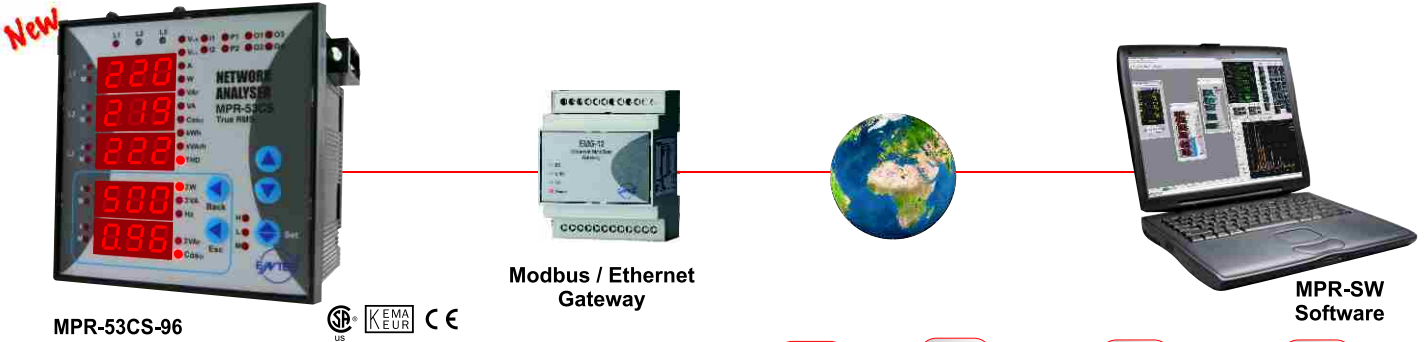


# NETWORK ANALYSER

## MPR-53 / EPM-07 Series



### General

MPR-53 / EPM-07 series measures many parameters of an electric network. More than 50 parameters are displayed.

- **EPM-07** : Network Analyser.
- **EPM-07S** : Network Analyser with RS-485 (MODBUS).
- **MPR-53** : Network Analyser with THD measurement.
- **MPR-53S** : Network Analyser with THD measurement and RS-485 (MODBUS).
- **MPR-53CS** : Network Analyser with THD measurement, RS-485, Pulse Counter, Digital Hour Counter, Alarm Contact
- IEC 61000-6-2, IEC 61000-6-4, IEC 61010-1

**Modbus**

**Harmonics**

**Max. Demand**

**Pulse Output**

**Digital Input**

**Alarm Contact**

**Digital Hour Counter**

**Pulse Counter**

### Product Code

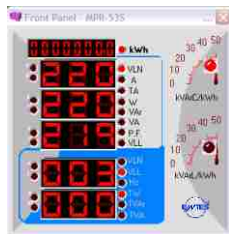
	% THD I	% THD V	Neutral Current	Digital Input	Energy Pulse Output	Dual Energy Meter	6 Different Energy Calculation Methods	.../5A	CT-25 (120A)	Alarm Contact	Digital Hour Counter	Pulse Counter	RS-485 Comm.	Pcs / Carton
EPM-07 -96														12
EPM-07 -DIN														12
EPM-07S -96														12
EPM-07S -DIN														12
MPR-53 -96														12
MPR-53 -DIN														12
MPR-53S -96														12
MPR-53CS -96 (new)														12
MPR-53S -DIN														12
MPR-53CS -DIN (new)														12
MPR-53S -DIN-CT25														12
EPM-07S -DIN-CT25														12

● Min. Order Quantity is 200pcs / device

### PC Interface Software (MPR-SW) :

MPR-SW is a graphic based software, which enables remote monitoring via intranet or internet.

Please refer to page 20 for MPR-SW Software.



popular in small cabinets!

**MPR-53S-DIN-CT25**

CT-25 is a Current Transformer, which is used together with MPR-53S-DIN-CT25 model.

It is a unique solution, which replaces conventional type CTs up to 120A.

