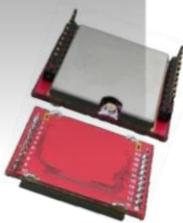# DATA CONCENTRATION UNIT

(Linux based DCU with RF 6LoWPAN, Zigbee and PLCC)

MAIN FEATURES

- Built in DLMS Client
- Manages up to 1000 meters node on (RF1 - 6LoWPAN, RF 2 - Zigbee & PLCC)
- Detects fault of device and log data and alerts to Cloud / MDAS
- Alerts during power outages and back battery for 10 Days
- During no network , the data is stored up 45 to 60 days of meter data
- Inbuilt Local Server and Scripts for Monitoring and Configuring system
- Meter Protocol Supported
    - DLMS over RF and PLCC
    - Modbus (ASCII and RTU)
    - Custom Protocol for Legacy Meter
- Meter Interface 6LoWPAN, Zigbee , PLCC Isolated RS232 and RS485
- MDAS / Cloud Interfaces: -
    - 3G / 4G / / HSPA+ / GSM / GPRS, 10/100 Ethernet , WiFi
- Meter data :-
    - Instantaneous Parameters, Load Survey, Tampers, Energies , etc…
- USB Plug and Play based Data Backup
- LED indicators for field diagnosis & testing
- Unit is suitable for poll/wall/rack mounting

Hardware Specification

- Processor - Renesas RZ A1H
- Linux 4.9 Latest Kernel based System
- Single Core ARM Cortex A9 @ 400MHz
- OpenVG1.1 2D graphics accelerator
- SD – RAM   - 128 MB
- eMMC FLASH - 1GB (Expandable)
- NOR FLASH - 64 MB (Expandable)
- Internal Local Server on Java

DATA CONCENTRATION UNIT

6LoWPAN, Radio Module, 28 dBm

High Performance, 920 – 925MHz Transceiver Module Consuming Industry's lowest Power, integrated with Renesas RL78/G1H, complying IEEE 802.15.4 e/g Standards, developed for 6LoWPAN (IPV6 over Wireless Personal Area Network)

- Renesas RL78/G1H, 16 bit MCU with integrated sub GHz Transceiver
- 2FSK/4FSK with support for data rates 50/100/200kbps
- Factory calibrated High TX Power of up to 28 dBm and RX Antenna diversity
- Industry's lowest power consumption in standby mode (6 mA at 3.3V)
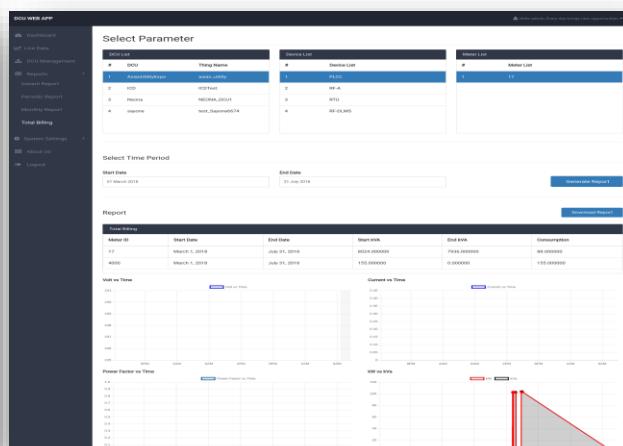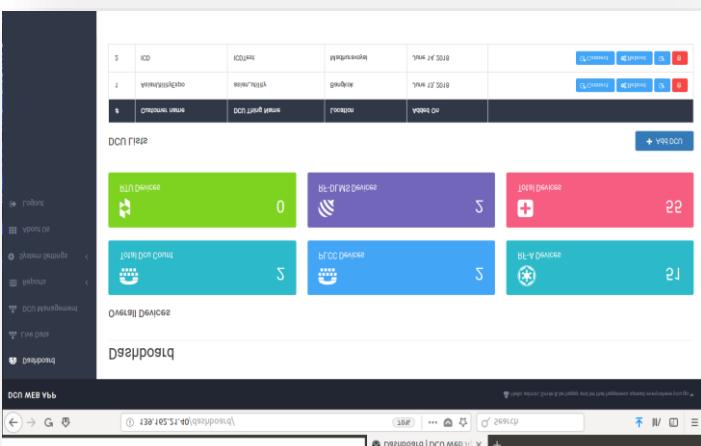- Simple UART interface for easy OEM integration

MDAS - Cloud Connection Protocol :-

➢ Direct Amazon Web Service (AWS) IoT with MQTT protocol
➢ MQTT & TLS 1.2
➢ HTTP / HTTPS Connection
➢ TLS 1.2 /SSL encryption,
➢ AWS Lamda integration to Cloud UI
➢ Custom Cloud Support

MDAS - Cloud Dash Board   MDAS - Cloud Report

Let's create your next innovation together!

THANK YOU

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