Multifunctional Meter SAMARTH

 "Samarth", panel/flush mounting energy meters, is a range of multifunction metering solution for AC & DC measurement.
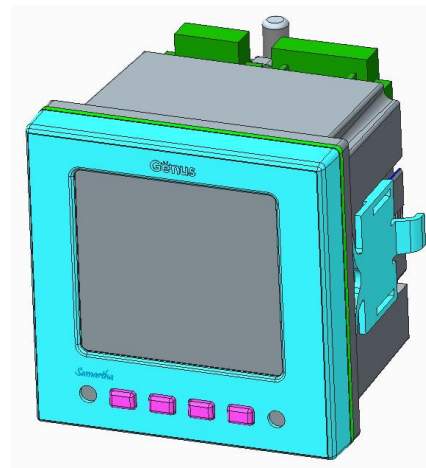
High precision measuring device have it's application in Building Management Solutions, Telecom Industry, Industrial/Grid Sub-Station Automation (SCADA), Energy Accounting Control & Relay Panels with different add-on communication option i.e. RS-485, RS-232, GSM/GPRS & Ethernet/TCP-IP etc.

Samarth-DC I Multi-Channel Direct Current (DC measuring) Energy Meter

The "Samarth-DC" is a multi-channel DC measuring instrument is a unique solution with add-on communication facilities for local & remote interfacing with Control/Data Center in its class.

The device has wide range of Direct Current (multi-channel) & Voltage measurement and Various Electrical parameters like Power/Energy/Demand available to display & store into it.

Technical Specifications - Shunt Based Multi-channel DC Energy Meter with add-on GPRS Modem & RS-485 communication port

Note: This is digitally generated picture, Actual may vary.

Electrical Parameters are-

S. No.	Items	Specified Operating Range/Parameters

1	Measured Voltage range	20-60 V dc
2	Measured Current Range	1 A to 100 A
3	Accuracy	Class-1
4	No of Voltage Channels	1
5	No of Current Channels	4
6	Size	103x96x87 mm (LxWxH)
7	System Clock	Internal Real Time clock
8	Display Mode	Auto & Push mode
9	Display Parameters	- LCD all segment check - Meter Serial No & Slave ID - DC Voltage - Current of all channels with Sign - Active Power of all channels with Sign - Date (DD: MM: YY) - Time (HH:MM:SS) - Cumulative Energy of individual channel - Total cumulative Energy - Present MD of each channel with Date & Time - Total Power-on Duration - MD Reset Counts - Load-on duration of all channels - Last 3 months MD & Energy of All channels
10	Billing parameters	Provision to store last 6 months billing data. The meter will store - - Cumulative Energy - Channel-wise Energy - Channel-wise Demand with Date & Time - Power On duration for billing month

		• Bill reset date/time.
11	Daily Energy Data	Meter stores following parameters for last 45 days, at midnight of the day • Date • Cumulative Energy • Channel-wise whole day energy consumption • Power on hours • Channel-wise duration of load hours
12	Load Survey Data	Meter stores load profile for every 30 minute block for last 45 days. Load profile includes: • DC Voltage • Current for individual channels • Demand for individual channels • Date & Time
13	Communication	• Add On GPRS modem for remote communication • RS485 Communication (Mod-bus Protocol)

Samarth I Multi function AC Energy Meter

The "Samarth" is a multifunction digital panel meter with high precision for measurement of electrical parameter like AC voltage/Current/ frequency/ Power (W/VAr/VA)/Energy.

A well suited device for CT/VT & LT-CT operated application is available in wide range of factory & field configurable parameters and communication option.

Larger LCD display enables numerous parameters representation simultaneously on Single Screen and Digital pulse input/output feature makes it best in category.

Applications

- Plant Automation & Building Management System
- Grid Substation automation & monitoring system (SCADA)
- Switchgear, Control & relay panels
- Energy Auditing & Monitoring Systems

Features

- Ergonomic & Rugged design for industrial & commercial application
- Easy programmability through keypad & software
- Four Line seven segment display along with display parameters configurability
- Measurement selection configurability of 3P4W & 3P3W,Secondary current 1A or 5A
- Field programmable CT & PT ratios with password protection
- Unidirectional /Bidirectional recording
- Indication for Quadrant of operation & Current Reversal
- Active , Reactive energy Calibration LED for accuracy test in field
- Accuracy class of 0.2S,0.5S
- Total Harmonic Distortion (THD)measurement & display for Voltage ,Current & Power
- Fixed & Sliding Window demand integration capability
- Connection check display for ease of installation
- Ethernet & RS 485 Modbus communication facility
- DI(Digital Input)& DO(Digital output) to integrate with control application
- Tamper detection & logging
- Mid Night , load survey ,Billing & TOD parameters configuration & recording
- Add on module for pulse input /output
- Base Computer Software for configuration , recorded data view & analysis