THD	L1	L2	L3	L1	L2	L3
I	14.7	14.7	14.6	PF	-0.02	-0.02
V	2.0	2.0	2.0	Corr.	-0.01	-0.02

Phase - Neutral Voltages ( $V_{LN}$ )	Total Current ( $\Sigma I$ )	Apparent Power (S)	Reactive Energy - Capacitive (kVArh)
Phase - Phase Voltages ( $V_{LL}$ )	Power Factor (P.F)	Total Active Power ( $\Sigma P$ )	Reactive Energy - Inductive (kVArh)
Average Phase - Neutral Voltage	$\text{Cos}\phi$	Total Reactive Power ( $\Sigma Q$ )	Max. Demand
Average Phase - Phase Voltage	Frequency (Hz)	Total Apparent Power ( $\Sigma S$ )	Max / Min. Values
Phase Currents (I)	Active Power (P)	Active Energy - Import (kWh)	
Neutral Current	Reactive Power (Q)	Active Energy - Export (kWh)	

**Measured Parameters ( EPM-07 / 07S )**

+

Total Harmonic Distortion for Voltage (THD V %)	Total Harmonic Distortion for Current (THD I %)
---	---

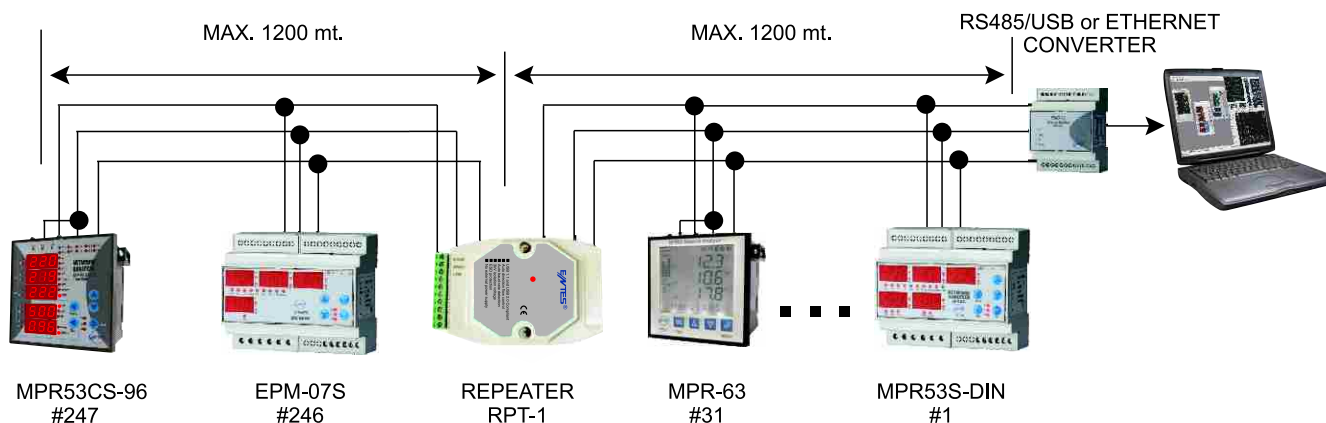
**Measured Parameters ( MPR-53 / MPR-53S )**

+

Digital Hourmeters	Digital Pulse (Count)
--------------------	-----------------------

