

#### **Energy & Power Quality Multimeter**



#### General

ELNet power multimeter is a compact, multi functional, three-phase multimeter, especially designed to suit the needs of power and energy measurement in electric panel. ELNet includes history data logging and an open protocol communication for building management systems. ELNet is designed for power and energy metering, as well as quality power measurement and data logging. ElNet is capable of measuring active, reactive and apparent power as well as frequency, power factor, current, voltage, harmonics analysis and has a waveform graphic display. ELNet's state of the art graphic LCD enables multilingual data and history graphic display, data processing and analysis. ELNet includes a 1MB flash memory for recording power malfunctions and interruptions such as high voltage / current (PEAK), low voltage (SAG) and phase disorder.

#### Main Features

- Measurements accuracy according to international standard IEC 687/61036.
- Accuracy better than 0.1% Class 0.1.
- Power quality analysis according to British standard EN50160.
- Multilingual simply operated menus.
- 1MB flash memory for data logging.
- Energy data logging.
- Alarms report.
- Ethernet (TCP/IP) and serial communication.
- Open protocols such as MODBUS and MODBUS over IP.
- State of the art graphic LCD display, 160x128 resolution, or text display 2x16 characters.
- Simple installation.

# Measurements accuracy:

ELNet has an autonomic measuring unit, which ensures accuracy of the power energy metering according to the international standard IEC 687/61036. Measurement accuracy of energy and energy components such as current, voltage, power and power factor is better than 0.1%.

### Power quality analysis:

ELNet enables data logging and reports based on the British standard EN 60150, including voltage interrupions (PEAK, SAG), high power factor, low / high frequency, harmonics spectrum analysis, etc. All events are recorded with accurate date and time.

### Simple operation:

ELNet power multimeter has a state of the art advanced display capable of displaying data such as voltage, current, powers and energies in a variety of menus. The ELNet built-in applications generator enables a simple and easy operation in various languages.

# Data logging and alarms report:

ELNet power multimeter has a 1MB memory. ELNet enables daily data logging for Max/Min value of power, current, voltage, power factor etc. as well as well as internal trend report configured by the operator. ELNet built-in applications generator enables data comparison on a weekly / monthly / yearly basis and alarms report recorded with accurate date and time.

#### Communication:

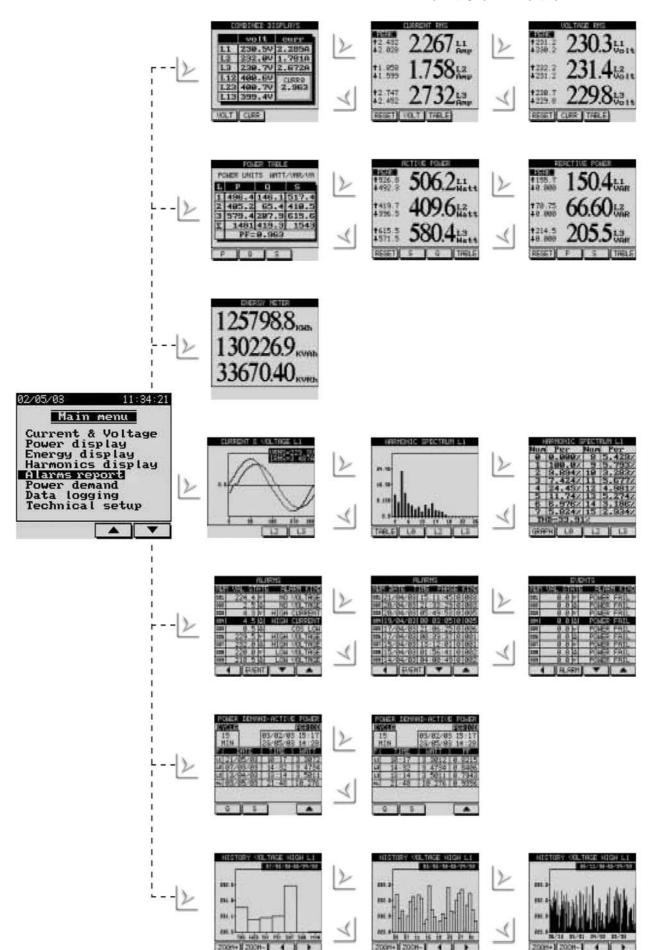
In addition to a standard serial communication (RS232 & RS485), ELNet power multimeter has an advanced Ethernet communication port with TCP/IP protocol, including open protocols such as MODBUS and MODBUS over IP support.

