



New-Generation Network Analyzers

MPR-4X series

With their compact design and 45mm depth, MPR-4X 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 8 MB internal memory, they offer wide I/O solutions with their replaceable modular structure based on customer requirements and areas of application.



MPR 4X series

Type	Operating Range
Digital Output Module (2DO)	5-24 VDC
Digital Input Module (2DI)	5-24 VDC
Digital I/O Module (2DI-2DO)	5-24 VDC
Digital I/O Module (4DI-4DO)	5-24 VDC
Relay Output Module (2 Relays)	5A/250 VAC;NO
Analog Output Module (2 AO)	(0-10 VDC) (0-5 VDC) (-5...+5 VDC) (-10...+10 VDC) (0-20mA) (0-24mA) (4-20mA)
Temperature Measurement Module (4 Thermocouple / 2 RTD) (1DI-1CO)	Connection Types <ul style="list-style-type: none"> 4 thermocouple - 1DI - 1DO 2 thermocouple - 1 RTD (2,3,4 wire) - 1DI - 1DO 2 RTD (2,3,4 wire) - 1DI - 1DO

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

MPR 4X series



96 x 96 x 45 mm compact design



Modular I / O



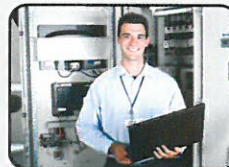
Measurement Class 0,5

- 96 x 96 x 50 mm compact design
- Voltage / Current unbalance measurement
- Modular I / O
- Harmonics 2 - 51st

PRODUCT SELECTION TABLE	Dimensions / mm	3rd Jct. Frequency W. / Vdc VASP 33 SS / MW / W/Wh Demand. / Min. Cos. / Inductance	THD-I	THD-V	Harmonics 1-51 st	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	Event Logs	Outage Records	
MPR-45	96x96	●					*	*	*	*	*	*	*	*								
MPR-45S	96x96	●				●	*	*	*	*	*	*	*	*	8MB							
MPR-46	96x96	●	●	●			*	*	*	*	*	*	*	*			*					
MPR-46S	96x96	●	●	●		●	*	*	*	*	*	*	*	*	8MB		*					
MPR-47S	96x96	●	●	●	●	●	*	*	*	*	*	*	*	*	8MB	●	*					

* Modular structure ■ Standard

Application Areas



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	5 - 690 VAC (L-N) 5-400 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 - 6 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: 0.5% ± 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	-	8MB	-	-	8MB
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 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	Front panel mounting with Rear terminals				
Connection Terminals	Screw terminal with socket				
Connection Types	3 phase neutral, 3 phase, 3 phase (Aron)				

* Provided with digital output I / O modules

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