

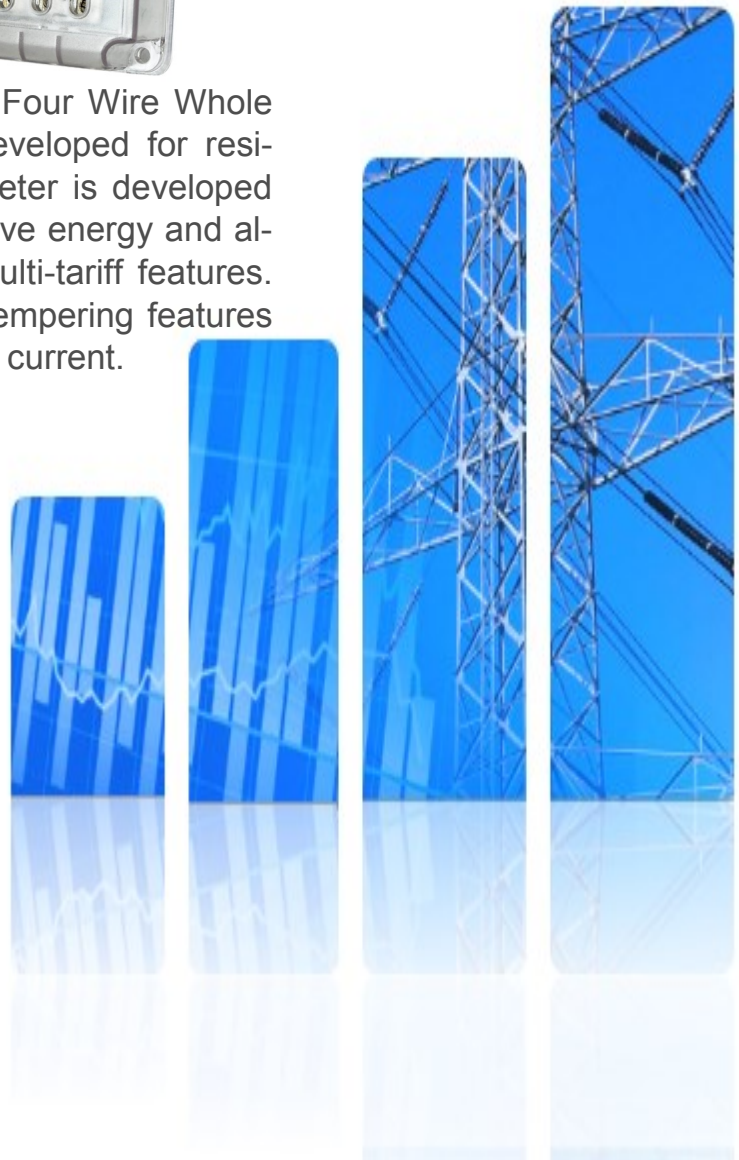
STATIC 3-PHASE WHOLE CURRENT GSM/GPRS ENERGY METER

(DLSM/COSEM COMPLIANT)
VTX-34G



VTX-34G is Electronic Three Phase Four Wire Whole Current GSM/GPRS Energy Meter developed for residential and commercial users. This meter is developed for measurement of Active and Re-active energy and also includes maximum demand and Multi-tariff features. This model upholds advanced Anti- Tempering features and suitable for high power theft areas. current.


These meters comply with the IEC 62053-21 & 62053-23 for Accuracy Class 1.0 for active energy and Class 2.0 for re-active energy measurement.



Vertex Electronics (Pvt.) Ltd.

Office: 190/S, Quaid-e-Azam Industrial Estate, Kot Lakhpat Lahore, Pakistan.
Works: 506 Sundar industrial Estate, Lahore, Pakistan.
Ph(s): +92-42-35215628, 35120190 **Fax:** +92-42-35400572
Email: info@vertex.pk, **Web:** www.vertex.pk

Features

- Satisfies IEC 62053-21 & 23, Accuracy Requirements
- Complies to DLSSM/COSEM Communication Protocol (Device Language Message Specification/Companion Specification for Energy Metering)
- Built-in relay for remotely disconnection / reconnection as per IEC 62058-31
- Eight digits (6 Digits+2 Decimals) register showing energy consumption (kWh & kvarh).
- Reading Display in case of Power Outage using internal batteries and super capacitor.
- Fulfills IEC 62053-21 & IEC 62053-23
- Active, Reactive Energy & Power Measurement
- Power Factor
 - Instantaneous (by Phase & Average)
 - Monthly Average (by Rate and Total)
- Meter body opened Indication on LCD *OPENED*
- Identification and Storage of Reverse Energy Flow Event with Date/Time Stamp
- Records Energy Accurately at Low/High Voltage
- Low Battery Indication 
- MDI TOD
- Impulse Output Display on LED for kWh
- Impulse Output Display on LED for kvarh
- Running Quadrant Display
- IrDA / Optical Communication Port for Laptop / PC
- Programming of Tariff and Seasons through PC Software
- Phase Indication (A, B, C) and Indication of Load with Blinking Circle Around the Respective Phase on LCD
- Display Off in case of Power Outage to Increase Battery Life. Display can be turned On by pressing Push Buttons.

