



ELNet GR energy powermeter is a multifunctional, three-phase powermeter, the unit is especially designed to meet the stringent needs of power and energy measurement in any electrical installation. ELNet GR 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, Voltage, Current, THD, TDD, K Factor, up to 64<sup>th</sup> Harmonics, phasor display, online wave forms and much more.

### Technical Data

Power Requirements:	90 ~ 250 VAC 110 ~ 280 VDC 60/50 Hz 8VA
Dimensions (HxWxD):	144 x 144 x 100 mm
Shipping Weight:	1.00 Kg.
Environmental:	
Operation.	-20 ~ +70 °C
Storage.	-20 ~ +70 °C
Humidity	0 ~ 95 RH% non-condensing
Front Panel Protection	IP64

### Communication

RS485 port:	Up to 115200 bauds Modbus RTU, BACnet MSTP
Ethernet (TCP/IP):	(Modbus and BACnet IP + Web browser capability

### Input & Output Rating

Accuracy:	Active energy 0.2% Reactive energy 0.2%
Voltage: Line-Line	0 ~ 950 VAC RMS
Line-Neutral	0 ~ 550 VAC RMS
Maximum	1000V RMS Continuous
Burden	< 0.06VA
Current: Rated	0-1 A or 0-5 A
Overload	50 A RMS Continuous
Withstand	100 A for 1 minute
Burden	< 0.05 VA
Display:	High resolution color LCD display 320x234 pixels
Maximum Input Voltage:	1000V
Maximum Input Current:	6A
Digital inputs:	4, 230VAC (ON)
Digital output:	3, dry contact maximum load 250mA

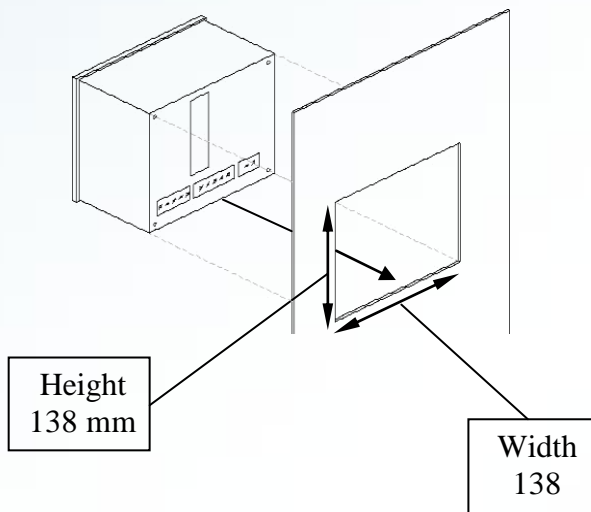


## Measurement & Display Values

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
Neutral Current	0.001 – 6A	0.001 – 6A	0.001 – 99999KA
Voltage L-N	0.000 – 550 V	0.000 – 550 V	0.001 – 99999KV
Voltage L-L	0.000 – 650 V	0.000 – 650 V	0.001 – 99999KV
Frequency (Hz)	45.001-65.001 Hz	45.001-65.001 Hz	45.001-65.001 Hz
Active power total\phase			0.000W – 99999MW
Reactive power total\phase			0.000VAR - 99999MVAR
Apparent power total\phase			0.000VA - 99999MVA
Power Factor (cap.\ind.)	-1.000 ÷ 1.000	-1.000 ÷ 1.000	-1.000 ÷ 1.000
Active Energy total\phase			0.001WH – 99999999MWH
Reactive Energy total\phase			0.001VARH - 99999999MVARH
Apparent Energy total\phase			0.001VAH - 99999999MVAH
Harmonic THD V\I			0.000 – 100%
Partial Harmonic V\I			0.000 – 100%
Operating hour meter			99999-HH:MM:SS

