

## CASCADEMIC Solutions Pvt. Ltd.

In the era of the smart and the convergence of technologies, we at CASCADEMIC extended and evolved our decades of embedded expertise from the SCADA to the M2M & Growing IoT space.

CASCADEMIC is a Fabless ODM Solution Provider in M2M and IoT. Specializing in Wireless Remote Monitoring, Sensors, and Controls & Industrial Automation.

In the process of continuous evolution and upgradation of technology, the process and processor SoC's are evolving and becoming more and more integrated. In addition, the complexities around RF, Ultra low power, Wireless protocols, and Embedded Java & Real time firmware applications built-on many such industrial embedded devices with long term reliability and availability requirements are increasing.

By addressing the above needs from the Concept to Manufacturing Vertical Integration, we act as an ODM partner for our Customer's Intelligent System Solution needs of:

- Wireless Smart Flow Meter
- OEM Thermal Printer Solution
- Wi-Fi RFID Access Control Solution
- Wireless Sensor Networks
- Smart Automation & Control
- GPS NAVI TRACK

## ADDRESS

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## MODBUS to LoRa Converter



Long lasting battery life

Easy configuration and installation

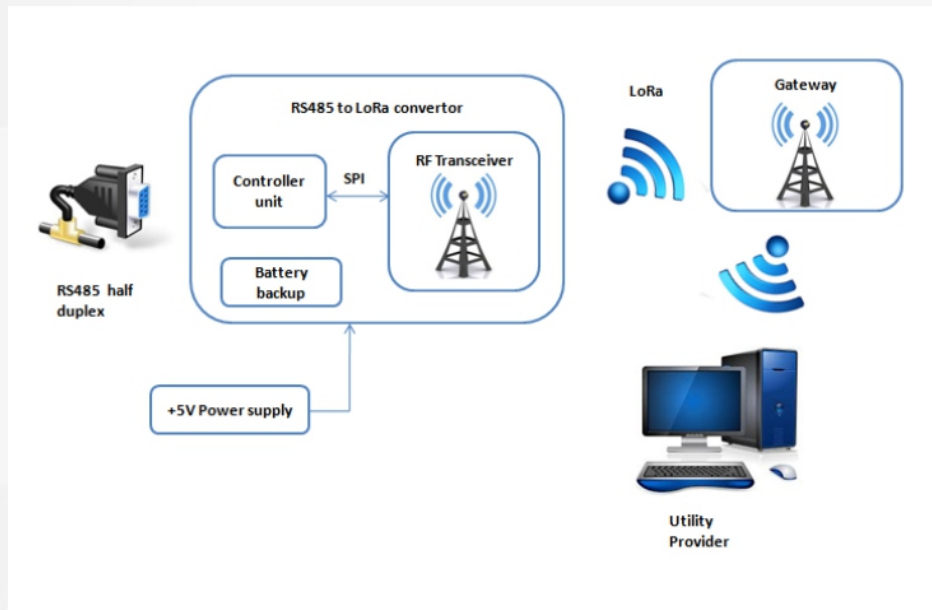
Wi-Fi, GPRS and MODBUS compatible

Secured communication using AES

## Product Description:

The MODBUS to LoRa Converter facilitates the use of the low power and longer range characteristics of the LoRaWAN technology in typical metering applications. This can be used to replace traditional human reading and send the meter reading and other parameters of the remote meters to the utility provider through LoRa. The converter collects the data from MODBUS(RTU) slave device and converts it to LoRa environment. The gateway collects the data and sends to the cloud using GPRS.

## Block Diagram:



## Features:

Input	Serial – RS485 half duplex (MODBUS RTU). Based on the MODBUS command given by the Server the adapter will read from the slave device and send to the Server.
Communication	Wireless output in the form of LoRa LoRaWAN 1.0 complaint Configurable frequency between 862 to 1020 MHz
Encryption	Provides secure communication using AES.
Range	Upto 1.2 Km Line of sight range - may vary depending on the antenna selection and test environment.
Memory	External flash memory upto 256 KB (extendable upto 8Mb).
Misc	IP66 enclosure Configurability of meter ID, date, time etc by the user through user application

## Application:

- Smart remote metering.
- Water Monitoring and Measurement.
- Gas Metering.
- Energy Metering.