

Multi-line Three-phase Panel Meter

Elite 440 is a multi-line three-phase digital panel meter for accurate and reliable measurement of electrical quantities (Voltage, Current, Power, Frequency, etc.) in industrial and commercial applications. It has a large multi-line backlit LCD display which enables four parameters to be displayed at the same time. Modbus communications capability allows easy integration with energy monitoring systems. An expansion module can be fitted for enhanced functionality (pulse input / output)



Applications

- Commercial and industrial sub-metering applications
- Building management and monitoring systems (SCADA/EMS/DAS)
- High, medium and low-voltage switchgear panels
- Control and relay panels
- Power Control Centre (PCC) panels
- Motor Control Centre (MCC) panels
- Energy management for commerce and industry

Benefits

- Easy interface with external devices through built-in Modbus (RS-485)
- Detachable connectors for easy installation
- Onboard diagnostics make installation easy
- Suitable for star or delta connections and for low or high-voltage applications
- Cost-effective online monitoring
- Field-configurable CT/ PT primary and secondary values using push-buttons

Features

- Large four-line seven-digit display with quadrant identification section and bar graph for instantaneous power-level indication
- High accuracy: Class 1.0, 0.5s, 0.2s
- Average THD measurement for voltage, current and power, up to 31st harmonic
- Measurement selection (star or delta/ 3P4W or 3P3W)
- Modbus communication via RS-485 port
- True root-mean squared (RMS) metering
- Calibration LED for accuracy test on site
- Wide and configurable current range 1-2A and 5-10A
- Wide-range auxiliary power supply, suitable for high-voltage or low-voltage installations
- Maximum demand recording
- Midnight snapshot (values) for selected energy registers
- Scroll-lock and 'Favourites Page' display support
- Expansion capability via add on modules for analogue outputs or pulse inputs/outputs
- Password protection for setup mode

Elite 440

Features	Models							
	441	442	443	444	445	446	447*	448*
P-N voltage	●	●	●	●	●	●	●	●
Average P-N voltage	●	●	●	●	●	●	●	●
P-P voltage	●	●	●	●	●	●	●	●
Average P-P voltage	●	●	●	●	●	●	●	●
Line current (L1, L2, L3 and Average)	●	●	●	●	●	●	●	●
Active / Reactive Current	●	●	●	●	●	●	●	●
Frequency	●	●	●	●	●	●	●	●
Power factor		●	●	●	●	●	●	●
Average Power factor		●	●	●	●	●	●	●
Active Power		●	●	●	●	●	●	●
Total Active Power		●	●	●	●	●	●	●
Reactive Power			●	●	●	●	●	●
Total Reactive Power			●	●	●	●	●	●
Apparent Power			●	●	●	●	●	●
Total Apparent Power			●	●	●	●	●	●
Active Total Import / Export Energy					●	●	●	●
Reactive Import (Q1+Q2) / Export (Q3+Q4) Energy						●		●
Reactive (Q1,Q2,Q3,Q4) Energy					●		●	
Apparent Import / Export Energy					●	●	●	●
Active / Apparent Forwarded		●	●	●				
Reactive Lag / Lead Forwarded			●	●				
Cumulative MD				●	●	●	●	●
Phase Angle			●	●	●	●	●	●
Power On / Off Hours			●	●	●	●	●	●
Load On / Off Hours		●	●	●	●	●	●	●
Feeder Interruptions Count (When Aux is also off)			●	●	●	●	●	●
Min / Max Values							●	●
THD Voltage **	●	●	●	●	●	●	●	●
THD Current **	●	●	●	●	●	●	●	●
THD Power **		●	●	●	●	●	●	●
RPM with Freq and VUnb and IUnb		●	●	●	●	●	●	●
Modbus on RS 485	●	●	●	●	●	●	●	●

(*) Additional modules (Two pulse input & output) can be available with Elite 447 and Elite 448

(**) THD for Voltage, Current and Power are optional in 441 to 446.

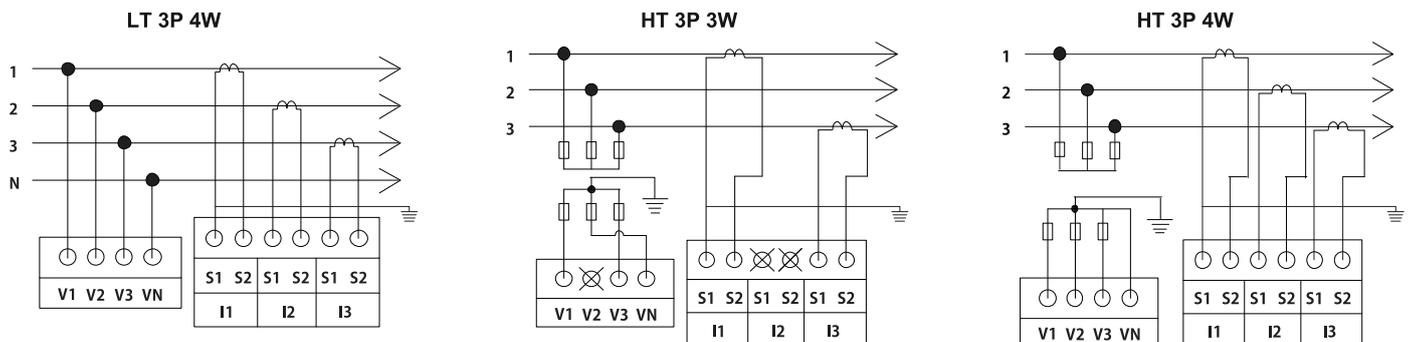
Optional software config view is available for reading and configuration

Metering Parameter Accuracy

Parameters	Accuracy Class 0.2*	Accuracy Class 0.5
Voltage	0.1	0.1
Current	0.1	0.2
kW	0.2	0.5
kVar	0.2	0.5
kVA	0.2	0.5
kWh	0.2	0.5
kvarh	0.2	0.5
Power Factor	0.2	0.5
Frequency	0.1	0.1

*0.2s available for HT-3 (5A Ibasic)

Connection Diagram



For CT/PT meter, ensure that it is connected on secondary side of instrument transformer.

In case of 3P 3WN is replaced by V2

Mechanical Dimensions