Security Features

- The meter is protected against any loss of data and functional performance due to any external interference such as influence of CD drive, mobile phones and complies to all relevant IEC/ANSI standards.
- The meter is protected against the influence of strong magnetic field.
- Identification and storage of reverse energy flow event with date and time stamp.
- Each meter has a unique serial number in its memory which can be displayed on the LCD.
- Provides 3 Levels of Access /Security Codes.
- Meter Keeps on Operating with or without Neutral Wire.

Dielectric Strength

- | | |
|---------------------------|------------------------|
| • Power Frequency | 4 KV for One Minute |
| • Impulse Voltage 8 KV: | 1.2/50 Micro Sec |
| • Short Time over Current | 3000 Amperes for 10 ms |
| • Insulation Resistance | More than 5 Mega Ohms |
| • Creepage Distance | 20mm Minimum |
| • DC Magnetic Field | 1000 Amp/Turns |
| • AC Magnetic Field | 400 Amp/Turns |

General/Electrical Specifications

- | | |
|----------------------------|-------------------------------------|
| • Reference Standards | IEC 62053 -21 & IEC 62053-23 |
| • Reference Specifications | DDS – 60 : 2007 |
| • Model Number | VTX-34G |
| • Connection Wiring | 3-Phase, 4-Wire |
| • Connection Configuration | Direct Connected |
| • Metrology | Four Quadrants |
| • Display | LCD |
| • Display Resolution | 6 Digits |
| • Storage of Data | Non-Volatile Memory (EEPROM) |
| • Supported Protocol | IEC 62056-21 |
| • Temperature Range | |
| Specified Operating Range | -25°C to 60°C |
| Limit Range of Operation | -25°C to 80°C |
| Limit Range for Storage | -25°C to 80°C |
| • Relative Humidity | Up to 95 % |
| • Operating Voltage | 3×230/400V |
| • Basic / Max Current | 10 / 100 A |
| • Reference Frequency | 50Hz |
| • Accuracy Class | |
| For Active Energy | Class 1.0 |
| For Reactive Energy | Class 2.0 |
| • Meter Constant | |
| Active & Reactive | 1000 imp/kWh |
| • Starting Current | Less than 40mA |
| • Power Consumption | |
| Voltage Circuit | Less than 2W, 10 VA |
| Current Circuit | Less than 4VA
(at basic current) |

Event Record

More than 28 different types of Events are recorded with Date/Time Stamp:

- | | |
|--------------------|---------------------|
| • Power Outage | • Under Voltage |
| • Phase Fail | • Low Battery |
| • Reverse Energy | • Parameters Change |
| • Reverse Polarity | • Time Change |
| • Over Load | • Resistor Reset |
| • Over Voltage | |

Display of Instantaneous Quantities

- | | |
|---------------------|---|
| • Voltages | U_1, U_2, U_3 |
| • Current | I_1, I_2, I_3 |
| • Phase Indication | A, B, C |
| • Active Power (kW) | kW ₁ , kW ₂ , kW ₃ |
| • Reactive Power | kvarh ₁ , kvarh ₂ , kvarh ₃ |
| • Apparent Power | kVA ₁ , kVA ₂ , kVA ₃ |
| • Power Factor | PF ₁ , PF ₂ , PF ₃ |
| • Meter Clock | Date/Time |
| • Tariff Indication | T ₁ , T ₂ , T ₃ , T ₄ |
| • Frequency | Fr-Hz |

Relay for Remote Disconnect & Reconnect

- Meters can be Disconnected/ Reconnected remotely through backend system in case of Non Payment by the consumer or under any predefined condition.
- Meter may Auto Disconnect based on Load Thresholds against different load limits.
- Load Limit, Sanction Load and Time Interval between Disconnect/ Reconnect is programmable remotely through backend system.

Vertex Electronics (Pvt.) Ltd.

Office: 190/S, Quaid-e-Azam Industrial Estate, Kot Lakhpat Lahore, Pakistan.

Works: 506 Sundar industrial Estate, Lahore, Pakistan.

Ph(s): +92-42-35215628, 35120190 **Fax:** +92-42-35400572

Email: info@vertex.pk, **Web:** www.vertex.pk