### LCD display:

ELNet power multimeter has a state of the art 160X128 resolution graphic display or 2x16 text display, capable of data display in a variety of languages and graph-form.

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# 能源管理數位電表





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Measure	Parameter	L1	L2	L3	N	$\Sigma^1$	RT <sup>2</sup>	Max	Min		官埕 Record
General											
Line Voltage	V1-N, V2-N, V3-N	•	٠	•			•	٠	٠	•	•
Phase Voltage	V1-2, V2-3, V3-1	•	•	•	•		•	•	•	•	•
Line Current	I1-N, I2-N, I3-N	•	٠	•			•	•	•	•	•
Neutral Current	IN				•		•	•	•	•	•
Frequency	Hz	•	•	٠			•	•	•	•	•
Power Factor	Pf		•	•		•	•			•	•
Power		•	•	•		٠	•	٠	•	•	•
Active Power (W)	P1, P2, P3					•	•	•	•	•	•
Apparent Power (VA)	S1, S2, S3		•	•		•	•	•	•	•	•
Reactive Power (VAR)	Q1,Q2, Q3					•	•	•	•	•	•
Harmonics											
Voltage THD	THD	•	•	•			•	•	•	•	•
Current THD	THD	•	•	•	•		•	•	•	•	•
K Factor	Kf	•	•	•	•		•	•	•	•	•
Voltage Harmonics		•	•	•			•	•	•	•	•
Current Harmonics		•	•	•	٠		•	•	•	•	•
Demand											
Active Power (W)	P <sub>1</sub> , P <sub>2</sub> , P <sub>3</sub>	•	•	•	•	•		•	•	•	•
Apparent Power (VA)	S1, S2, S3	•	•	•	•	•		•	•	•	•
Reactive Power (VAR)	Q1, Q2, Q3	•	•	•	•	•		•	•	•	•
Voltage	V1-N, V2-N, V3-N	•	•	•				•	•	•	•
Current	I1-N, I2-N, I3-N	•	•	•				•	•	•	•
Events											
Voltage Peak		•	•	•				•		•	•
Current Peak		•	•	•				•		•	•
Voltage SAG		•	•	•						•	•
Current SAG		•	•	•						•	•
Power Fail											•
Missing Cross Zero		•	•	•						•	•
<b>Graphic Display</b>											
Current		•	•	•							
Voltage		•	•	•							
Active Power (W)	W		•	•							
Apparent Power (VA)	VA	•	•	•							
Reactive Power (VAR)	VAR	•		•							
Energy											
Active Energy (Wh)	Watt Hour	•	•	•		٠					•
Apparent Energy (VAh)	VA Hour	•	•	•		•					•
Reactive Energy (VARh)	VAR Hour	•	•	•		•					•
1 $\Sigma$ = Sum / Average of all 3	phase values	21	RT = F	Real t	ime	displ	ay				
	ELNet-G						ELI	Net-T			

ELINet-G	ELINET-1				
110/230VAC, 60/50 Hz, 30VA	110/230VAC, 60/50 Hz, 30VA				
(HxWxD) 144x144x100 mm	(HxWxD) 96x159x57 mm				
650 gr	450 gr				
1000 VAC	1000 VAC				
5A	5A				
- 20 - 50°C, 0 - 90 RH%	- 20 - 50°C, 0 - 90 RH%				
Graphic 160x128	Text 2x16				
	110/230VAC, 60/50 Hz, 30VA (HxWxD) 144x144x100 mm 650 gr 1000 VAC 5A - 20 - 50°C, 0 - 90 RH%				