

ELNet^{MC} Multi channel Energy meter & Powermeter



ELNet-MC energy powermeter is a compact, multi functional, multi channel, three-phase powermeter, especially designed to meet the stringent needs of power and energy measurement in any electrical installation.

ELNet-MC includes history data logging and supports standard communication protocols BACnet and Modbus with simple integration into Building Management Systems over RS485 or Ethernet TCP. An indispensable tool for the Building Engineer, it aids efficient use of electricity by showing Power Factor, Max and Min demand, and Current in Neutral Line.

Technical Data

| | |
|------------------------|---|
| Power Requirements: | 90 ~ 250 VAC 110 ~ 280 VDC 60/50 Hz 11VA |
| Dimensions (HxWxD): | 110 x 300 x 60 mm |
| Shipping Weight: | 1.25 Kg. |
| Environmental: | |
| Operation. | -20 ~ +70 °C |
| Storage. | -20 ~ +70 °C |
| Humidity | 0 ~ 95 RH% non-condensing |
| Front Panel Protection | IP33 |

Communication

| | |
|--------------------|--|
| RS485 port: | Up to 115200 bauds Modbus and BACnet. |
| Ethernet (TCP/IP): | Built-in & Web Browser Capability |

Input & Output Rating

| | |
|---------------------------|--|
| Accuracy: | Active energy 0.2% Reactive energy 0.2% |
| Voltage: Line-Line | 0 ~ 550 VAC RMS |
| Line-Neutral | 0 ~ 950 (calculated) VAC RMS |
| Maximum Burden | 1000V RMS Continuous < 0.06VA |
| Current: Rated | 0-1 A, 0-5 A, up to 63Amp using our current transformers |
| Overload Withstand Burden | 50 A RMS Continuous 100 A for 1 minute < 0.05VA |
| Display: | High resolution color LCD display 320x240 pixels |
| Maximum Input Voltage: | 1000V |
| Maximum Input Current: | 6A |
| Digital input: | Up to 36 Optional, by replacing a current transformer card with a digital input card |



CONTROL APPLICATIONS Ltd.

Supervision & control system

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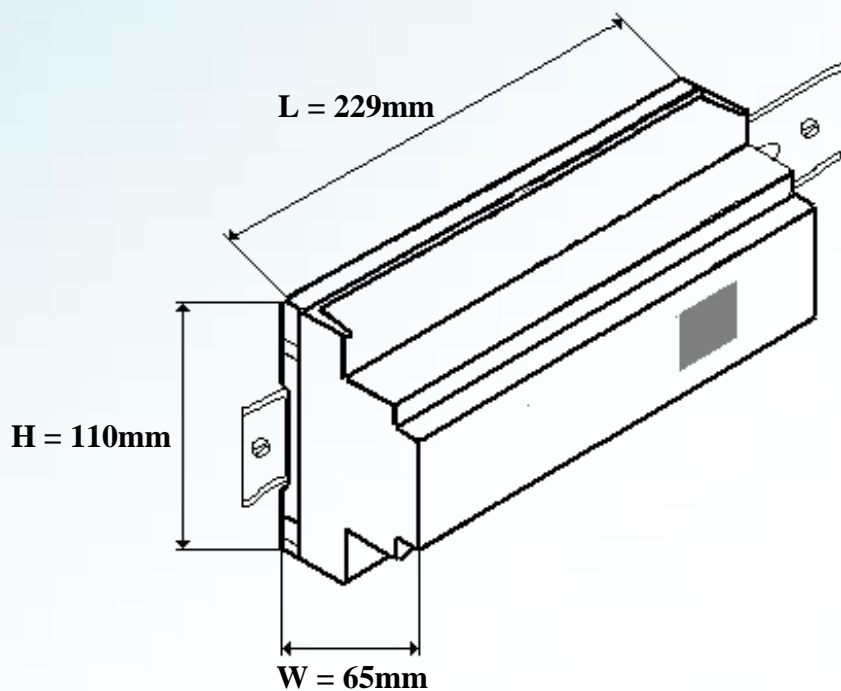
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Measurement & Display Values in direct connection

