



## MPR-1 Serie Netzanalysatoren der neuesten Generation

MPR-1 Serie Netzanalysatoren geeignet für Hutschienenmontage sind, sind zum Messen und Analyse elektrischer Parametern von Maschinen und Schalttafeln entworfen. Dank ihres **Designs ohne Display** stellen sie eine sehr **preisgünstige** Messeinrichtung für Energieüberwachungssoftware dar.

Dank der **Kommunikationsfähigkeit** dieser Geräte können Energiemessungen von einem einzigen Überwachungszentrum aus monitorisiert werden.

Die MPR-1 Serie erkennt den Status von Feldgeräten (Schutzschalter, Lasttrennschalter, Schalterkontakte, usw.) und ermöglicht ihre Kontrolle über digitalen Eingänge und Ausgänge.

- DIN rail mounting
- Cost-effective by means of its design without a screen
- Detailed measurement up to 51 harmonics
- Current/voltage unbalance measurement
- Detection of connection errors



## SPECIFICATIONS

	MPR-14S / MPR-14S-D	MPR-15S-22 / MPR-15S-22-D	MPR-16S-21 / MPR-16S-21-D	MPR-17S-23 / MPR-17S-23-D
<b>ENCLOSURE</b>				
Dimensions	DIN4 Rail Mounting			
Protection Class	Terminals = IP20, Enclosure Protection Class = Ip40			
<b>MEASUREMENTS</b>				
<b>Voltage</b>				
Measurement Range	10-300 VAC (L-N) 10 - 480 VAC (L-L)			
Measurement Range with Transformer	1-400.0kV Transformer Ratio: 1-5000			
Accuracy	%0.5 ± 1 Digit			
Input Impedance	>1M Ω			
Burden (Input Load)	<0,5 VA			
<b>Current</b>				
Nominal Current	In : 5A / 1A			
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			
<b>Power/Energy</b>				
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%	
Individual Harmonics	-	-	1-51 Voltage (V) and Current (I)	
Demand Period	1,2,5,10,15,20,30,60 min.			
Frequency	45-65 Hz			
Sampling Period	128			
<b>SUPPLY</b>				
Supply Voltage	95 - 270 VAC/DC (12-50 VDC for MPR-1-D Series)			
Operating Frequency	50/60 Hz			
Power Consumption	<6 VA			
<b>DIGITAL INPUT / OUTPUT</b>				
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)	
<b>ANALOG OUTPUT</b>				
Current Output	-	-	0-20mA, 4-20mA, 4-24mA	
Voltage Output	-	-	0-5V, 0-10V, ±5V, ±10V	
<b>RELAY OUTPUT</b>				
Relay Output	-	-	1 NO Contact, 250 VAC/5A	-
<b>MEMORY</b>				
Internal Memory Size	-	-	4MB	
<b>COMMUNICATION</b>				
Communication Interface/Protocol	RS 485 / MODBUS RTU			
Transfer Speed	2400-115200			
<b>AMBIENT CONDITIONS</b>				
Operating Temperature	- 10 / +55 °C			
Storage Temperature	- 20 / +70 °C			
Overvoltage Category	III			
Pollution Degree	II			
Ambient Humidity	%95			
<b>STANDARDS</b>				
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			
<b>CONNECTIONS</b>				
Mounting	Rail Mounting			
Connection Terminals	Screw Terminal			
Connection Types	3F4T, 3F3T, 3 Phase Aron, 3F4T Balanced, 3F3T Balanced			

## HEADQUARTERS

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