

# ELNet<sup>LT</sup> Energy meter & Electrical Powermeter



ELNet LT energy powermeter is a compact, multi functional, three-phase powermeter, especially designed to meet the stringent needs of power and energy measurement in any electrical installation. ELNet LT 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, Current in Neutral Line and Harmonics up to 64th.

## Technical Data

|                        |  |
|------------------------|--|
| Power Requirements:    | 90 ~ 250 VAC<br>110 ~ 280 VDC<br>60/50 Hz<br>9VA                               |
| Dimensions (HxWxD):    | 96 x 96 x 80 mm  |
| Shipping Weight:       | 0.65 Kg.   |
| Environmental:         |  |
| Operation.             | -20 ~ +70 °C   |
| Storage.               | -20 ~ +70 °C   |
| Humidity               | 0 ~ 95 RH%<br>non-condensing   |
| Front Panel Protection | IP64   |
| Memory size:           | Flash memory dedicated for 6 months of daily energy and additional 1MB memory. |

## Communication

|                    |   |
|--------------------|---|
| RS485 port:        | Up to 115200 bauds<br>Modbus and BACnet |
| Ethernet (TCP/IP): | Optional &<br>Web browser capability    |

## Input & Output Rating

|                         |  |
|-------------------------|--|
| Accuracy:               | Active energy 0.2%<br>Reactive energy 0.2%       |
| Voltage: Line-Line      | 0 ~ 950 VAC RMS                                  |
| Line-Neutral            | 0 ~ 550 VAC RMS                                  |
| Maximum Burden          | 1000V RMS Continuous<br>< 0.06VA                 |
| Current: Rated          | 0-1 A or 0-5 A                                   |
| Overload                | 50 A RMS Continuous                              |
| Withstand Burden        | 100 A for 1 minute<br>< 0.05 VA                  |
| Display:                | High resolution color LCD display 320x240 pixels |
| Maximum Input Voltage:  | 1000V  |
| Maximum Input Current:  | 6A   |
| Digital inputs:         | 2, 230VAC (ON)                                   |
| Digital \ pulse output: | 1, dry contact maximum load 250mA                |



**CONTROL APPLICATIONS Ltd.**

Supervision & control system

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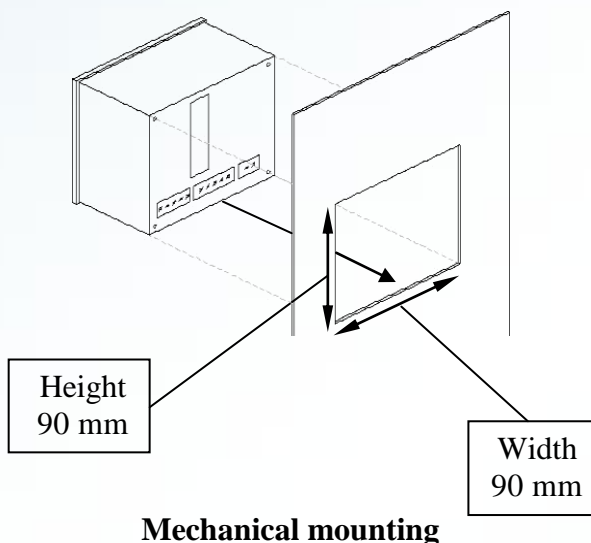
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## Measurement & Display Values

| 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 (calculated) | 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 – 950 V   | 0.000 – 950 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  
 IEC 61000-4-11  
 BTL approve ( BACnet MS/TP & IP)



