

QD-1000

Data Logger cum Remote Terminal Unit With GSM/GPRS, GPS and Ethernet

Salient Features

- 8 High accuracy Analog Inputs (4-20mA or 0-10V)
- 8 Digital Inputs and 8 Digital Outputs
- RS232 and RS485 ports for data acquisition
- Optional SDI and HART Communication ports
- 16x2 OLED display with 3x3 keypad
- Upto 64 MB serial Flash and Upto 16K FRAM
- Upto 32GB SD card and USB pen Drive support
- Inbuilt GPS (Optional)
- Supports TCP, HTTP and FTP protocols for data communication
- Supports MQTT protocol for telemetry applications
- Configurable automation Logic for digital outputs
- External Watchdog timer



Functional Features

- Data Capturing
 - ▶ Monitor analogue and digital inputs and log captured data
 - ▶ Monitor serial ports and log data received at the serial port.
 - ▶ Act as a master device and capture data from one or more devices connected to RS232/RS485 ports.
 - ▶ Supports standard protocols like MODBUS or proprietary protocols for master slave communication.
 - ▶ Firmware can be customised to support proprietary protocols
- Data Logging
 - ▶ Highly reliable serial flash which can store up to 64 MB of data
 - ▶ SD card which can store up to 32 GB of data.
 - ▶ Store data for different intervals in different files in SD card
 - ▶ Copy data to external USB drive
- Automation, Remote Control and Remote Monitoring
 - ▶ Simple configurable logic for each Digital Output based on time, week day, Analog input values and status of Digital Inputs/Outputs
 - ▶ Remote operation of Digital Outputs using SMS Commands or commands from server using MQTT or HTTP/TCP responses
 - ▶ Generation of alerts on changes of Digital Inputs/Outputs and/or when crossing threshold limits of Analog Values
 - ▶ Sending SMS messages to one or more numbers and/or messages to Server on each alerts
- Data Communication
 - ▶ Communicate data to the external world through Ethernet port or through GSM/GPRS network.
 - ▶ Supports various protocols like TCP/IP, HTTP, FTP etc
 - ▶ Supports MQTT protocol which is a common standard for M2M communications.
- Configuration
 - ▶ Windows utility to configure the logger through serial port
 - ▶ Configure through browser by connecting it to a LAN or directory to the PC through Ethernet port
 - ▶ Configure parameters by simple SMS commands from Authorised Numbers
 - ▶ If MQTT protocol is used, configuration by publishing configuration messages.
- Other Important Features
 - ▶ Over the air updation of the firmware through GSM/GPRS network
 - ▶ Software updation from USB pen drive
 - ▶ External watch dog timer in case of firmware crash

Hardware Specifications

- ARM Cortex M4 Processor with
 - ▶ 120 MHz clock speed :150 DMIPS performance
 - ▶ 1MB Flash and 256KB single-cycle System SRAM
 - ▶ 6KB of EEPROM
 - ▶ 10/100 Ethernet MAC and PHY with IEEE 1588 PTP hardware support
 - ▶ Watchdog timer
- Storage
 - ▶ 16MB Serial Flash (Expandable upto 64MB)
 - ▶ 2KB FRAM (Expandable upto 16KB)
 - ▶ SD Card upto 32 GB
 - ▶ USB OTG Compatible to standard USB Pen drives
- Analog Ports
 - ▶ 8 Number of Delta Sigma Analog inputs with 24 bit resolution
 - ▶ Option to configure for 4-20mA, 0-5 Volts or 0-10 Volts sensor inputs
 - ▶ Option for using high tolerance resistors for 4-20mA for higher accuracy
- Digital Inputs/Outputs
 - ▶ 8 Number of Digital Inputs
 - ▶ 8 Number of Digital Outputs
- Communication Ports
 - 10/100 Ethernet(MAC) Port,PHY with IEEE 1588 PTP hardware support
 - Two RS232 ports
 - One RS485 Port
 - One USB port
 - One SDI Port (Optional)
 - One Hart Port (Optional)
 - One CAN port (Optional)
 - Ethernet port
- 16 x 2 OLED display
- 3 x 3 Keypad
- GSM/GPRS Module Specifications
 - ▶ Built in ARM processor with OpenCPU support
 - ▶ GSM 850/900/1800/1900MHz GPRS Class 10
 - ▶ Operating Temperature: -40 ~ +85c
 - ▶ Sensibility: -109dBm(850/900MHz); -108dBm(1800/1900MHz)
 - ▶ Sleep mode for low power consumption
- GPS Specifications
 - ▶ Ublox Max-7 Module
 - ▶ 56 Channels,GPS L1C/A,SBAS L1C/A,QZSS L1C/A
 - ▶ Cold Start 30 s, Warm Start :28 s, Hot Start :1s ,Aided Starts 5 s,

Applications

- Weather Station Monitoring
- Environment Monitoring
- Industrial Automation
- Remote Monitoring for Windmills

TRAIAC

www.traiac.in info@traiac.in
+91-7012776582 9544766026