



Network Analyzers (LCD)

MPR-3 Series



MPR-3 Series (72x72)


MPR-3 Series New Generation Mini Network Analyzers

With 72x72x50mm size, MPR-3 series mini network analyzers occupy smaller space. These analyzers are preferred in Rack type panels due to their compact design and used in applications such as UPS, machine control panels, data processing and system rooms and security control.

MPR-3 series can detect the status and enable the control of the devices (circuit breaker, contactors, switches etc.) in the field with their digital inputs and outputs.



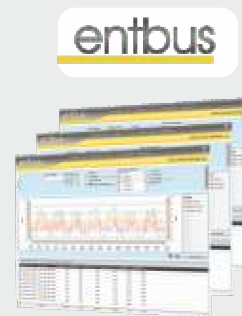
PRODUCT SELECTION TABLE

Product Code	Dimensions / mm	3xV, 3xI, Frequency, W, VAcr, VA, I _{MP} , I _Q , I _{DS} , kWh, kVAh, kVAh Demand, Max., Min. Cosφ, I neutral	% THD-I	% THD-V	RS-485	Digital Input	Digital Output	Real Time Clock (RTC)	Pulse Counter	Number of Samples In One Period	Operating Hours Meter	Alarm	Event Logs	X/I, X/1	plug & meter	185-300 VAC/DC	Pcs/Box
MPR-32	72x72	●						●		128	●			●		●	24
MPR-32S	72x72	●			●			●		128	●			●		●	24
MPR-34-11	72x72	●	●	●		1	1	●	●	128	●	●	●	●		●	24
MPR-34S-11	72x72	●	●	●	●	1	1	●	●	128	●	●	●	●		●	24
MPR-34S-11-PM 	72x72	●	●	●	●	1	1	●	●	128	●	●	●		●	●	24
MPR-34-20	72x72	●	●	●		2		●	●	128	●		●	●		●	24
MPR-34S-20	72x72	●	●	●	●	2		●	●	128	●	●	●	●		●	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.



* For more detailed information, see Page 84.

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MEASURED PARAMETERS

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

MPR-32



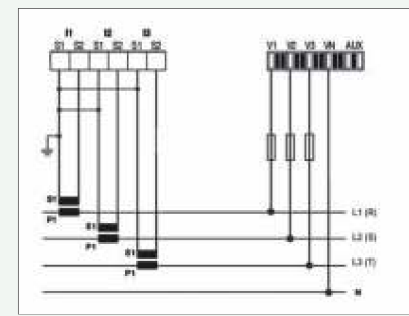
Total Harmonic Distortion for Voltage (THD-V)

Total Harmonic Distortion for Current (THD-I)

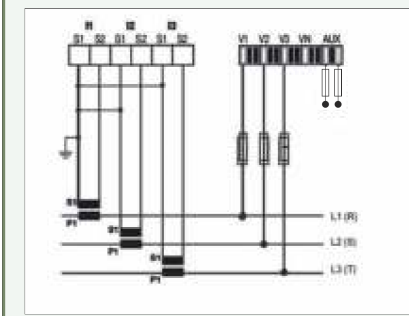
MPR-34-11 / MPR-34S-11 / MPR-34-20 / MPR-34S-20 / MPR-34S-11-PM

Connection Diagram PR25 - MPR-3 Series (72x72mm)

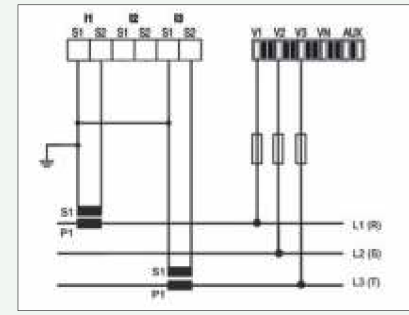
MPR-3 Series (3 Phase neutral 3P4W connection)



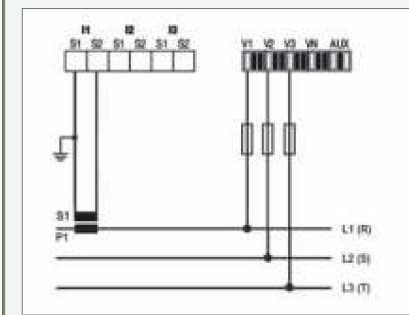
MPR-3 Series (3 Phase without neutral 3P3W connection)



