuracy**

- Voltage 0.5% of range maximum
- Current 0.5% of nominal
- Frequency 0.2% of mid-frequency
- Power factor 1% of unity (0.01)
- Active power (W) ±1% of range maximum
- Reactive power (VAr) ±2% of range maximum
- Apparent power (VA) ±1% of range maximum
- Active energy (Wh) Class 1 IEC 62053-21
- Reactive energy (VARh) ±2% of range maximum

**Wiring Diagram**



**Dimensions**





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