Network Analyzers (LCD)

MPR-2 Series

NEW

MPR-2 Series

MPR-2 Series DIN rail type Network Analyzers

MPR-2 Series DIN rail type Network analyzers are designed to measure and analyze various electrical parameters. With their communication features all measurements can be tracked from a single monitoring center.

MPR-2 series can detect the status and allow the control of devices (breakers, switches, contactors etc.) in the field via their digital inputs and outputs.

CE

PRODUCT SELECTION TABLE

Product Code	3xV, 3xI, Frequency, W, VAr, VA, ΣP, ΣQ, ΣS, kWh, kVArh, Demand, Max., Min. Cosφ, I neutral	% THD I	% THD V	Harmonics 1-51.	RS-485	Digital Input	Digital Output	Analog Output (mA/V)	Temperature Input	Relay Output	Clock (RTC)	Number of Samples In One Period	Memory	Current - Voltage Unbalances	Pulse Counter	Operating Hours Meter	Alarm	Event Logs	Profile Logs	X/5, X/1	plug&meter	85-300 VAC/DC	Pcs/Box
MPR-24	●										●	128				●	●			●		●	24
MPR-24-PM	●										●	128				●	●				●	●	24
MPR-25S-22 plug&meter	●	●	●		●	2	2				●	128	4 MB		●	●	●	●	●	●		●	24
MPR-26S-21	●	●	●	51	●	2				1	●	128	4 MB	●	●	●	●	●	●	●		●	24
MPR-26S-21-PM plug&meter	●	●	●	51	●	2				1	●	128	4 MB	●	●	●	●	●	●		●	●	24
MPR-27S-23	●	●	●	51	●	2	2	1			●	128	4 MB	●	●	●	●	●	●	●		●	24
MPR-28S-32	●	●	●	51	●	2	2		1		●	128	4 MB	●	●	●	●	●	●	●		●	24

Remote Monitoring Software:

With the energy management software developed by ENTES, energy consumption and quality can be monitored in real time by reading the values measured by devices. As a result, comprehensive energy monitoring and data storage is provided.
With the analysis of stored data, improvements in energy costs and sustainable savings are accomplished.

entbus

** For more detailed information, see Page 84.*

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MEASURED PARAMETERS

Phase - Neutral Voltages (V_{LN})	Neutral Current (In)	Active Power (P)	Active Energy Import (kWh or MWh)
Phase - Phase Voltages (V_{LL})	Total Current (ΣI)	Reactive Power (Q)	Active Energy Export (kWh or MWh)
Average Phase-Neutral Voltage	Power Factor (P.F)	Apparent Power (S)	Reactive Energy Capacitive (kVArh or MVArh)
Average Phase-Phase Voltage	Cosφ	Total Active Power (ΣP)	Reactive Energy Inductive (kVArh or MVArh)
Max. Demand	Frequency (Hz)	Total Reactive Power (ΣQ)	Apparent Energy (kVAh or MVAh)
Phase Currents (IL)	Max. / Min. Values	Total Apparent Power (ΣS)	

MPR-24

+

Total Harmonic Distortion for Voltage (THD-V)	Total Harmonic Distortion for Current (THD-I)

MPR-25S-22

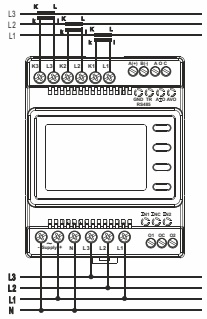
+

Voltage / Current Unbalances	1-51st Individual Voltage Harmonics	1-51st Individual Current Harmonics

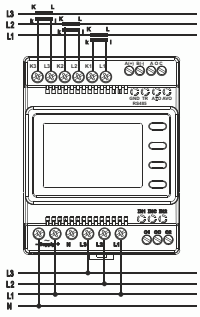
MPR-26S-21 / MPR-27S-23 / MPR-28S-32

Connection Diagram DIN4 - MPR-2 Series

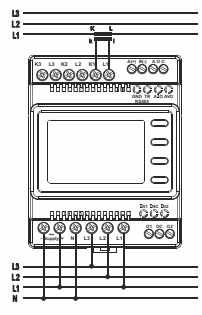
MPR2 Series (3P4W)



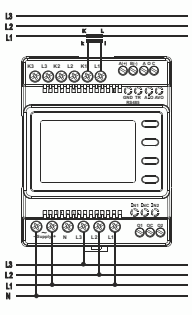
MPR2 Series (3P3W)



