

WDSM 4.0

Wireless Data Sync Module



WE STAND OUT FOR QUALITY

WDSM is a 3rd Generation smart controller which collects data as well as executes commands for control operation for real time supervisory monitoring and control systems.

Standard Application features

- Communication gateway between Server and Remote Station
- Communication gateway between multiple station / meters
- Concentrating and storing data
- Power system monitoring and feedback
- Data collection via RS485 port
- Auto restart feature in case of power failure
- Integration with various protective relays with open standard protocol like Modbus TCP/IP, etc
- Inbuilt processor supports independent operation
- Supports a maximum of 32 devices (32 slaves as MODBUS master)
- Capable of auto-detecting GPRS networks for data transmission Supports MODBUS
- Scan Time as low as 0.5 seconds (Network Delay can be as long as 10 seconds)
- Easy SMS based configuration
- 8 character password protection
- Optional SD card interface for Data Backup
- Easy to install, compact in size

Introduction

This operation manual provides introductory and elementary information on electrical specification, installation and wiring. ReDA Connect is a wireless radio wave communication device and therefore should be installed in an enclosure free of air borne dust, humidity, electrical shock and vibration. The device should be installed in a well ventilated area with an easy access to mobile network and should be free from mobile network jammers and high electrical and magnetic interference.

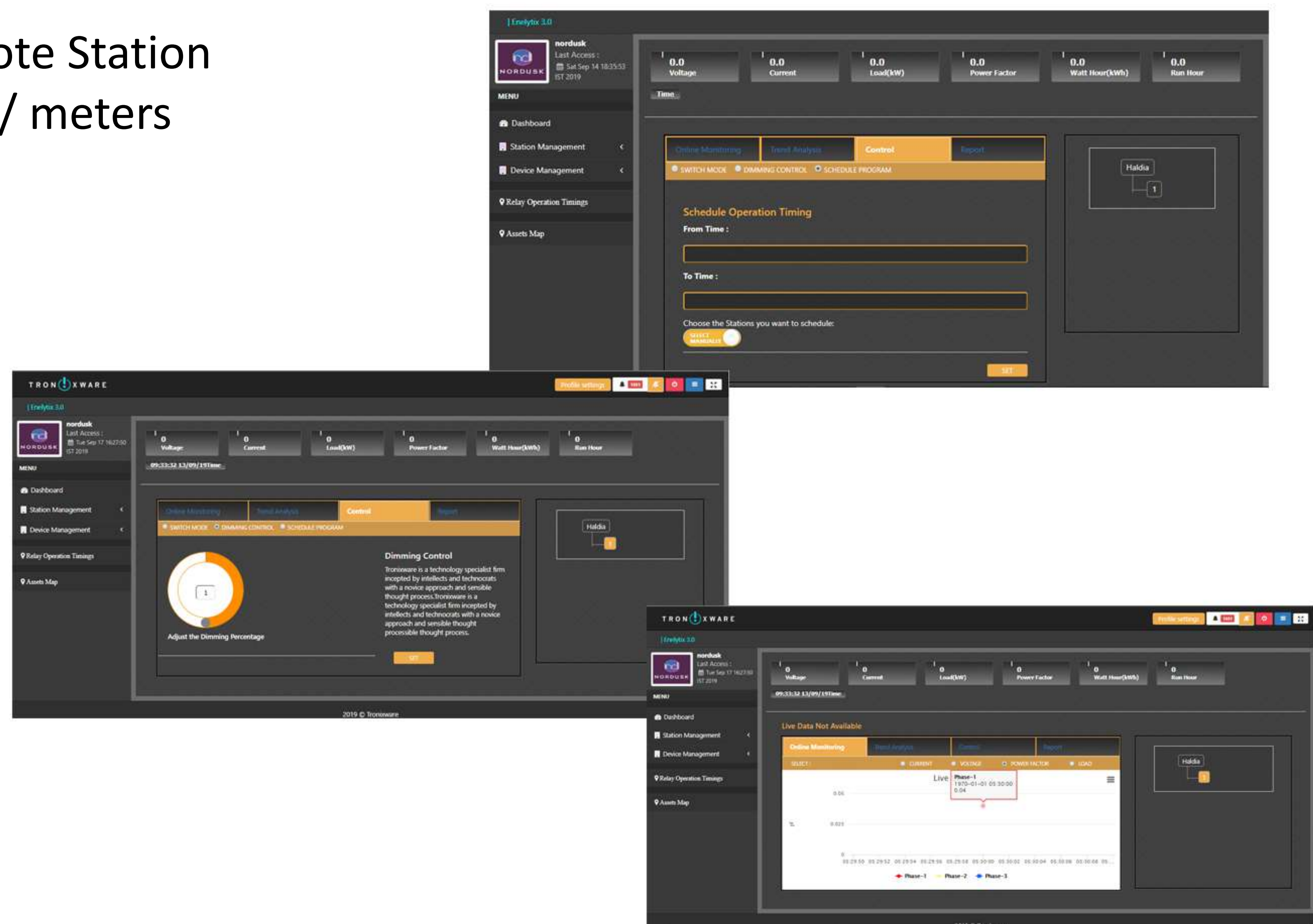
The device should not be handled with or operated on by an authorized personnel and should not be opened or dismantled (as it requires specific tools to open it), to prevent any damage to the device or any person.

