

Three Phase Transformer Operated Smart Meter SM-38



Overview

VISIONTEK SM-38 Three Phase ac Static Transformer Operated Smart Energy Meter from Linkwell is designed for revenue metering application for high value commercial & industrial (LT) consumers and for energy audit purposes at distribution transformer side.

Smart Meters have versatile features that enable the utilities to configure the meter remotely such as downloading the TOD tariff into the meter, configure to Bi-directional metering (Net Metering), firmware upgrade, etc....

VISIONTEK SM-38 has a field replaceable communication module that offers two-way communication for meter data transfer. The communication module is swappable between different communication technologies as specified in IS 16444 Part 2 such as 6LoWPAN or Cellular (GSM/GPRS/3G/4G LTE)

Load Profile

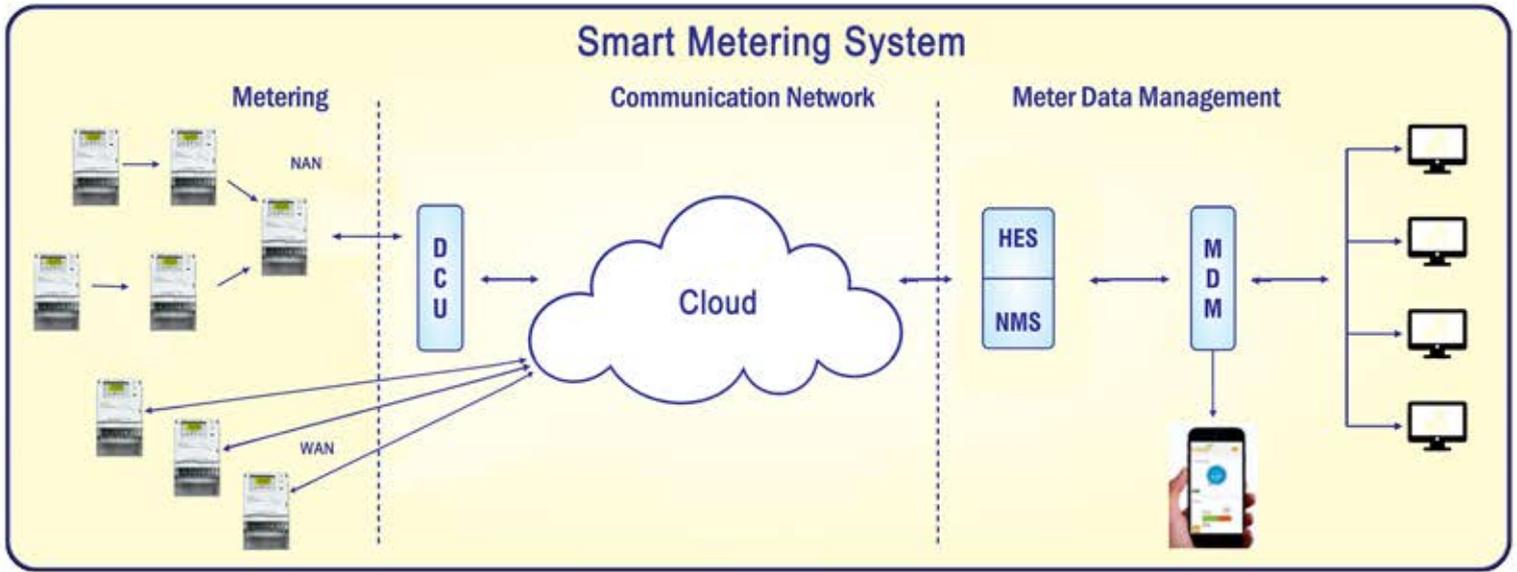
TOD Metering

Bi-directional Metering

Two-Way Communication

Features

- Class 0.5S accuracy compliance with IS/IEC standards
- Large LCD for display of measured parameters with legends
- LED indications for Calibration, Meter status and data communication
- Programmable Time of Use metering, Bi-directional(net) metering, etc.,
- Optical communication port for local meter reading
- Field Replaceable GSM/GPRS modem/NB/IoT Module/LPRF module with 6LoWPAN network protocol for remote meter reading
- Supports Push/Pull data mechanism for meter data transfer and last gasp/first breath/other event alerts
- Firmware download feature through remote communication
- Detection of meter top cover open and communication module open

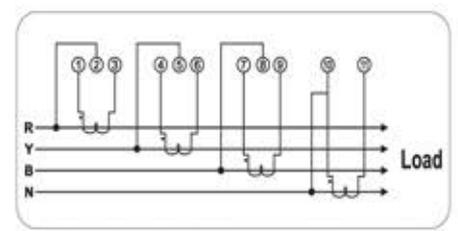


Specifications

Connection Type	Three Phase Four Wire
Accuracy Class	Class 0.5S
Standards	Complies with IS16444 Part-2/ CBIP 325/IEC 62052-11/IEC 62053-22/IEC 62053-23/ IS15959 Part 3 (for communication protocol)
Voltage	3 x 240V (L - N) Operating : -40 % to +20 %
Current	In-5A, I _{max} -10A; -/5A (Programmable CT primary value)
Power Factor Range	Zero Lag – Unity – Zero Lead
Frequency	50 Hz ±5%
Starting Current	0.2% of I _b at V _{ref} & Unity Power Factor
Power Consumption	As per IS 16444 Part-2
Display	LCD with back-light, 7 segment display for parameters and icons for tamper indications and data communication
Local Communication Interface	Optical port
Remote Communication Interface	Field Replaceable LPRF module(865 MHz)/GSM/GPRS/3G/4G LTE/NB/IoT/Sigfox/LoRa/WAN
Data Storage	Non-volatile memory with a retention time of minimum 10 years
Measured Values / Units	Active Energy, Reactive Energy Maximum Demand kW/Rising Demand* True RMS Phase wise Voltages True RMS Phase wise Currents
Maximum Demand (MD) Register	Programmable Integration period for (15 or 30 or 60 minutes); Sliding window or Fixed window method
Billing registers	Up to last 12 months bill point registers
Programmable Features	Programmable time zones/rate registers , uni-directional to bi-directional (net) metering
Data Transfer	Two-way data communication through push/pull mechanism, last gasp/first breath/other event alerts
Events Logging	Missing voltage ; voltage Unbalance ; High voltage ; Low voltage ; Current Reversal (not applicable for bi-directional(net) metering); Over Current ; Low Current ; Current Unbalance ; Current Circuit open ; Current Circuit short (bypass) ; Neutral Disturbance ;; Top Cover Open/module cover open/terminal cover open* detection; Magnetic Influence ; Low Power Factor
Temperature Range	-10°C to 60° C
Humidity	≤95%
Enclosure	IP 51
Dimensions (L x W x H) in mm	288 x 170 x 92 mm
Weight	2kg +/- 0.1 kg



LCD Display



Meter Connection Diagram

Note: We pursue a policy of continuous research and development. Specifications and features are subject to change without notice

*Indicates optional feature