| Measurement Parameter | Display Range in direct connection (scaling factor 1) | Measuring in direct connection (scaling factor 1) | Display Range |
|-----------------------------|---|---|---------------------------|
| Current | 0.001 – 6A | 0.001 – 6A | 0.001 – 99999KA |
| Voltage L-N | 0.001 – 6A | 0.001 – 6A | 0.001 – 99999KA |
| Voltage L-L | 0.000 – 550 V | 0.000 – 550 V | 0.001 – 99999KV |
| Frequency (Hz) | 0.000 – 950 V | 0.000 – 950 V | 0.001 – 99999KV |
| Active power total\phase | 45.001-65.001 Hz | 45.001-65.001 Hz | 45.001-65.001 Hz |
| Reactive power total\phase | | | 0.000W – 99999MW |
| Apparent power total\phase | | | 0.000VAR - 99999MVAR |
| Power Factor (cap.\ind.) | | | 0.000VA -99999MVA |
| Active Energy total\phase | -1.000 ÷ 1.000 | -1.000 ÷ 1.000 | -1.000 ÷ 1.000 |
| Reactive Energy total\phase | | | 0.001WH – 99999999MWH |
| Apparent Energy total\phase | | | 0.001VARH - 99999999MVARH |

Standards

IEC 62053-22
 IEC 62053-23
 IEC 62052-11
 EN 55022, Class A, Amendments A1; A2
 EN 55024, Amendments A1; A2
 EN 61000-3-2, Class A
 EN 61000-3-3, Amendment A1
 IEC 61000-4-2
 IEC 61000-4-3
 IEC 61000-4-4
 IEC 61000-4-5
 IEC 61000-4-6
 IEC 61000-4-11