MPR2 Series (3P4W Balanced)

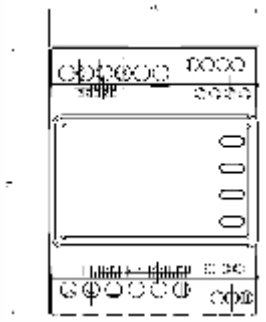


MPR2 Series (3P3W Balanced)



Dimensions

MPR-2 Series



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SPECIFICATIONS

	MPR-24PM / MPR-24	MPR-25S-22	MPR-26S-21	MPR-27S-23	MPR-28S-32	MPR-26S-21-PM
ENCLOSURE						
Dimensions	DIN4 Rail Mounting					
Protection Class	Terminals = IP20, Enclosure Protection Class = IP40					
Display	LCD					
MEASUREMENTS						
VOLTAGE						
Measurement Range	10-400 VAC (L-N) 10 - 690 VAC (L-L)					
Measurement Range with Transformer	1-400.0kV Transformer Ratio: 1-5000					
Accuracy	%0.5 ± 2 Digit					
Input Impedance	>1M Ω					
Burden (Input Load)	<0,5 VA					
CURRENT						
Nominal Current	Compatible with Entes plug&meter current transformers.	In : 5A / 1A				Compatible with Entes plug&meter current transformers.
Minimum Current		5 mA				
Measurement Range		50 mA - 5,5 A Accuracy: : %0.5 ± 1 Digit				
Measurement Range with Transformer		50 mA -10000 A				
Burden		<1 VA				
Overload Current		1,2 In continuous				
Short Time Overload (1s)		10xIn				
POWER/ENERGY						
Active Power	0 - 1 GW Accuracy : %1 ± 1 Digit					
Reactive Power	0 - 1 GVAr Accuracy : %1 ± 1 Digit					
Apparent Power	0 - 1 GVA Accuracy : %1 ± 1 Digit					
Power Factor	±1.00 Accuracy : ± 0,02					
Active Energy	0 - 99 999 999 kWh or MWh Accuracy : %1 class 1					
Reactive Energy	0 - 99 999 999 kVArh or MVArh Accuracy : %2 class 2					
Total Harmonic Distortion (THD)	–	THD V%, THD I%				
Separate Harmonics	–		1-51 Voltage(V) and Current(I)			
Demand Period	1,2,5,10,15,20,30,60 dak.					
Frequency	45-65 Hz					
Number of Samples In One Period	128					
SUPPLY						
Operating Voltage	85 - 300 VAC/DC					
Operating Frequency	50/60 Hz					
Power Consumption	<6 VA					
DIGITAL INPUT / OUTPUT						
Digital Input Pulse Width	–	20/500 ms				
Digital Input Operating Voltage	–	12...48 VAC/DC				
Switching Current	–	Max 50mA				
Digital Output Supply Voltage	–	5-30 VDC (open collector)				
Pulse Duration	–	100ms pulse period 80ms pulse width				
Pulse Width	–	20-500 ms (Adjustable)				
ANALOG OUTPUT						
Current Output		–		0-20mA, 4-20mA, 4-24mA		–
Voltage Output		–		0-5V, 0-10V, ±5V, ±10V		–
RELAY OUTPUT						
Relay Output	–		1 NO Contact, 250 VAC/5A	–		1 NO Contact, 250 VAC/5A
TEMPERATURE INPUT						
Sensor Input Type		–			PTC or Thermocouple type	–
Thermocouple Type		–			B,C,K,R,S,T	–
MEMORY						
Internal Memory Size	–		4MB			
COMMUNICATION						
Communication Interface/Protocol	–	RS 485 / MODBUS RTU				
Transfer Speed	–	2400-115200				
AMBIENT CONDITIONS						
Operating Temperature	- 10 / +55°C					
Storage Temperature	- 20 / +70°C					
Overvoltage Category	III					
Pollution Degree	II					
Ambient Humidity	%95					
STANDARDS						
Standards	EN 61557-12, EN 61326-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4 EN 62053, EN 60068, EN 61010					
CONNECTIONS						
Mounting	Rail Mounting					
Connection Terminals	Screw Terminal					
Connection Types	3P4W, 3P3W, 3 Phase Aron, 3P4W Balanced, 3P3W Balanced					