Single Phase Smart Meter SM-12

Overview

Smart Meter is an alternating current static watt-hour meter with time of use registers, internal connect /disconnect switches with two-way communication capability. VISIONTEK SM-12 Single Phase Smart Meter from Linkwell is designed to meter residential and small commercial energy consumers in single-phase distribution networks.

Smart Meters have versatile features that enable the utilities to configure the meter remotely for load shedding in case of emergency/peak load conditions or when the demand is exceeding the supply, download the TOD tariff into the meter, configure to Bi-directional metering (Net Metering), from post-paid to pre-paid mode, etc..

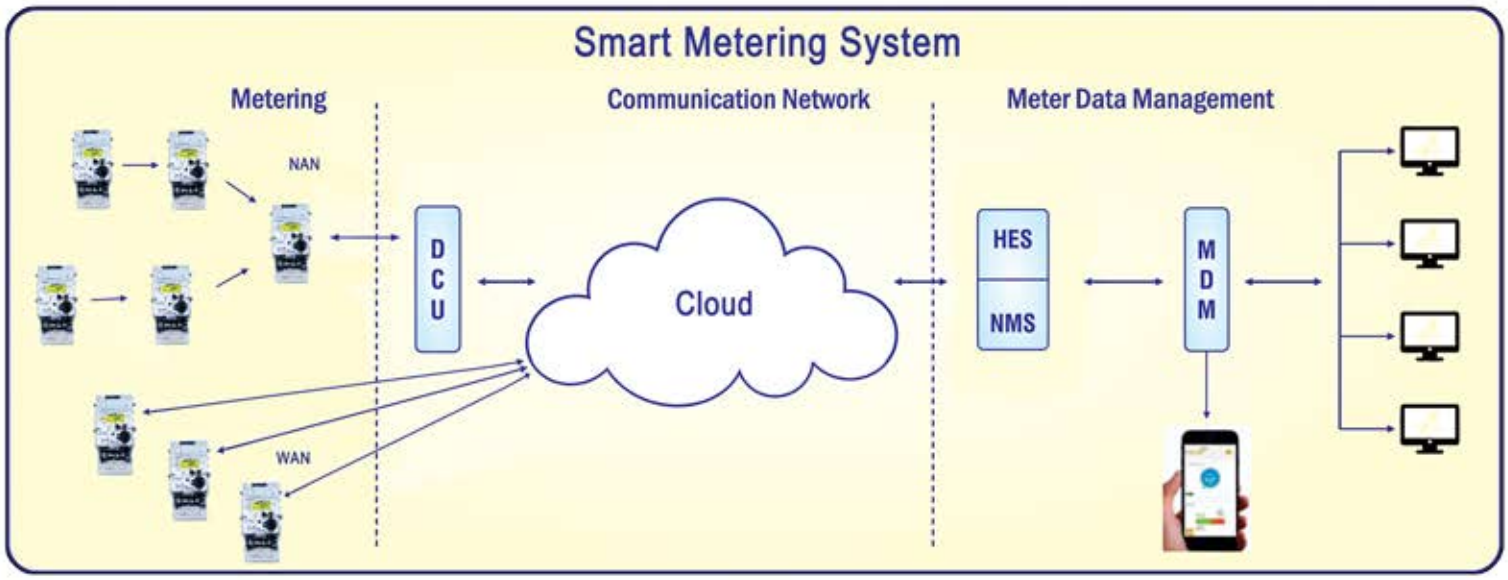
Smart Meters also enable the consumers in managing their loads and empower the consumers to make informed choices about the usage of energy real time information through mobile-phone apps.

Load Control	Two-Way Communication	Prepaid Metering	Net Metering

Features

- Class 1.0 accuracy compliance with IS/IEC standards
- Large LCD for display of measured parameters with legends & load connect/disconnect indications
- LED indications for Calibration, Meter status and data communication
- Programmable Time of Use metering, Pre-paid metering, Bi-directional(net) metering, load control feature
- Suitable for load control application such as Street Light Controlling as per Astronomical Clock
- Optical communication port for local meter reading
- Field Replaceable GSM/GPRS modem/NBIoT 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

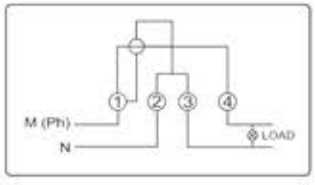
For more information on products
Visit : www.smart-energy-meters.com
or email : energymeters@visiontek.co.in



Specifications

Connection Type	Single Phase Two Wire
Accuracy Class	Class 1.0
Standards	Complies with IS 16444 Part-1 / CBIP 325/IEC 62052-11/IEC 62053-21/IEC 62053-23/ IS 15959 Part-2 (for communication protocol)
Voltage	Nominal : 240 V (L-N) | Operating : -40% to +20%
Current	5-30A, 10-60A*, 5-100A*
Power Factor Range	Zero Lag – Unity – Zero Lead
Frequency	50 Hz ±5%
Starting Current	0.2% of Ib at Vref & Unity Power Factor
Power Consumption	As per IS 16444 Part-1
Display	LCD with back-light, 7 segment display for parameters and icons for tamper indications load switch status and data communication
Local Communication Interface	Optical port
Remote Communication Interface	Field Replaceable LPRF module(865 MHz)/GSM/GPRS/3G/4G LTE/NBIoT/Sigfox/LoRaWAN
Measured Values/Units	Active Energy Maximum Demand kW True RMS Voltage True RMS Current
Maximum Demand (MD) Register	Programmable Integration Period (15 or 30 or 60 minutes);Sliding window method or Fixed window method
Billing registers	Upto 12 months bill point registers
Programmable Features	Programmable time zones/rate registers , post paid to pre-paid, uni-directional to bi-directional (net) metering
Data Transfer	Two-way data communication through push/pull mechanism, last gasp/first breath/other event alerts
Load Control	Load connect/disconnect automatically as per pre-defined current threshold, through local push-button and through remote command for pre-paid functionality
Event (Tampers) Loggingl	Neutral Missing (Single Wire) Current Reversal (not applicable for bi-directional metering) Earth load (Current bypass) Magnetic influence Top Cover Open/module cover open/terminal cover open* detection * Over Load * Neutral Disturbance * High Voltage * Low Voltage
Temperature Range	-10° C to 60° C
Humidity	</=95%
Enclosure	IP 51
Dimensions (L x W x H) in mm	254 x 139 x 83 mm
Weight	1.2kg +/- 0.1kg

LCD Display



Connection Diagram

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

*Indicates optional feature

VISIONTEK
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