**Measured Parameters ( MPR-53CS )**


247 DEVICES CAN BE CONNECTED SERIALLY BY USING REPEATERS



# NETWORK ANALYSER

## MPR-53 / EPM-07 Series

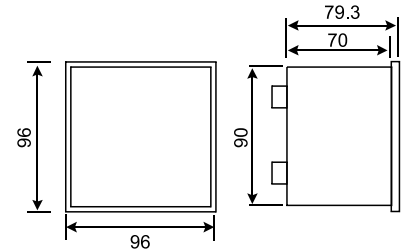
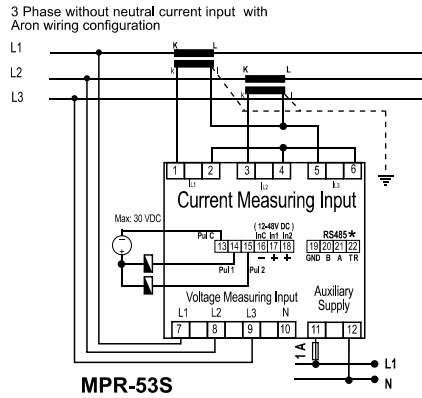
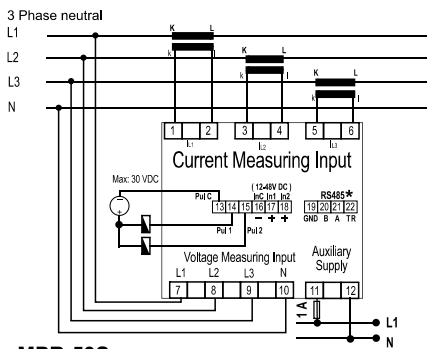
(new)

MODEL	EPM-07	EPM-07S	MPR-53	MPR-53S	MPR-53CS
<b>SPECIFICATIONS</b>					
<b>Electrical Parameters</b>					
<b>Operating Voltage</b>	110VAC* / 230 V AC $\pm$ 10%; 45 - 65 Hz				
<b>Network Type</b>	3-phase / 4-wire (Star), 3-phase / 3-wire (Delta), 3-phase / 3-wire (Aron)				
<b>Accuracy</b>	1% $\pm$ 1 digit				
<b>Current Transformer Ratio</b>	1...2000 (programmable)				
<b>Voltage Transformer Ratio</b>	0,1...4000,0 (programmable)				
<b>Measurement input</b>					
<i>Voltage</i>	10 - 300 V AC (L-N), 10 - 500 V AC (L-L)				
<i>Current</i>	50 mA - 5,5 A				
<b>Measurement Ranges</b>					
<i>THD</i>	-	0-99.9 %			
<i>Voltage</i>	10 - 500 V (direct), 10 - 400 kV (with voltage transformer)				
<i>Current</i>	50 mA - 5,5 A (direct), 50 mA - 10.000 A (with current transformer)				
<i>Frequency</i>	20 - 90 Hz				
<i>Power Factor</i>	4 quadrant				
<i>Power</i>	0 - 215 M (W, VAR, VA)				
<i>Energy</i>	0 - 99 999 999 999,9 kWh, kVArh				
<b>Power Consumption</b>	< 4 VA				
<b>Burden</b>	< 1 VA (Current burden), < 0,5 VA (Voltage burden)				
<b>Demand Time</b>	1 - 60 min. (Programmable via MPR-SW)				
<b>Communication Interface</b>	MODBUS RTU (RS-485) [for EPM-07S & MPR-53S]				
<i>Baud Rate</i>	1200 - 38400 bps				
<i>Address</i>	1 - 247				
<i>Parity</i>	No, odd, even				
<b>Alarm Contact Output</b>	Output 1/2 : 2 NO relays, 5A, 1250 VA (resistive) [for MPR-53CS] ----- Output 3/4 : Mentioned on Front Panel [for MPR-53CS] Output 5/6/7/8 : (Virtual Outputs) Mentioned in Register Table				
<b>Digital Hourmeter</b>	3 Hourmeters (HH HH HH HH.HH) : <i>Total Hours (non-resettable)</i> <i>Run Hours (resettable)</i> [for MPR-53CS] <i>Setpoint Hours (resettable for 16 setpoints)</i>				
<b>Digital Input</b>	2 Digital Inputs				
<i>Input Pulse Width</i>	80 msec. (Min.), (100msec. period)				
<i>Operation Voltage</i>	12...48 V AC / DC				
<b>Energy Pulse Output</b>	NPN Transistor				
<i>Switch Period</i>	Min. 1,6 sec. (400 msec. pulse width)				
<i>Operation Current</i>	Max. 50 mA				
<i>Operation Voltage</i>	5...24 V DC, max. 30 V DC				
<b>Display</b>	Red LED ; 10 mm Height				
<b>Mechanical Parameters</b>					
<b>Equipment Protection</b>	Double Insulation (  ), Measurement Category III				
<b>Ambient Operating Temperature</b>	-5°C, +55°C				
<b>Degree of Protection</b>	IP40 (front panel), IP54 (Optional)				
<b>Connection / Installation</b>	Terminal / Flush-mounting with rear terminals				
<b>Dimensions</b>	96x96 mm (PR19**), DIN6 (PK26**)				
<b>Weight / each</b>	0,6 kg (PR19) ; 0,6 kg (DIN6)				
<b>Quantity in 1 package</b>	12 pcs (PR19), 12 pcs (DIN6)				

