



ens

ENMU

multifunctional merging unit
with phasor measurements



ENMU is a multifunctional merging unit with digital inputs and outputs, that can serve as a digital fault recorder and a phasor measurement unit.

ENMU provides IEEE C37.118 phasor measurements. ENMU records fault oscillograms and phasor measurements.

ENMU synchronizes the data using IEEE 1588v2 PTP.

The modification with built-in digital inputs and outputs provides remote monitoring and control via IEC 61850-8-1 (MMS, GOOSE). The number of digital and analog signals processed can be increased by connecting external devices such as ENMV-1.

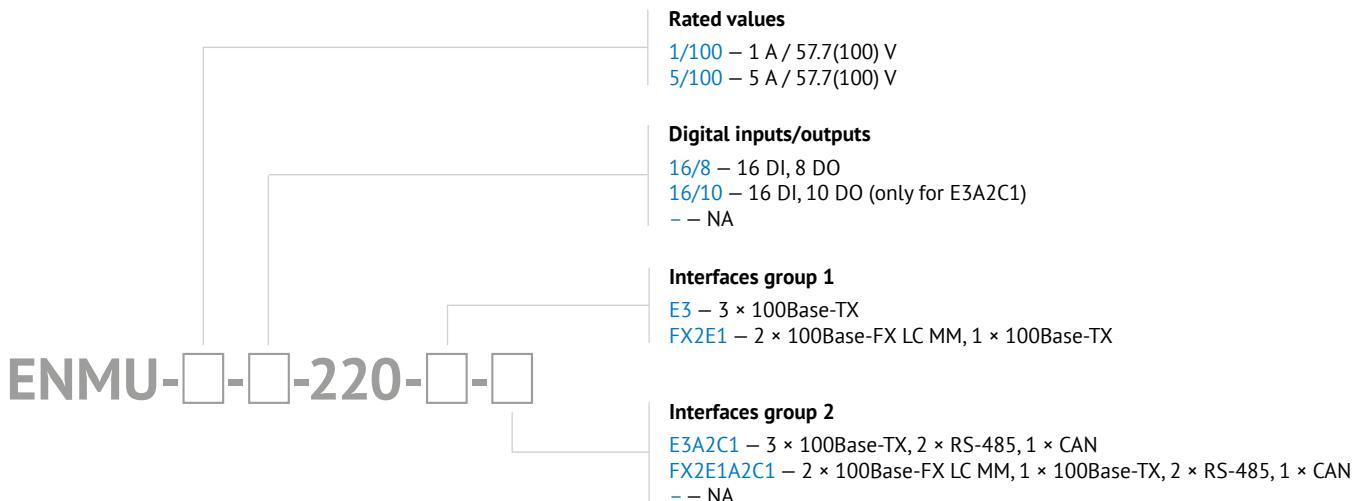
Specifications

Analog inputs	4 voltage inputs: 2...200% U_{nom} (57.7 V) / 0.2%
	4 inputs CT measuring: 1...200% I_{nom} (1/5 A) / 0.2%
	3 inputs CT protection: 10...4000% I_{nom} (1/5 A) / 5%
	IEC 61869-13: 0.2, 0.2DR5-200, 6TPS40, $T_p = 120$ ms
Sampled Values	2 × SV80/96 (protection), 2 × SV256/288 (measuring)
Digital inputs	16 inputs: 220 VDC, adjustable thresholds; programmable logic expressions (AND, OR, XOR, CMP, RS FF)
Digital outputs	10 outputs: 3 × DO SSR, 7 × DO EMR or 8 outputs: 3 × DO TRIP, 5 × DO EMR DO EMR – 400 VAC 6 A, 220 VDC 0.45 A, 6 ms; DO SSR – 400 VDC 1.35 A, 5 ms; DO TRIP – 250 VDC 10(40) A, 1 ms
Fault recorder	sampling rate up to 14,4 kHz, 8 GB storage, FTP access
Interfaces / protocols	USB + please see ordering information / IEC 61850-9-2, IEC 61850-8-1 (ed. 1), IEEE C37.118-2, IEC 60870-5-104, IEC 60870-5-101, IEEE 1588v2 PTP (time sync)
Power supply	120...370 VDC or 100...265 VAC (47...63 Hz), 30 VA
Operating temperature / housing	-40...+70 °C; 303 × 254 × 100 mm, IP20

Sertification

Conformance to 2014/35/EU (LVD), 2014/30/EU (EMC)

Ordering Information



enip2.com

