**Overview**

A DCU is an intelligent device with built-in LPR modules to acquire data from Electronic Energy Meters or Meter Interface Units (MIUs) using AMR Software. Its in-built 2G/ 3G module then transmits data to the Data Acquisition Server Interfaced with Data Logger PC. A DCU is usually installed in a sub-station. A MIU is connected to Electronic Energy Meters and enables wireless transmission of data from meters to DCUs. It eliminates conventional cabling requirements between meters and DCUs, thereby ensuring a quantum jump and data integrity of the system

**Features**

* Compact and Easy to install
* Supports any of the communication technologies (2G/ 3G).
* Supports MIOS compliant/ Modbus / IEC 62056-21/ DLMS Meters.
* IP (Internet Protocol)-based Communication, enabling simultaneous data access from hundreds of AMRs/ DCUs. Secure and reliable data transfer through VPN.
* Can be made a wireless system with the use of MIUs
* Real-time Tamper Alerts/ Event notifications to Data Centre/ Mobile phones of officials in the field through SMS.
* Online monitoring of vital instantaneous parameters such as voltages, currents, energies, power, power factors, power quality etc.
* Power Outage Management
* Remotely configurable and feasible firmware upgradation
* In-built universal power supply (1-Phase/3-Phase) with battery backup (optional)
* GPS time synchronization from central server for effective energy audit
* Two-way communication facilitating monitoring, control and administration.
* Buffering of data in the event of loss of communication or power interruption. Common Optical Probe to connect to any Meter.
* Independent of field power supply (such as 110V, 220V, 440V).
* Common Data Acquisition and Management Software at Server end for any meter type and for any communication technology.
* Type tested for protection against Environment, EMI-EMC, Surge etc.

**Application Areas**

* Smart Grid Solutions
* Automatic Meter Reading

**Technical Specifications**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Processor | CPU | High Speed ARM Cortex A7/A8 |
| Speed | Cortex A7 @900MHz  Cortex A8 @1GHz |
| C:\Users\Aamani\Downloads\2-OperatingSystem.png | Operating System | OS | Linux |
| C:\Users\Aamani\Downloads\3-Memory.png | Memory | RAM | 256MB/512MB |
| Expandable | SD card up to 16GB |
| C:\Users\Aamani\Downloads\4-CommunicationPort.png | Communication Ports | USB | USB 2.0 OTG |
| Other | Ethernet, RS232, RS485 |
| C:\Users\Aamani\Downloads\5-Wireless.png | Wireless Connectivity | WLAN | IEEE 802.11 b/g/n |
| Connectivity | GSM/GPRS |
| Other | Low Power Radio Module |
| C:\Users\Aamani\Downloads\inputoutput port.png | Ports | Digital Output ports | 24 (relay outputs) |
| Digital Input ports | 24 (opto isolated) |
| Analog Input ports | 16 (16-bit) |
| C:\Users\Aamani\Downloads\9-Dimensions.png | Dimensions | H x W x D in mm | 185 x 95 x 43 |
| C:\Users\Aamani\Downloads\10-Operating.png | Operating Conditions | Operating Temperature | 0°C - 50°C |
| Relative Humidity | 5-95% (Non-condensing) |