



MPR-4 Series New Generation Network Analyzers

MPR-4 Series **panel type** network analyzers are compact solutions with their **96 x 96 x 45 mm** dimensions designed for detailed measurement and analysis of electrical parameters. It has wide operating voltage range of 50-270 VAC/DC.

Devices with **internal memory up to 16 MB** offer a **wide range of I/O solutions with their replaceable modular structure** depending on requirements and areas of use. Therefore they provide flexible detection and control of devices in the field.

Real-time monitoring is possible via **large LCD screen**. Thanks to **the communication feature** of MPR-4 Series, energy measurements can be monitored easily from a single monitoring center.

- Digital input/output, analog output and relay measurement options with modular I/O structure
- 96 x 96 x 45 mm slim design
- 3,5" segment LCD screen
- 16 MB memory
- Current & voltage unbalanced measurement
- Detailed measurement up to 51 harmonics
- 256 event log
- Sag / Swell measurement
- Compatible with **plug&meter** current transformers
- Active energy Class 0.5 (optional)
- IP54 protection class (optional)



SPECIFICATIONS

	MPR-45	MPR-45S-L	MPR-45S	MPR-46	MPR-46S-L	MPR-46S	MPR-47S	MPR-47S-L	MPR-47S-D	MPR-47S-PM	MPR-46S-PM
ENCLOSURE											
Dimensions	96x96x45 mm										
Protection Class	Terminal: IP20, Front: IP51 (IP54 optional)										
Display	3,5" LCD display										
MEASUREMENT											
Voltage											
Measurement Range	5-300 VAC (L-N), 5-480 VAC (L-L)										
Measurement Range with Voltage Transformer	5 V - 999,9 kV										
Neutral - Ground Voltage (PE-N)	2-300 VAC										
Accuracy	0,5% ± 1 Digit (for MPR-4x-0,5 0,2% ± 1 Digit)										
Input Impedance	> 1 M										
Burden	< 0,5 VA										
Current											
Nominal Current	In: 5A / 1A										
Minimum Current	5 mA										
Measurement Range	50 mA - 5,5 A										
Measurement Range with Current Transformer	50 mA - 10.000 A										
Accuracy	0,5% ± 1 Digit (for MPR-4x-0,5 0,2% ± 1 Digit)										
Burden	0,5 VA										
Overload Current	1,2 x In										
Short Time Overload (1 sec)	10 x In										
Power / Energy											
Active Power	0 - 1 GW ; 1% ± 1 Digit (for MPR-4x-0,5 0,5% ± 1 Digit)										
Reactive Power	0 - 1 GVar ; 2% ± 1 Digit (for MPR-4x-0,5 1% ± 1 Digit)										
Apparent Power	0 - 1 GVA ; 1% ± 1 Digit										
Power Factor	± 1.00 ; Accuracy ± 0,02 (for MPR-4x-0,5%± 0,01)										
Active Energy	0 - 99 999 999 kWh or MWh; Accuracy 1% (Class 1) (for MPR-4x-0,5 Class 0,5)										
Reactive Energy	0 - 99 999 999 kVarh or MVarh; Accuracy 2% (Class 2) (for MPR-4x-0,5 Class 1)										
Apparent Energy	0 - 99 999 999 kVAh or MVAh; Accuracy 1%										
Total Harmonic Distortion	-										
Individual Harmonics	-										
Voltage and Current Unbalances	-										
Sag&Swell	-										
Demand Period	1,5,10,15,20,30,60 min										
Frequency	45-65 Hz										
Sampling Rate per Period	128										
SUPPLY											
Operating Voltage	50-270 VAC/DC										
Operating Frequency	50/60 Hz										
Power Consumption	< 5 VA (< 10 VA with module)										
MEMORY / RECORD											
Internal Memory Size	-	16 MB	-	16 MB	-	16 MB	-	16 MB	-	16 MB	-
LOG Record	-	.	-	.	-	.	-	.	-	.	-
Event Record	-	.	-	.	-	.	-	.	-	.	-
COMMUNICATION											
Interface / Protocol	-	RS 485 / Modbus RTU	-	RS 485 / Modbus RTU	-	RS 485 / Modbus RTU	-	RS 485 / Modbus RTU	-	RS 485 / Modbus RTU	-
Transfer Rate (bps)	-	2400-115200	-	2400-115200	-	2400-115200	-	2400-115200	-	2400-115200	-
INPUTS and OUTPUTS (with MODULE)											
Digital Input											
Pulse Width	40 - 500 ms										
Digital Output											
Energy Pulse Output	Active energy (1 kWh/pulse - 50 MWh/pulse) Reactive energy (1 kVarh/pulse - 50 MVarh/pulse)										
Pulse Width / Duty	20 - 1000 ms										
Switching Current	Max 50 mA										
Switching Voltage	5 - 24 VDC, max 30 VDC										
Relay Output											
Relay Output	2 NO, 250 VAC / 5 A										
Analog Output											
Current Output	0 - 20 mA, 4 - 20 mA, 0 - 24 mA										
Voltage Output	0 - 5 V, 0 - 10 V, ± 5 V, ± 10 V										
Accuracy	0,5%										
CONNECTIONS											
Mounting Type	Flush mount										
Connection Terminals	Screw terminal with socket										
Connection Types	3P4W, 3P3W, 3 Phase Aron, 3P4W (balanced), 3P3W(balanced)										
AMBIENT CONDITIONS											
Ambient Temperature	-10 / + 70°C										
Storage Temperature	-20 / + 80°C										
Overvoltage Category	III										
Pollution Degree	II										
Maximum Ambient Humidity	90%										
STANDARDS											
Standards	EN 61557-12, EN 61326-1, EN 61000-6-2, EN 61000-6-4, EN 62053, EN 60068, EN 61010										

Compatible with x/333 mV and ENTES plug & meter current transformers.

HEADQUARTERS

Address: Dudullu OSB; 1. Cadde; No: 23 34776 Umraniye - ISTANBUL / TURKIYE Tel: +90 216 313 01 10 Fax: +90 216 314 16 15 Sales Fax: +90 216 365 71 71
E-mail: contact@entes.eu Web: www.entes.eu Call Center Technical Support: 0850 888 84 25 Coordinates: 40,995852 N, 29,178398 E

INTERNATIONAL BRANCH OFFICES

ISTANBUL : contact@entes.eu Tel: +90 216 313 01 10 Fax: +90 216 314 16 15
INDIA : contact@entes.in Tel: +91 981 - 2980004
GREECE : contact@entes.eu Tel: +30 2310 706999 +30 2310 707296
GERMANY : kontakt@enteselektronik.com Tel: +49(0) 7022-931992-0

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