To ensure perfect installation and operation of this device, please follow the manual completely and then proceed in the presence of any authorized personnel of “Tronixware”. ReDA Connect is a GPRS based module suitable for any remote application for Data Acquisition.

The device is best associated with “Enelytix – Energy Management Enterprise Solution” to meet the present day utility and demands of any kind of industrial platform to meet the present scenario for energy conservation. The purpose of monitoring facility in real time online platform is completely resolved by its data handling capability and multi tasking features. The device has the complete solution in data acquisition, data filtration, data processing and transmission to its designated server.

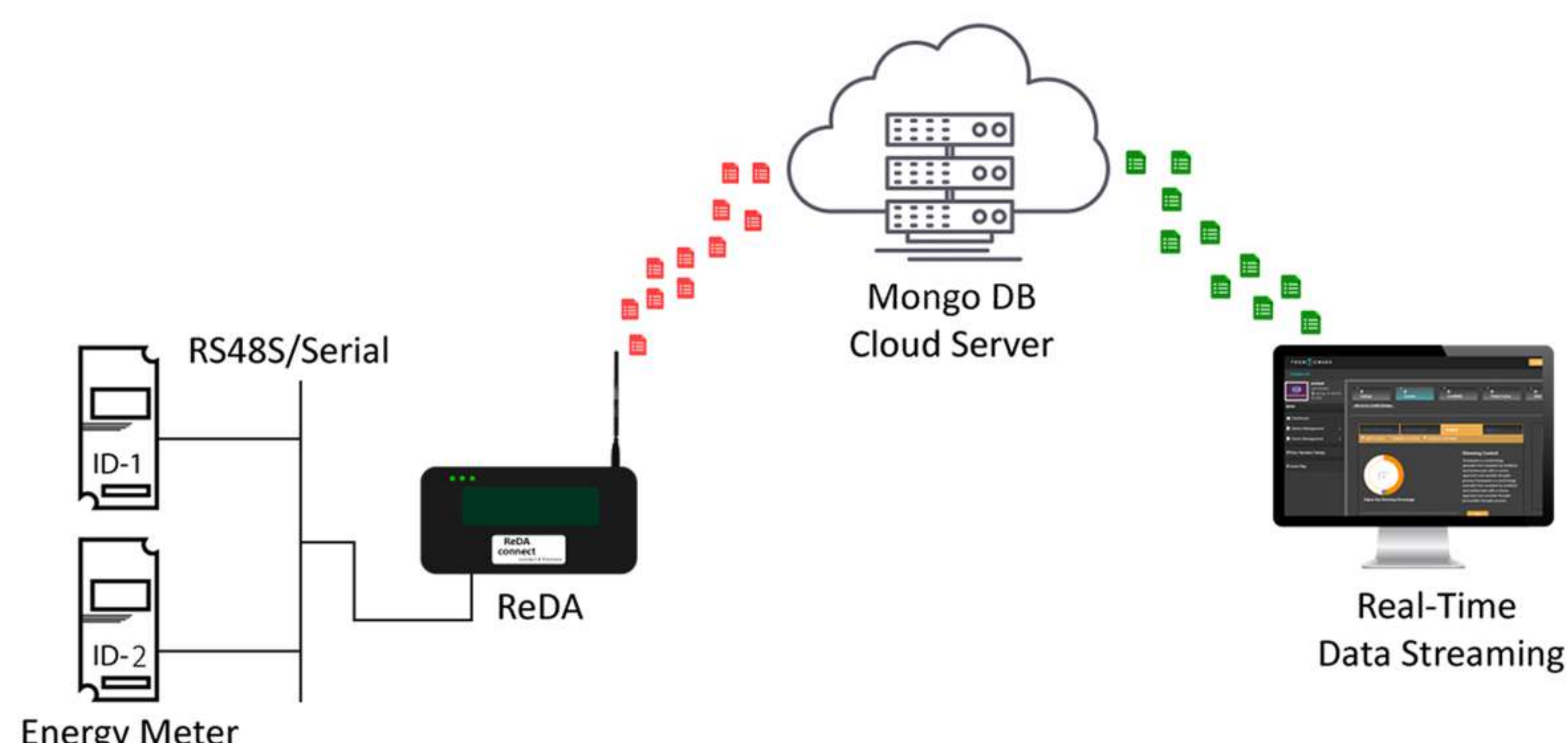
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Communication Diagnostics

