

Display Panels ENMI

• OVERVIEW

ENMI displays values of main measured and calculated parameters received from Intelligent Electronic Device ENIP-2. ENMI may use for displaying service data from other devices and systems.

Display panel ENMI designed for ENIP-2 to display measured values. Usage of ENMI as switchboard instruments provides identity of measurements, transmitted to SCADA and readings on the devices at the facilities.

ENMI produced in different version: LEDs, TFT color touch screen, monochrome LCD. Depending from version, they have special functionality.



• VERSIONS

ENMI - X - 24 - 2

- Type of display**
 3 – LED for ENIP-2
 4 – LCD FSTN monochrome for ENIP-2
 5 – LCD TFT touch screen for ENIP-2
 6 – LCD TFT touch screen multipurpose display

• SPECIFICATIONS

	ENMI-3	ENMI-4	ENMI-5	ENMI-6
Type of display	7-digit LED (3 lines of 4 digits), digit height 20x11 mm	4", FSTN monochrome 240x128 px	4.3", TFT touch screen 480x272 px	
Interface	RS-485 (Modbus RTU)			Ethernet or RS-485
Supply voltage	18...36 V=			
Power consumption	5 VA	3 VA		
Operation temperature	-40...+55 °C.	-10...+55 °C	0...+55 °C	
Design and mounting	120x120x49 mm plastic housing, panel or cabinet mounting, IP30 (111x111 mm square cutout), ENMI constructively combines with ENIP-2.			

• DATA DISPLAY

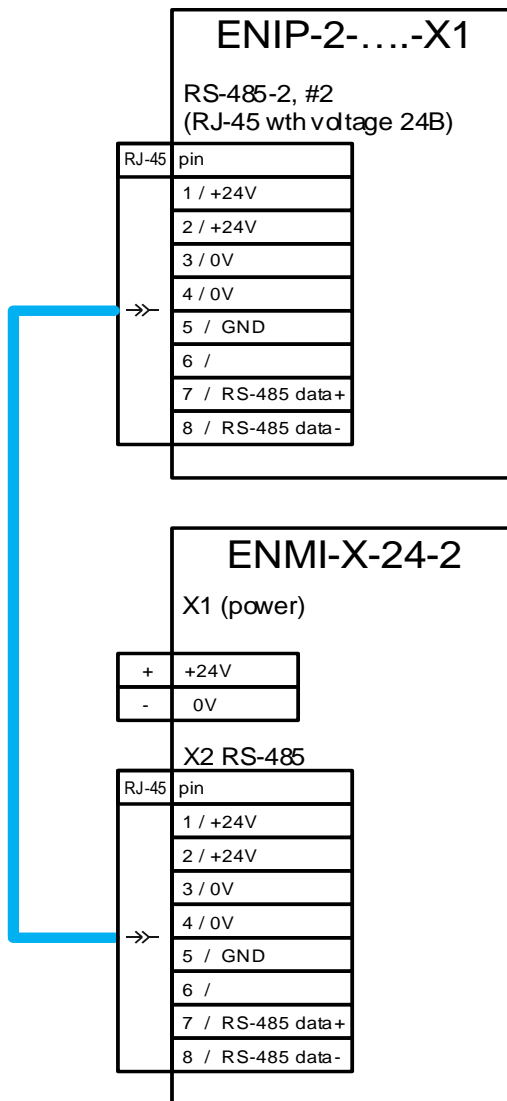
Parameters	ENMI-3	ENMI-4	ENMI-5
<ul style="list-style-type: none"> Voltage – phase/line-to-line, average; Current – phase and average; Power: P (W), Q (VAr), S(VA) – phase and total; Frequency; Power factor – phase and total; Energy: Wh, VAh, VAh – total (import and export); Status of ENIP-2 Digital Inputs; 	+	+	+
Alarms	+	+	+
Mnemonic circuits based on digital signals of ENIP-2	-	+	-
<ul style="list-style-type: none"> Imitation of pointer instrument; Phasor diagram; Graph of parameters for last 7 minute. 	-	-	+
Operate Digital Outputs of ENIP-2	-	-	+
Selection one of several ENIP-2 on RS-485 bus (Master mode)	+	+	+
Possibility of receive data by several ENMI on RS-485 bus (Slave mode) from one ENIP-2 (in periodic broadcast mode)	+	+	+

- **MOUNTING ON THE PANEL**



ENMI can be mounted on the switching panels in square cutout 111x111 mm. ENIP-2 and ENMI connected via standard UTP patch cord. Devices may be mounted together.

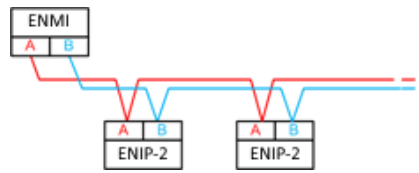
- **CONNECTION WITH ENIP-2**



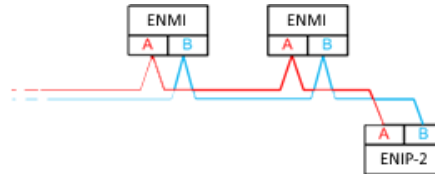
- **APPLIANCE**

“One ENMI – several ENIP”: ENMI can display data from several intelligent electronic devices ENIP-2. In that case, ENMI must be Master in RS-485 network and ENIP-2 in slave mode (default mode for ENIP-2). ENIP-2 connection info (Modbus address), which data we want to see on display module must be setup in ENMI. On ENIP-2 RS-485

port must be set protocol Modbus RTU with default register’s addresses “ENIP-2 2012” and same baud rate, parity None.



“One ENIP – several ENMI”: ENMI, connected to ENIP-2 RS-485 port with periodic broadcast mode, can display received data. ENMI must be setup in slave mode.




- **SOFTWARE**

All available parameters of ENMI can be setup throw RS-485 port with free ENMI’s configuration software, named “ENMI configurator”. Basic setup communication parameters and display settings can be setup through using controls on the front panel of ENMI (available for ENMI-4-24-2 and ENMI-5-24-2).

- **WARRANTY**

The manufacturer offers the customer a 36-month functional warranty on the display module ENMI for faulty workmanship or parts from date of dispatch from the distributor. In all cases, this warranty is valid for 48 months from the date of production.

- **STANDARTS COMPLIANCE**

Electromagnetic compatibility certificate № E032/02
 EN 61010-1:2010, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, 61000-4-6, 61000-4-8, 61000-4-11.

RoHS Declaration of conformity

RoHS Directive 2011/65EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

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