

Description

ProM300 is a panel mounted meter providing multifunctional power analysis. It is simple and yet powerful tools, that can provide the measurement and analysis of various power parameters such as voltage, current, four quadrant power, power factor, individual and total harmonic distortion of voltage and current, etc.



Main Features

- True RMS reading with sampling rate of 128 sample/cycle
- Individual harmonics up to 31st order
- Reverse connection correction of the current transformer
- Four quadrant power, demand, maximum/minimum demand
- Bi-directional energy flow
- Class 0.5S for active energy conforming to IEC 62053-22 and class 2 for reactive energy conforming to IEC 62053-23
- 96 x 96 mm panel mount meter

Electrical Characteristics

Power supply voltage		85 to 270Vac or 120 to 380Vdc
Power consumption		<4VA
Voltage input	Direct Input	Up to 660Vac Line-Line
	VT Primary	Up to 600000V
	VT Secondary	30 to 600V
	Frequency	45-65Hz
	Impedance	1M Ω
	Overload capacity	2 x Un for 1 second
Current input	CT Primary	1 to 9999A
	CT Secondary rated	1A or 5A
	Operation range	5mA to 6A
	Impedance	<0.01 Ω
	Overload capacity	100A for 0.5 second
Maximum reading for energy		99,999,999MWh/MVarh
Backlight lighting		Off, On, 5, 10, 30, 60 or 120 seconds

Measurement Accuracy

Voltage, current	±0.5%
Active power	±0.5%
Reactive power	±2.0%
Apparent power	±1.0%
Active energy	±0.5%
Reactive energy	±2.0%
Power factor	±1.0%
Frequency	±0.2%

Communications

Interface	2-wire RS485
Protocol	Modbus RTU
Baud rate	1200 to 38400 Default set at 9600
Parity bit	Odd, even, none Default set at none
Stop bit	1 or 2 Default set at 1
Response time	<100ms
Transmission mode	Half-duplex

Environment Characteristics

Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +80°C
Humidity	<90% non-condensing
Pollution degree	2
Altitude	Up to 2000m ASL
Vibration	10Hz to 150HZ IEC 60068-2-6
Protection degree	IP51 front display, IP30 meter body

Electromagnetic Characteristics

Electrostatic discharge	±8kV contact discharge
Immunity to radiated field	10V/m, 80 to 2000MHz
Immunity to electrical fast transient	±4kV
Immunity to surges	±4kV
Immunity to conducted disturbances	10V, 0.15 to 80MHz
Immunity to magnetic fields	IEC 61000-4-8
Immunity to voltage dip	IEC 61000-4-11
Radiated emission	Class B to EN55011
Conducted emission	Class B to EN55011
Harmonic emission	IEC 61000-3-2

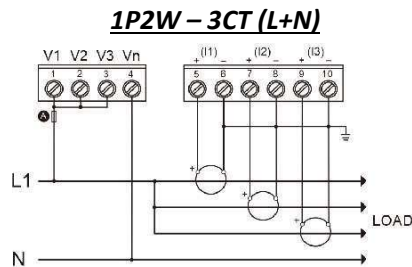
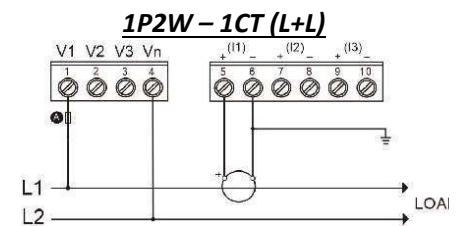
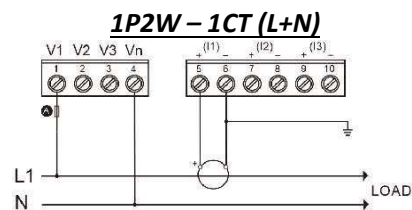
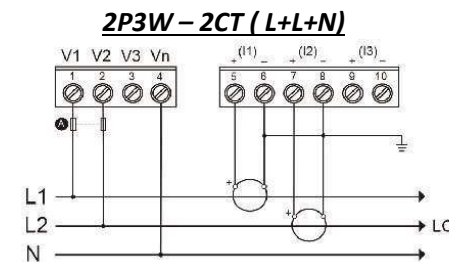
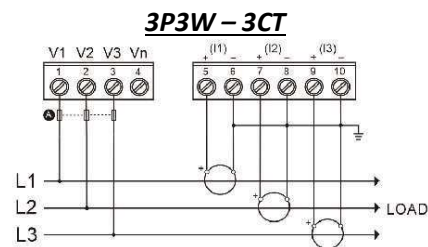
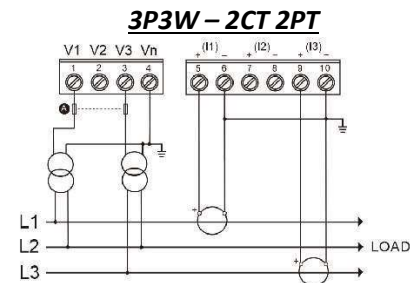
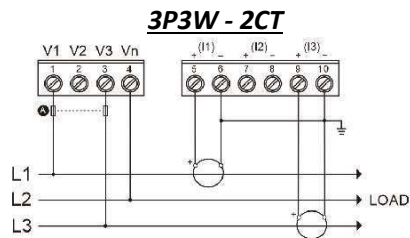
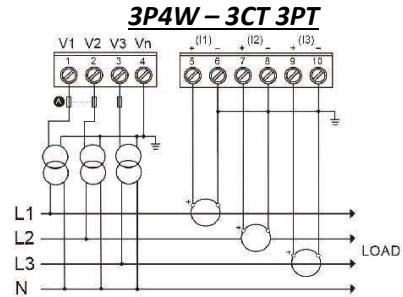
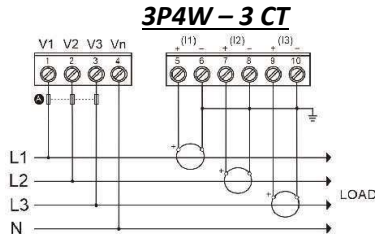
Pulse Output