- Real time diagnosis of Meters (Master & Slave devices)
- Communication link between server and device
- Diagnosis of network connectivity and strength
- Diagnosis of modem and SIM identification
- Auto self diagnosis to maintain redundancy



Communication Interface

Interface	18 PIN Micro fit Connector
Data Interface	3 PIN feed (Tx, Rx, Gnd) for Rs 485 / Rs 232 2pin for 4-20 mA/0-5 mv
Programming Interface	6 Pin feed
Communication method	RS-485 / RS-232 / 4-20 mA / 0-5v / Potential free Ios
Communication distance	<500 m
Baud Rate	4800-19200 bps - 9600 bps
Parity	No2 / odd / even (Rs 485)
Communication protocol	Modbus

Electrical Specifications

Power Supply voltage	12 volt DC, 0.5 amps
SMPS (Input)	Input : 100 – 230 volt AC
SMPS (Output)	12 volt DC, 2 amps(max)
Operating Temperature	10 - 55°C
Humidity	10 – 90 % non condensing

Standard Specifications

Product Model No	DSWM900A / 900 / sim 900
Hardware Interface	12 volt DC, 0.5 amps
Serial Port Instruction	RS485 protocol
SIM Card Interface	Standard (SIM card)
GSM 900	Tx:880 – 915 MHz Rx: 925 – 960 MHz
ZDCS 1800	Tx:1710 – 1785 MHz Rx: 1805 – 1880 MHz
Transmission Rate	300bps – 115200 bps Class 4(2w) at EGSM 900MHz Class 1(1w) at DCS 1800 MHz
Modulation Mode	GSM / GPRS – GMSK
DATA GPRS	Coding Scheme: CS-1, CS-2, CS-3 and CS-4 Supports PAP(Password Authentication Protocol) Usually used for PPP connections Integrated TCP/IP protocol Supports Packet Switch Broadcast Control Channel(PBCCH)
DATA CSD	CSD transmission rates up to 14.4 kbps and non-transparent Unstructured Supplementary Services Data(USSD) Support
TCP / IP Stack	Internet Services TCP, UDP, HTTP, FTP, SMTP, POP3
SMS	MT, MD, CB, Text and PDU mode Support transmission of SMS alternatively over CSD or GPRS User can choose preferred mode
Channel Spacing	200 KHz
GPRS connectivity	GPRS multi-slot class 10 GPRS multiple station class B