

# nVent ERIFLEX Power Meters & Software



The nVent ERIFLEX Network Analyzer is a compact and innovative instrument designed for precise measurement and recording of electrical parameters. It is particularly well-suited for energy consumption analysis and control.

Its quick and easy connection system makes it ideal for retrofitting existing switchboards or conducting energy audits. The analyzer is the perfect tool for establishing measurement points across a facility.

Communication is supported via an RS485 serial port using MODBUS RTU protocol (PM RS485 version) and an Ethernet port using MODBUS TCP protocol (PM Ethernet version).

Remote management is available through the free EriflexNET software. For Ethernet models, an integrated web interface allows full access and control from any PC connected to the network, offering a convenient and intuitive way to manage the device remotely. You can download the EriflexNET software from the Resources tab below.

## CERTIFICATIONS



## FEATURES

Ultra-compact DIN 96x96 format, with only 39 mm depth for space-constrained installations

Backlit LCD display for clear visibility of readings

Four-quadrant bi-directional measurement of all energy and power types

Comprehensive electrical parameter monitoring for cost-effective consumption analysis: Voltage, Current, Power: Active, Reactive, Apparent, Power Factor, Harmonics (Voltage and Current) – up to the 15th order, Frequency, Phase Order

Three selectable current scales for flexible configuration

Up to 8 MB of onboard memory for data logging, including energy counters

Selectable recording of up to 24 real-time parameters for MIN/AVG/MAX tracking

Communication options: MODBUS RTU via RS485 port, MODBUS TCP via Ethernet port

Remote management via free EriflexNET software or integrated web interface

Two digital outputs for alarm signaling or pulse emissions

One digital input for synchronizing Demand (DMD) calculations

Accuracy class 0.5 in compliance with IEC/EN 61557-12 for active power and energy

Flexible wiring: compatible with both single-phase and three-phase systems

Built-in integrator: no external integrator required, pre-calibrated for use with nVent ERIFLEX Rogowski coils

## SPECIFICATIONS

|                                      |                                                 |
|--------------------------------------|-------------------------------------------------|
| <b>Frequency:</b>                    | 45 - 65 Hz                                      |
| <b>Mounting Cutout:</b>              | 91x91mm                                         |
| <b>Current Measurement Range:</b>    | 500 A; 4000 A; 20000 A                          |
| <b>Input Voltage:</b>                | 600 VAC                                         |
| <b>Complies With:</b>                | 2014/30/EU;2014/35/EU;EN 61010-1;EN 61010-2-030 |
| <b>Installation:</b>                 | Indoor                                          |
| <b>IP Rating:</b>                    | IP54;IP20                                       |
| <b>Frequency Accuracy:</b>           | ±0.1% of Reading ±1 Digit within 45–65 Hz Range |
| <b>Voltage Accuracy:</b>             | ±0.2% of Reading within 10% FS to FS Range      |
| <b>Current Measurement Accuracy:</b> | ±0.4% of Reading within 5% FS to FS Range       |
| <b>Operating Temperature:</b>        | -25 to 55 °C                                    |
| <b>Storage Temperature:</b>          | -25 to 75 °C                                    |
| <b>Humidity:</b>                     | 80 % Max                                        |

Table 1/2

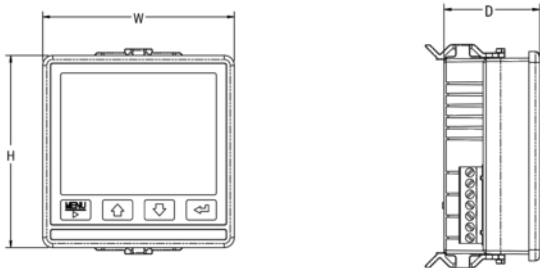
| Catalog Number | Article Number | Width (W) | Height (H) | Depth (D) | Auxiliary Power Supply Voltage | Auxiliary Power Supply Frequency |
|----------------|----------------|-----------|------------|-----------|--------------------------------|----------------------------------|
| PMETHERNET     | 509011         | 96mm      | 96mm       | 39mm      | 85-265 VAC / 110 VDC ±15%      | 50 - 60 Hz                       |
| PMRS485        | 509010         | 96mm      | 96mm       | 39mm      | 230 VAC ±15%                   | 50 - 60 Hz                       |

Table 2/2

| Catalog Number | Article Number | Configuration                               | Data Transfer   | Remote Operation | Operation  | Unit Weight |
|----------------|----------------|---------------------------------------------|-----------------|------------------|------------|-------------|
| PMETHERNET     | 509011         | Ethernet for HTTP, MODBUS TCP Communication | 10 - 100 Mbps   | Yes              | Web Server | 0.26 kg     |
| PMRS485        | 509010         | RS485 for MODBUS RTU Communication          | 300 - 57600 bps | Yes              | EriflexNET | 0.33 kg     |

|                                     | PMETHERNET                                                                                                   | PMRS485 |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------|---------|
| Minimum voltage for FFT calculation | 20/35 VAC (direct connection; multiplied by PT ratio when using PT)                                          |         |
| Starting current (Ist)              | 3A for FSA 500A<br>25A for FSA 4000A<br>120A for FSA 20000A                                                  |         |
| Current Inputs                      | Rogowski coil inputs<br>(3 coils, ordered separately)                                                        |         |
| Wiring Modes                        | Compatible with both single-phase and three-phase systems                                                    |         |
| Active power/energy accuracy        | Class 0.5 per IEC/EN 61557-12                                                                                |         |
| Reactive power/energy accuracy      | Class 2 per IEC/EN 61557-12                                                                                  |         |
| Digital Outputs                     | Type: 2 x NPN, Passive Optoisolated<br>Max Values: 27 VDC - 27 mA                                            |         |
| Digital Inputs                      | Type: Optoisolated<br>Voltage Range: 80 - 265 VAC-DC                                                         |         |
| Terminal wire diameters             | Measuring Terminals: 2.5 mm <sup>2</sup> / 14 AWG<br>I/O, AUX, RS485 terminals: 1.5 mm <sup>2</sup> / 16 AWG |         |

## DIAGRAMS



## WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at [www.nvent.com](http://www.nvent.com) and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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