

ENIP-2

multifunctional measuring transducer



ENIP-2 is a series of three-phase multifunctional measuring devices suited for substations, power plants, industrial facilities and distribution grids.



ENIP-2 Panel, presented here is one of the implementations, with TFT touch screen (480 × 272) being its distinguishing feature. The display is controlled by touch and hardware buttons.

ENIP-2 is designed to match the requirements of modern automatic control systems in terms of accuracy and rapidness of measurements.

ENIP-2 provides instant and averaged true RMS values of the signal and its fundamental harmonic. Averaging interval can be selected from a range of 200 to 2000 ms, while instant values are updated every 50 ms. The measurement range is up to 200% I_{rated} and 150% U_{rated} .

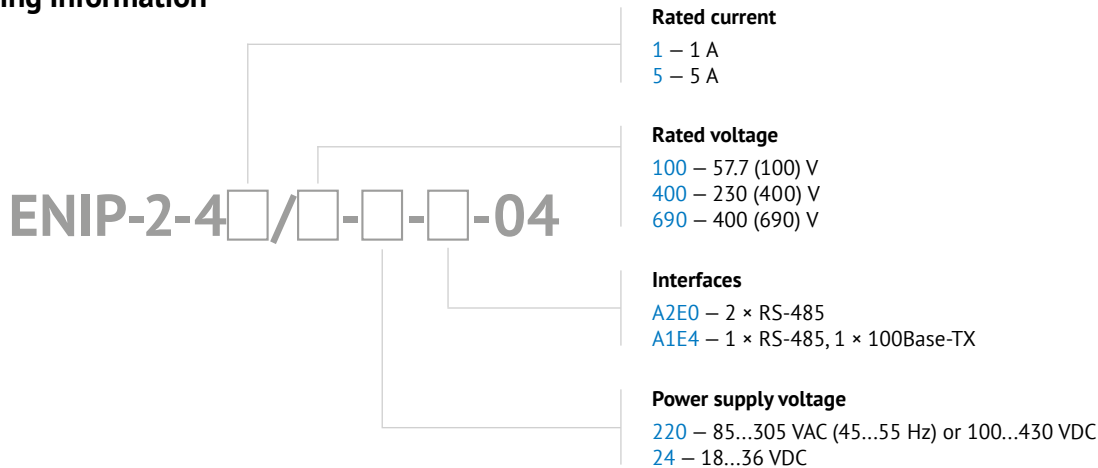
ENIP-2 supports standard communication protocols.

For input and output of digital signals, ENIP-2 connects to ENMV-1 external modules.

Specifications

Measurements	rated current: 1 or 5 A, rated voltage: 57.7 (100), 230 (400) V, 400 (690) V; U: $\pm 0.2\%$ (input range: 20–150 %); I: $\pm 0.2\%$ (input range: 20–200 %); P, Q, S: $\pm 0.5\%$; f: ± 10 mHz
Measuring time / update settings	50 msec (sliding window) / 20 msec
Additional parameters	cos, tg, angles (phase and average), active and reactive energy, U_0 , U_1 , U_2 , K_{2U} , K_U , I_0 , I_1 , I_2 , K_{2I} , K_I , THD
Digital signals	digital inputs/outputs (up to 4 modules): ENMV-1-6/3R, ENMV-1-24/0, ENMV-1-0/22, ENMV-1-0/20, ENMV-1-16/6, ENMV-1-16/3R; up to 32 expressions with 32 functions: AND, OR, CMP, TIMER, VALID
Event logging	I/O history, event log
Interfaces and protocols	1 or 2 \times RS-485 (600...115200 baud): IEC 60870-5-101, Modbus RTU 1 \times 100Base-TX: IEC 60870-5-104, IEC 60870-5-101 (UDP), Modbus TCP, Modbus RTU, SNMP, web-console
Real-time clock	time accuracy – 500 μ s (error less than 5 s per day without sync); RS-485 over IEC 60870-5-101
Power supply	18...36 VDC, 85...305 VAC (45...55 Hz) or 100...430 VDC, 10 VA
Operating conditions and design	–40...+70 $^{\circ}$ C (display –20...+70 $^{\circ}$ C), 120 \times 120 \times 49 mm (IP40 front panel, IP30 housing)

Ordering Information



Options and accessories

RS-485 splitters: [EX4RJ](#), [EX6RJ](#), [EX3TBS](#), [EX4TB](#), [EX5RJX](#)
Surge protection devices for RS-485: [ESP485-1](#), [ESP485-2](#), [ESP485-SG](#)
Surge protection devices for Ethernet: [ESP-LAN](#)



enip2.com