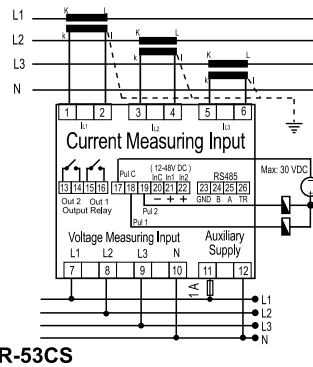
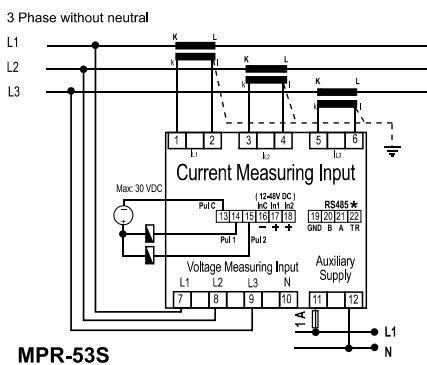
\* 110 V AC, 60Hz Supplied devices are custom manufactured by order

### Connection Diagram

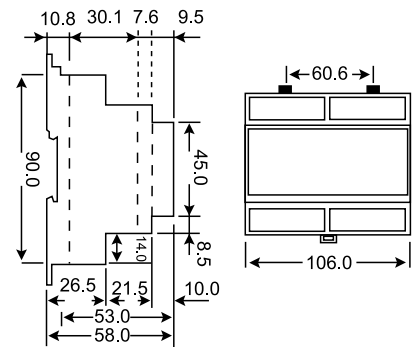
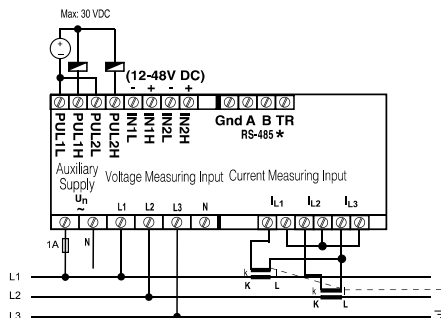
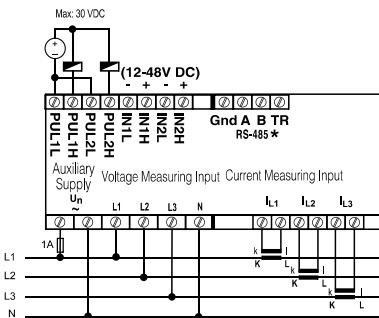
(PR 19- 96x96mm)



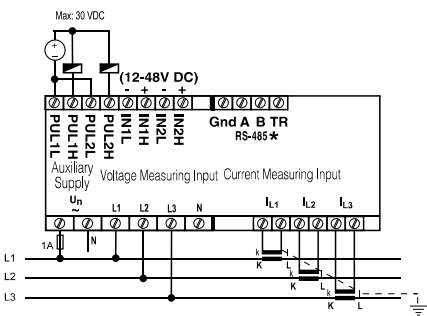
TYPE PR 19



(PK 26 - DIN6)



TYPE DIN / PK 26



3 Phase without neutral

MPR-53S

\* RS-485 terminals are standart for EPM-07S and MPR-53S