

New Generation Network Analyzers

MPR-4 Series



MPR-4 Series

With their compact design and 45mm depth, MPR-4 series new generation network analyzers occupy less space in the panels and have a wide range of operating voltage (45-265 VAC/DC). In addition up to 16 MB internal memory, they offer wide I/O solutions with their replaceable modular structure based on customer requirements and areas of application.

Product Code	Dimensions / mm	3xV, 3d, Frequency, W, VA, VAR, P, Q, S, kWh, kVAh, Demand, Max, Min, Cos φ, I neutral	THD-I	THD-V	Harmonics 1-51st	RS-485	Digital Input	Digital Output	AO mA	AO V	Relay Output	Pulse Output	Temperature	Real Time Clock	Memory	Voltage/Current Unbalances	Pulse Counter	Operating Hours Meter	Alarm	Log Records	Event Records	Pcs / Box
MPR-45	96x96	●					*	*	*	*	*	*	*	●					*	*	*	●
MPR-45S	96x96	●				●	*	*	*	*	*	*	*	●	16MB							●
MPR-46	96x96	●	●	●			*	*	*	*	*	*	*	●		*			*	*	*	●
MPR-46S	96x96	●	●	●		●	*	*	*	*	*	*	*	●	16MB				*	*	*	●
MPR-47S	96x96	●	●	●	●	●	*	*	*	*	*	*	*	●	16MB	●	*		*	*	*	●

* Modular structure @ Standard

- 96 x 96 x 45 mm compact design
- Voltage / Current unbalance measurement
- Modular I / O
- Harmonic Measurement up to 51st
- 256 Event Records

Module Table

Product Code	Type	Operating Range
MM-102	Digital Output Module (2DO)	5-24 VDC
MM-120	Digital Input Module (2DI)	5-24 VDC
MM-122	Digital I/O Module (2DI-2DO)	5-24 VDC
MM-144	Digital I/O Module (4DI-4DO)	5-24 VDC
MM-002	Relay Output Module (2 Relays)	5A/250 VAC;NO
MM-202	Analog Output Module (2 AO)	(0-10 VDC) (0-5 VDC) (-5...+5 VDC) (-10...+10 VDC) (0-20mA) (0-24mA) (4-20mA)

* I/O module can be attached to a single device

Application Areas:



96 x 96 x 45 mm compact design



Modular I / O



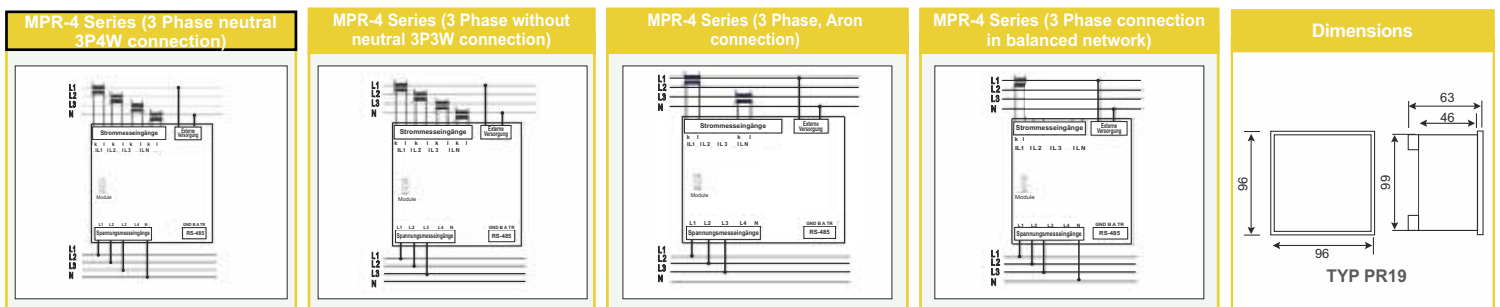
Measurement Class 0,5

SPECIFICATIONS

	MPR-45	MPR-45S	MPR-46	MPR-46S	MPR-47S
ENCLOSURE					
Dimensions	96x96x45mm				
Protection Class	Terminals = IP20, Enclosure Protection Class = IP51				
Display	LCD, with backlight				
MEASUREMENTS					
VOLTAGE					
Measurement Range	10 - 400 VAC (L-N) 10 - 690 VAC (L-L)				
Measurement Range with Transformer	1-400.0 kV Transformer Ratio: 1-5000				
Accuracy	0,5% ± 1 Digit				
Input Impedance	>1M Ω				
Burden (Input Load)	<0,5 VA				
CURRENT					
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	0,5 VA				
Overload Current	1,2 In continuous				
Short Time Overload (1s)	10xIn				
POWER/ENERGY					
Active Power	Range: 0 - 1 GW, Accuracy: 1% ± 1 Digit				
Reactive Power	Range: 0 - 1 GVar, Accuracy: 1% ± 1 Digit				
Apparent Power	Range: 0 - 1 GVA, Accuracy: 1% ± 1 Digit				
Power Factor	Range: ±1.00, Accuracy : ± 0,02				
Active Energy	Range: 0 - 99 999 999 kWh or MWh, Accuracy: 1% 1 class				
Reactive Energy	Range: 0 - 99 999 999 kVarh or MVarh, Accuracy : 2% class 2				
Total Harmonic Distortion (THD)	-				THD-V, THD-I
Separate Harmonics	-		-		Up to 51st Harmonics
Demand Period	1,2,5,10,15,20,30,60 minimum adjustable				
Frequency	45-65 Hz				
SUPPLY					
Operating Voltage	45 - 265 VAC/DC				
Operating Frequency	50/60 Hz				
Power Consumption	<5 VA				
PULSE OUTPUT					
Energy Pulse Output	* Active Energy Output (1kWh/pulse - 50MWh/pulse) * Reactive Energy Output (1kVarh/pulse - 50MVarh/pulse)				
Switching Current	* Max. 50 mA				
Switching Voltage	* 5..24 VDC				
Pulse Width	* 100 ...2500 ms				
Maximum Voltage	* Max. 30 VDC				
MEMORY					
Internal Memory Size	-	16MB	-	-	16MB
COMMUNICATION					
Communication Interface/Protocol	-	RS-485 / MODBUS RTU	-	-	RS-485 / MODBUS RTU
Transfer Speed	-	2400-115200 bps	-	-	2400-115200 bps
AMBIENT CONDITIONS					
Operating Temperature	- 5 / +55°C				
Storage Temperature	- 25 / +70°C				
Overvoltage Category	III				
Pollution Degree	II				
Ambient Humidity	90%				
STANDARDS					
Applied Security 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 with Rear Terminals				
Connection Terminals	Screw Terminal with Socket				
Connection Types	3P4W, 3P3W, 3 Phase (Aron), 3P4W Balanced, 3P3W Balanced				

* Provided with digital output I / O modules

Connection Diagrams PR19 - MPR 4 Series (96x96mm)



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