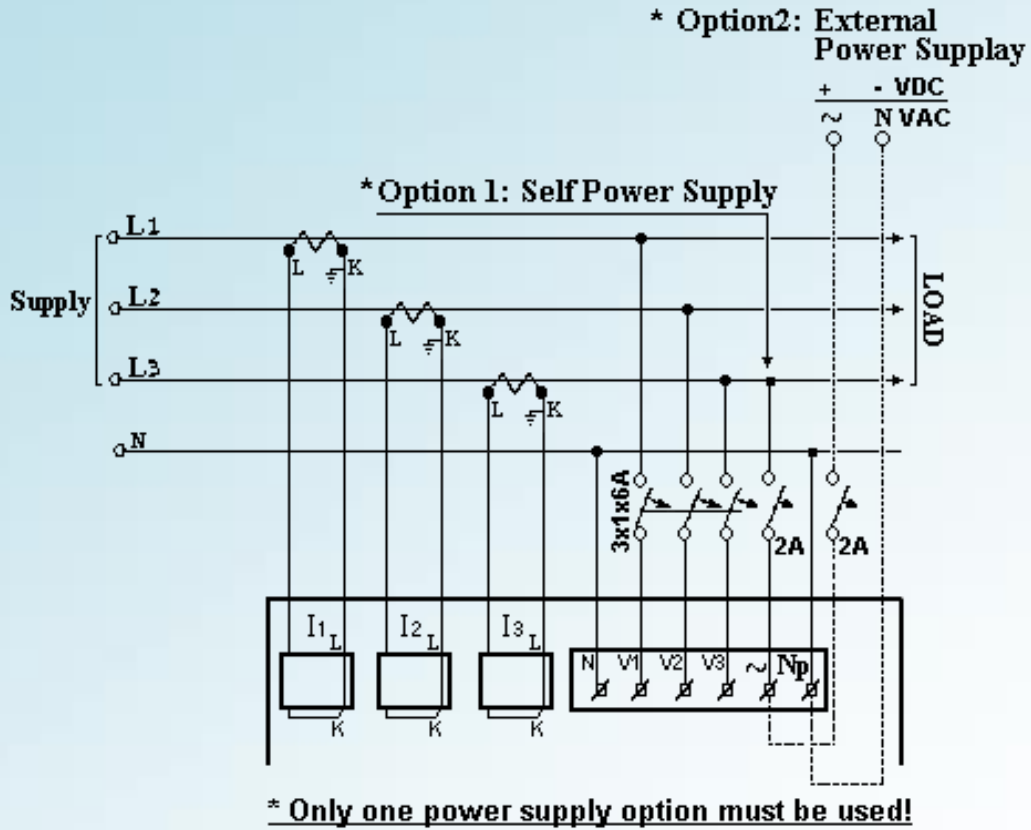
## Standards

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  
 ICE 61000-4-11

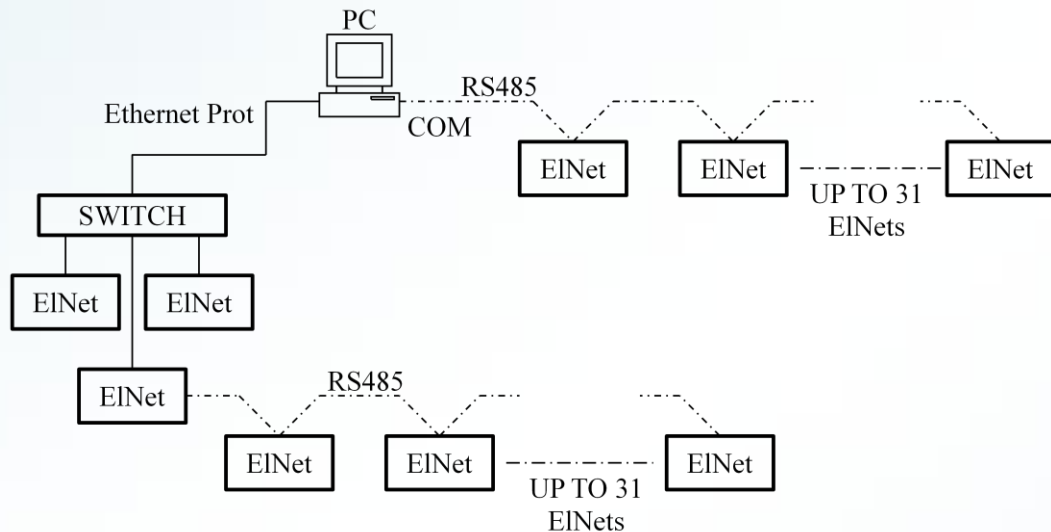


**Mechanical mounting**





### Wiring Diagram Example



— TCP/IP ETHERNET (Shielded & Grounded)

- - - RS485 (Shielded & Grounded)

### Communication Diagram Example