Interface type	Open collector opto-coupler
Pulse constant	0.001, 0.01 or 0.1 per kWh/kVarh configurable
Pulse width	60, 100 or 200ms configurable
Reading type	Import/export/total active/reactive energy configurable
Class	A according to IEC 62503-31
Input voltage	5 to 27VDC

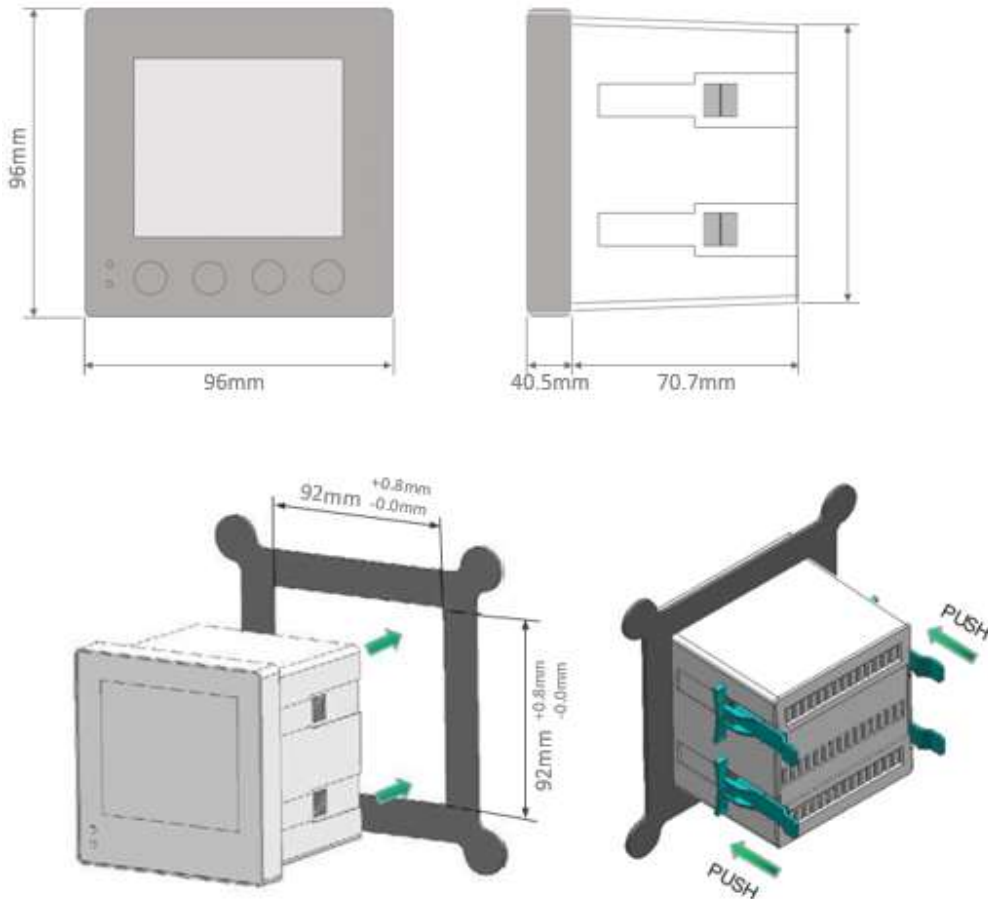
Safety

Overvoltage category	CAT III to IEC 61010-1
Measurement category	CAT III to IEC 61010-1
Power frequency withstand test	4kV for one minute
1.2/50µs impulse withstand test	6kVpeak
Protective class	II to IEC 61010-1

Typical Application



Installation Dimension



Part SKU	
Power meter with LCD display, 96x96mm, class 0.5S, 128 sample/cycle, 2 pulse output, RS485 Modbus RTU	ProM300