

ENERGY MONITORING SOLUTION

DESCRIPTION

Energy Monitoring Solution is designed for remote monitoring of energy usage, that is required for energy saving & optimization. It collects the parameters from energy meter, solar inverter, sensors through MODBUS RTU protocol. It transmits the data in real time using technologies like GPRS (2G/3G) / Wi-Fi / Ethernet / LoRa.

The device can be configured through SMS/Serial/GPRS based on communication technologies. All the energy meters parameters are transferred to Cloud & the consolidated report will be visible to the user. It can be accessed in mobile application. CASCADEMIC provide basic platform for cloud application & using the platform the OEM can develop their own application. It has inbuilt memory for data storage.

SPECIFICATIONS

Supply

Input Supply: (9V-30V) External supply

Rechargeable Battery Supply: 7.4V, 1100mAh (optional)

System

Processing Core: ARM Cortex M4

GSM

GSM: Quad band (850/900/1800/1900 MHz)

Protocol: TCP, HTTP, FTP

SMS Support

LoRa

LoRaWAN1.0 complaint

Supports Class A & C

128 bit AES encryption

Upto 20 dBm transmit power

Frequency support 862-1020MHz

Ethernet

Support both TCP server and client

Supports 10/100 PHY

Wi-Fi

Supports WiFi Client/AP/Router

2.4 GHz 802.11b/g/n compatible

Memory

External Flash 8MB(default configuration)

Support upto 64 MB for data storage

External Interface

2 Digital Output/Input

1 UART for debug interface

Antenna

External antenna for GSM, LoRa

Onboard antenna for Wi-Fi



KEY HIGHLIGHTS

1. Multiple communication technologies support LoRa, Wi-Fi, Ethernet, GSM/GPRS
2. Plug & Play solution of existing system & easy integration
3. Energy monitoring from Energy meters, Sensors, Solar inverter, MODBUS Slave devices

OUR OTHER PRODUCTS

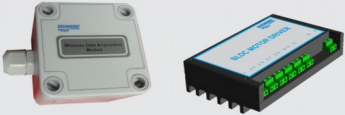
Thermal Printer & Driver Cards



Metering Adapter & Gateway



Data Logger & Motor Driver



Wireless Access Control & Battery Monitoring



IoT , Interface & Controller Modules



Indication

Power on, GSM status, Status indication

Environmental Characteristics

Operating Temperature -40°C to 85°C

FEATURE

Configuration of the device through SMS/Serial/ GPRS

Device tampering detection

Flash data storage when device fails to transmit data to server

Firmware upgrade over the air for GPRS,Wi-Fi, Ethernet

One Energy meter/RS485 Slave can be connected to one EMS LoRa module

16 Energy meter/RS485 Slave can be connected to one EMS for GPRS, WiFi and Ethernet

10 parameters can be monitored through remotely for LoRa device

More than 50 parameters can be monitored remotely in GPRS, WiFi,

Ethernet communication device

Protocol support TCP/IP, HTTP, FTP

OPTIONAL FEATURES

Rechargeable battery

IP standard enclosure

APPLICATIONS

Telecom Tower and Remote Infrastructures

Industrial Plants, Educational Institutions, IT Parks, Malls

Solar Power Monitoring

Data Centre Management

CASCADEMIC Solutions Pvt. Ltd.

With IoT and M2M being the core of development in the modern embedded era, we at CASCADEMIC develop Industrial solutions in SCADA, M2M & Growing IIoT

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