MPR-3 Series (3 Phase without neutral 3P3W Aron connection)

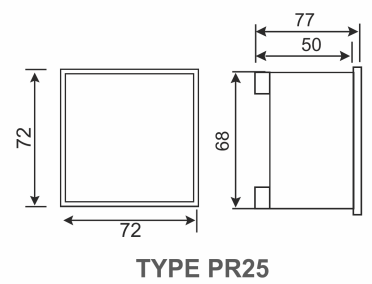


MPR-3 Series (3 Phase connection in balanced networks)

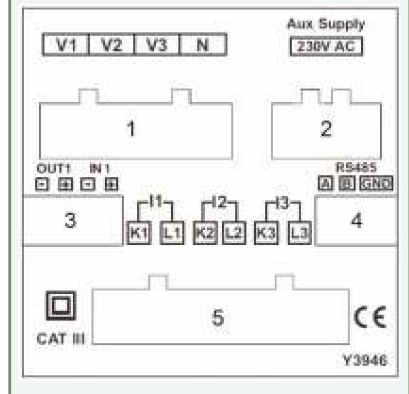


Dimensions

MPR-3 Series



TYPE PR25





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SPECIFICATIONS

	MPR-32 / MPR-32S	MPR-34-11	MPR-34S-11	MPR-34-20	MPR-34S-20	MPR-34S-11-PM
ENCLOSURE						
Dimensions	72x72x50 mm					
Protection Class	Terminals = IP20, Enclosure Protection Class = Ip51					
Display	LCD					
MEASUREMENTS						
Voltage						
Measurement Range	10-400 VAC (L-N), 10-690 VAC (L-L)					
Measurement Range with Transformer	10V - 999 kV					
Measurement Class	%0.5 ± 1 digit					
Input Impedance	1,8 MΩ					
Burden (Input Load)	<0,5 VA					
Akim						
Measurement Class	%0,5 ± 1 digit					
Nominal Current	1A, 5A					
Measurement Minimum Current	5mA					
Measurement Range	50mA-5,5A 0,5% ± 1 digit					
Measurement with Transformer	50mA-10kA					
Burden (Input Load)	<1 VA					
Overload Current	1,2 In					
Power/Energy						
Active Power Measurement Class	%1 ± 1 Digit					
Reactive Power Measurement Class	%1 ± 1 Digit					
Active Energy Accuracy	Class 1					
Reactive Energy Accuracy	Class 2					
Active Power Measurement Range	0-1 GW					
Reactive Power Measurement Range	0-1 GVAR					
Apparent Power Measurement Range	0-1 GVA					
Active Energy Indicating Range	9 999 999,9 kWh					
Max. Reactive Energy Indicating Range	9 999 999,9 kVARh					
Number of Samples In One Period	128					
SUPPLY						
Operating Voltage	185-300 VAC/DC					
Supply Frequency	45-65 Hz					
Power Consumption	<4 VA					
INPUT/OUTPUT STRUCTURE						
Digital Input	-	1		2		1
Digital Output	-	1		-		1
Digital Input Pulse Width	-			20/500 ms		
Digital Input Operating Voltage	-			5...48 VAC/DC		
Switching Current	-			Max. 50mA		
Switching Voltage	-			Max. 30 VDC		
Pulse Time	-			100ms pulse period 80ms pulse width		
Pulse Width	-			20-500 ms (Adjustable)		
AMBIENT CONDITIONS						
Operating Temperature	-10 / +55°C					
Storage Temperature	-20 / +70°C					
Ambient Humidity	%95					
STANDARDS						
Applied Standards	EN 61326-1, EN 61557-12, EN 62053, EN 61010-1, EN 61000-6-2, EN 61000-6-4, EN 55011, EN 60068-2					
CONNECTIONS						
Mounting	Front Panel Mounting					
Connection Terminals	Screw Terminal with Socket					
Connection Types	3P4W , 3P3W, 3 Phase Aron, 3P4W Balanced, 3P3W Balanced					
COMMUNICATION						
Communication Interface/Protocol	-	RS-485/ MODBUS RTU	-	RS-485/ MODBUS RTU	-	RS-485/ MODBUS RTU
Transfer Speed	-	2400 - 115200	-	2400 - 115200	-	2400 - 115200

Compatible with Entes plug & meter current transformers.