**Mechanical mounting**

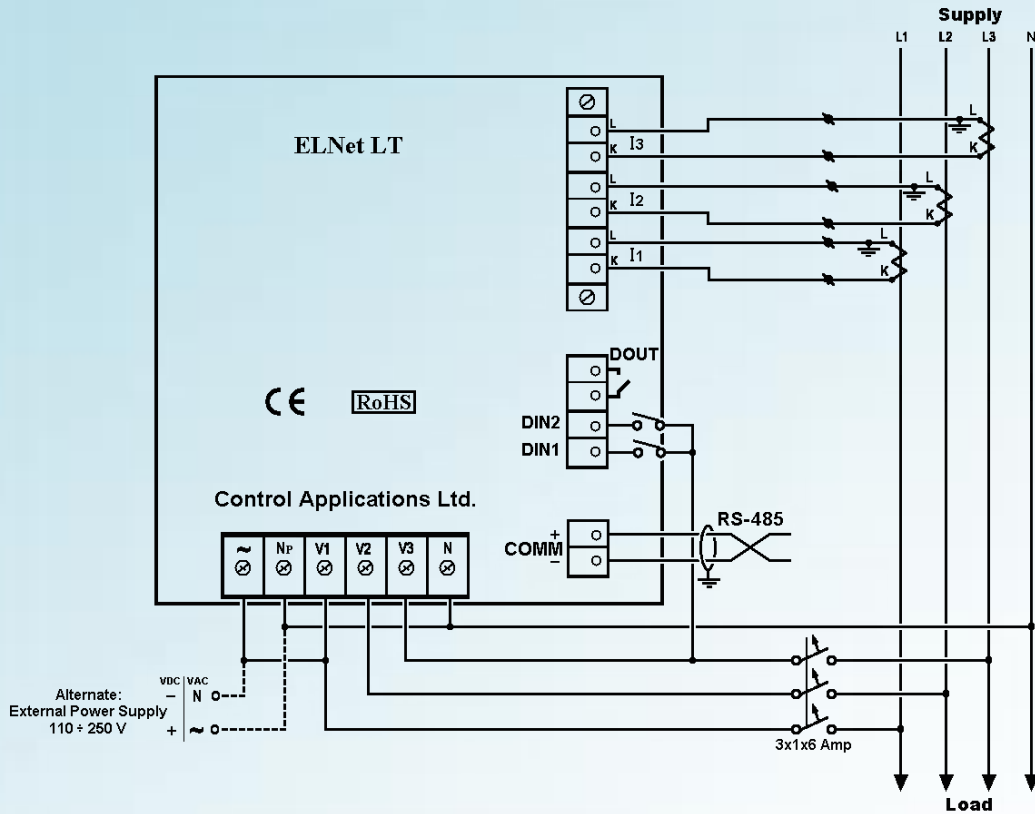


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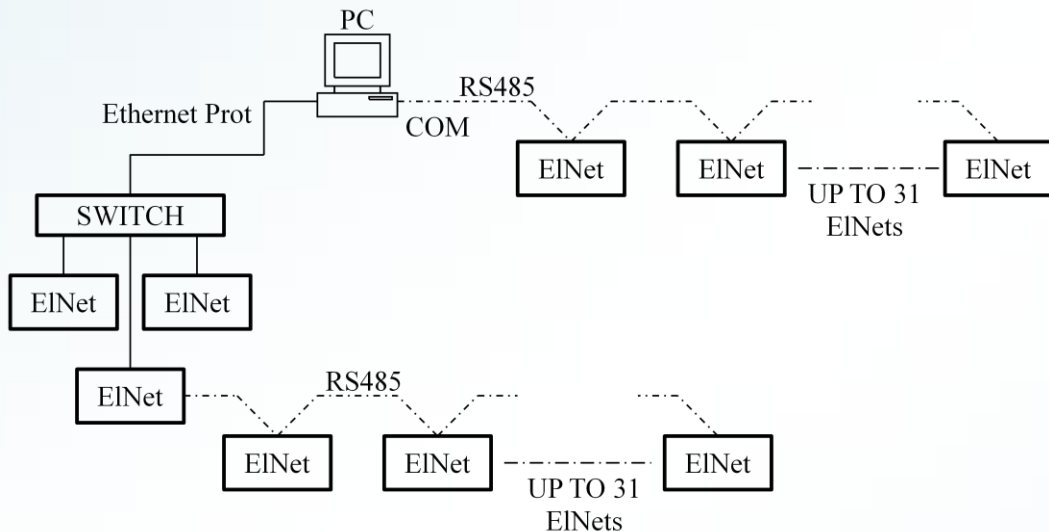
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## Wiring Diagram Example



— TCP/IP ETHERNET (Shielded & Grounded)

- - - RS485 (Shielded & Grounded)

## Communication Diagram Example