3G Modbus Data Center

RC51

- Smart Phone, Tablet, PC. Real Time Monitoring
- Automatic Synchronous Database Server
- Built-in 3G Modem (UMTS/HSDPA)
- Online Monitoring
- Easy Setting by Embedded Web Console
- Keep Data as Tag (Max. 128 tags Option)
- Support Modbus RTU, ASCII, TCP
- Data backup more than 1 Week

3G Modbus Data Center RC51 is equipment for collecting data from field devices such as PLC, Power Meter, Flow Meter, Analog Module etc. which communicate via Modbus Protocol (RTU/ASCII/TCP). Data will be store as “Data Tag” similar to process of SCADA then send the data to computer server using UMTS/HSDPA Modem (3G Modem) connect with local provider of mobile phone such as AIS, DTAC, TRUE and TOT (Thailand mobile provider). Can view data simultaneously via Smart Phone, Tablet, PC.
Specifications

Cellular Interface

Dual Band: UMTS/HSDPA (900/2100 MHz)
Quad Band: GSM/GPRS/EDGE (850/900/1800/1900 MHz)
GPRS multi-slot: Class 12
EDGE multi-slot: Class 12
WCDMA 3GPP: Release 5

Output power:
UMTS 850/1900: 0.25W
UMTS 900/2100: 0.25W
GSM 850/GSM 900: 2W
DCS 1800/PCS 1900: 1W

Data Transfer (Max.):  
HSDPA: 3.6 Mbps (DL)
WCDMA: 384 Kbps (DL), 384 Kbps (UL)
EDGE Class: 236.8 Kbps (DL), 118 Kbps (UL)
GPRS: 85.6 Kbps (DL), 42.8 Kbps (UL)
CSD: GSM data rate 14.4 Kbps

Ethernet Interface

Speed: 10/100 Mbps, Full-duplex or Half-duplex, Auto MDI/MDIX
Connector: RJ45
Standard: 10 Base-T/100 Base-T Standard
Transmission: 100 m.
Protocols: MODBUS TCP (Max. 4 Connection), TCP/IP, UDP, DHCP, HTTP
Configuration: Web Console

Serial Interface

Serial Standards:
RS-232 Through D-Type 9 Pin Connector
RS485/422 (Isolated) 5 Pin Terminal Block
Loading: RS485/422 Max 32 Unit
Distance:
RS-232 Length 15 m.
RS-485/422 Length 1 Km.
Protocol: MODBUS RTU, ASCII

Serial Parameter
Baud Rate: 4800, 9600, 19200, 38400, 57600, 115200
Data Bits: 7, 8
Stop Bit: 1, 2
Parity: None, Odd, Even

System Requirement
Web Server: Apache, IIS
Script: PHP
Database: MySQL, SQL Server

Record

Storage Interface: 256 Mbytes
Data Capacity:
@ 1 Tag = 22,369,621 Records
@ 80 Tags = 818,400 Records
Sampling 1 min. = 568 days
Sampling 10 sec = 94 days
@ 128 Tags = 516,222 Records (Optional)
Sampling 1 min. = 358 Day
Sampling 10 sec = 59 Day

Power Requirements
Power Supply: 12 to 24 VDC
Power Consumption
Standby: 120 mA @ 12 VDC (1.5 W)
Upload Data: 200 mA @ 12 VDC (2.5 W)

Environmental Limits
Operating Temperature: 0 to 55 °C
Operating Humidity: 5 to 95% RH
Storage Temperature: 0 to 70 °C

Physical Characteristics
Dimension: W30 x H122 x D98 mm.
Mounting: DIN Rail

Warranty
Warranty Period: 5 year

Ordering Information
Specify Data Capacity
Example
RC51/80 Tags

Package Checklist
1. RC51 2. LAN Cable 3. Manual