**Mechanical mounting
 DIN Rail installation**



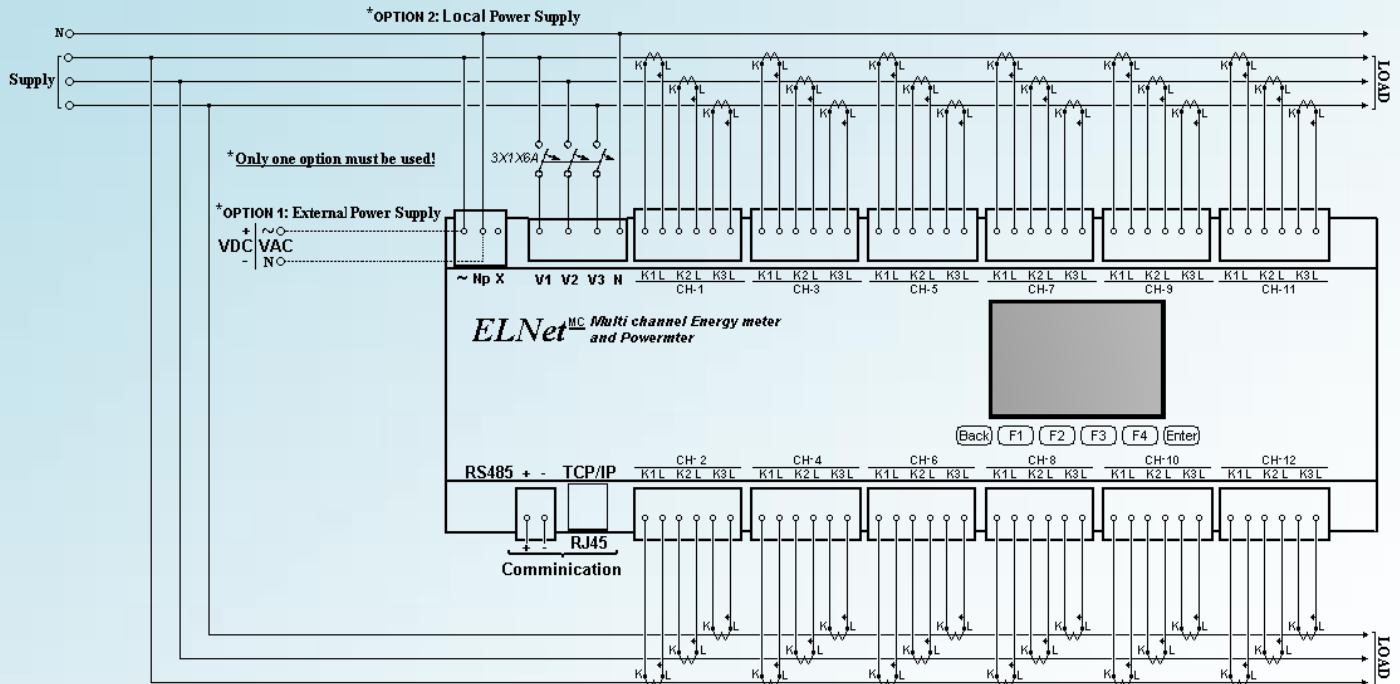
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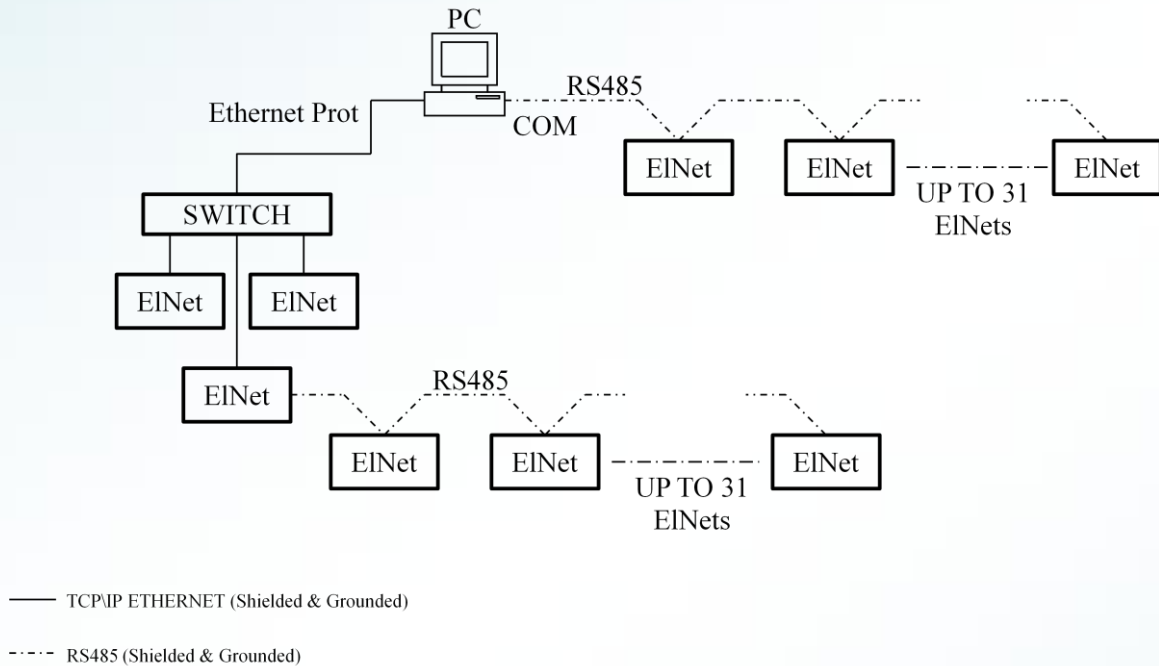
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Wiring Diagram Example



Communication Diagram Example



— TCP/IP ETHERNET (Shielded & Grounded)

- - - RS485 (Shielded & Grounded)



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