

ELECTRONIC SINGLE PHASE TWO WIRE ENERGY METER

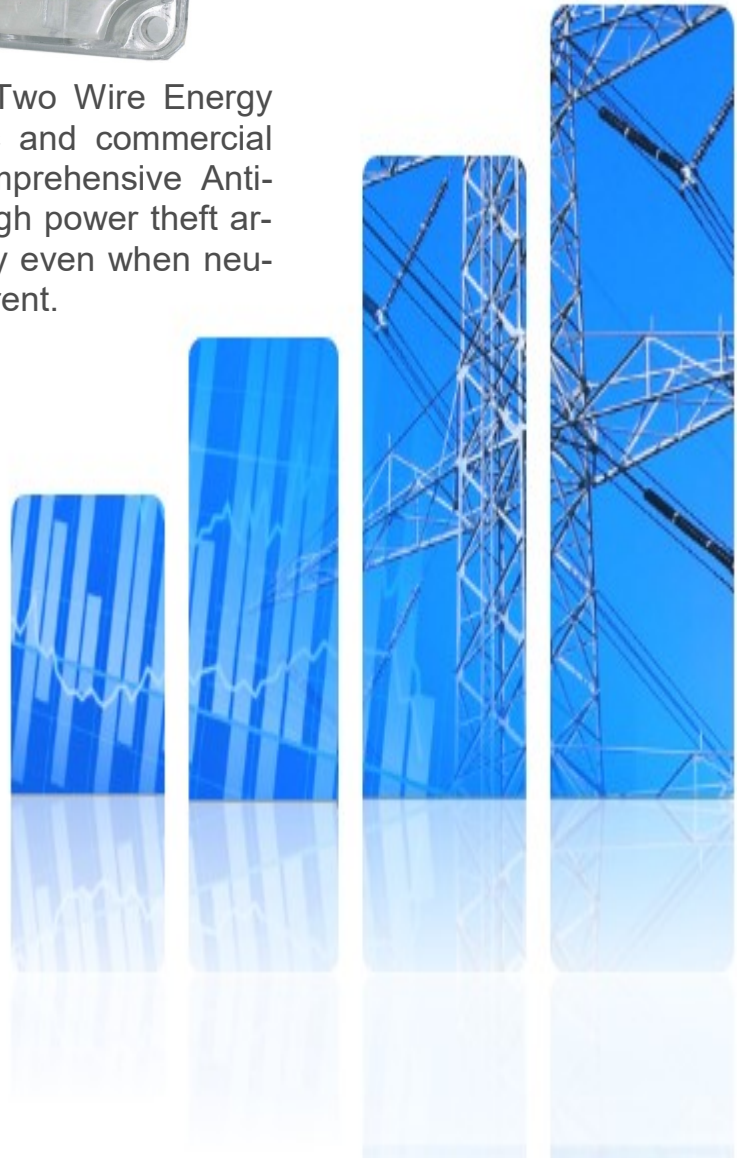


(WITH SINGLE WIRE OPERATION & DOOR OPEN FEATURE)
VTX-12



VTX-12 is Electronic Single Phase Two Wire Energy Meter mainly developed for domestic and commercial applications. This model upholds comprehensive Anti-Tampering features and suitable for high power theft areas. Meter is capable to record energy even when neutral is missing or in case of reverse current.

These meters comply with the IEC 62052-11 & 62053-21 for Accuracy Class 1.0 with optional multi-tariff features.




Vertex Electronics (Pvt.) Ltd.

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Features

- Eight digits (5 Digits+3 Decimals) register showing energy consumption (kWh).
- Display all readings in case of power outage.
- Low battery indication  when 25% life of the battery is left.
- Meter body opened indication on LCD. *OPENED*
- Error indication in case of hardware/ software faults.
- Self-diagnostic test of memory.
- Reliable LCD with ultraviolet protection.
- No effect of tilt on meter accuracy.
- Protection against dust & moisture.
- Separate LEDs for Earth, Neutral Missing, Reverse Energy & Power Indication.

Anti-Tampering Features

- **Earth:** When fan dimmer is used for tampering then Earth LED on meter name plate lights up and meter keeps on recording the energy accurately by measuring the load current (Accuracy within $\pm 2\%$)
- **Neutral:** When one of the input wire i.e. phase or neutral is disconnected for tampering then Neutral LED on meter name plate lights up and meter keeps on billing by measuring the Load current ≥ 0.1 Ib (Accuracy within $\pm 2\%$)
- **Reverse:** When meter's input and output are interchanged/ reversed to tamper the meter, then Reverse LED on meter name plate lights up, which indicate that the connections of meter are reversed. However, in this case the meter records energy accurately.
- Protection against external influence such as strong Electromagnetic field, Radar magnet, CD drive, etc.

Display Sequence of Windows

Each window displays for 5 seconds and scrolls automatically.

- Meter Serial Number
- Total kWh
- Previous Month MDI (kW)
- Current Month MDI (kW)
- Instantaneous Power (kW)

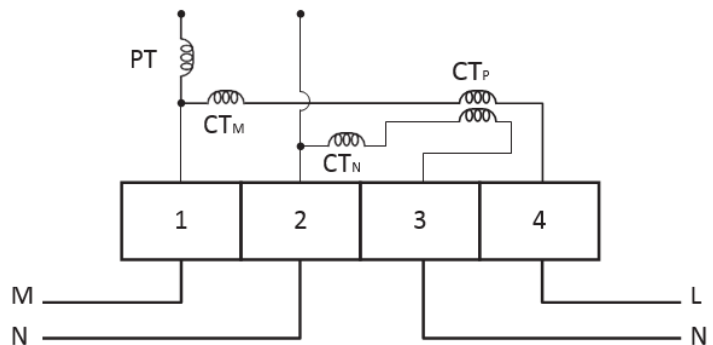
Electrical Specifications

- Operating voltage 240 Volts
- Basic/Max Current 10/40 Amp
- Reference Frequency 50Hz
- Accuracy Class 1.0
- Meter Constant 1000 imp/kWh
- Starting Current Less than 40mA
- Power Consumption
 - Voltage Circuit Less than 2W, 10VA
 - Current Circuit Less than 4VaA (at basic current)
- Initial startup time After 5 seconds of supply of rated voltage

General/Electrical Specifications

Reference Standards	IEC 62053 -21
Reference Specifications	DDS – 65 : 2003
Model Number	VTX-12
Connection Wiring	1-Phase, 2-Wire
Connection Configuration	Direct Connected
Operating Voltage	240 Volt
Basic/Max Current	10/40 Amp
Reference Frequency	50Hz
Accuracy Class	1.0
Meter Constant	1000 imp/kWh
Starting Current	Less than 40mA
Power Consumption	
Temperature	
Operating	-25°C to 60°C
Limit Range of Operation	-25°C to 80°C
Limit Range of Storage	-25°C to 80°C
Relative Humidity	Up to 95 %
Storage of Data	Non-Volatile Memory (EEPROM)

Connection Diagram



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