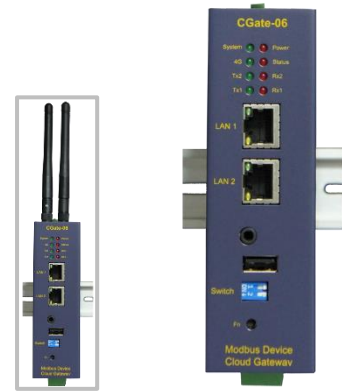


- ✓ Suitable for Modbus Devices IoT Application
- ✓ Cloud monitoring and cloud backup applications
- ✓ Web instant monitoring and management functions
- ✓ Active Instant Modbus Slave device Monitoring Management
- ✓ Active save the operation information of Modbus Slave device
- ✓ Active Alert function
- ✓ MySQL real-time monitoring point status database
- ✓ MQTT instant messaging function
- ✓ Modbus proxy server function (Modbus Agent)
- ✓ 4G communication uplink interface Expandable
- ✓ Dedicated Wi-Fi wireless configuration mechanism for easy installation and maintenance



Product Features

☒ Easy Setting, Plug & Play

Just need to connect the various Modbus devices to CGate-06 and complete basic settings, CGate-06 will take the initiative and regularly to read the information and store it in SQL database. No additional program development, just through the Web Console can reach all the basic operations.

CGate-06 can set of Modbus devices by "adding" the new devices. Users can add other undefined Modbus Slave devices by themselves to make the types of devices that can be connected more complete.

☒ Active Alarm

CGate-06 could have exclusive alarm parameters for its connected devices and specified monitoring point individually. When an alarm occurs, in addition to issuing an Email notification, it can also be extended through the Modbus DO module (eq. LLD-ModbusIO- 02), for instant DO change alert notification.

☒ Modbus proxy server function (Modbus Agent)

CGate-06 can integrate Modbus Register and Coil of all connected devices into its own Register and Coil. The remote monitoring host or HMI can serve as the Modbus-TCP Master for remote management.

☒ Web HMI, full-featured, easy to operate(web console)

Web Console functions in CGate-06 allow users to cross-platform in different O.S. (Windows \ Linux...) \ different hardware environment (PC \ Pad \ Smart Phone...) \ by simply using the graphic interface displayed in built-in standard Web Browser on the host \ easy to understand and easy to use \ which can make real-time monitoring \ settings \ operating information query and upgrading operations ◦

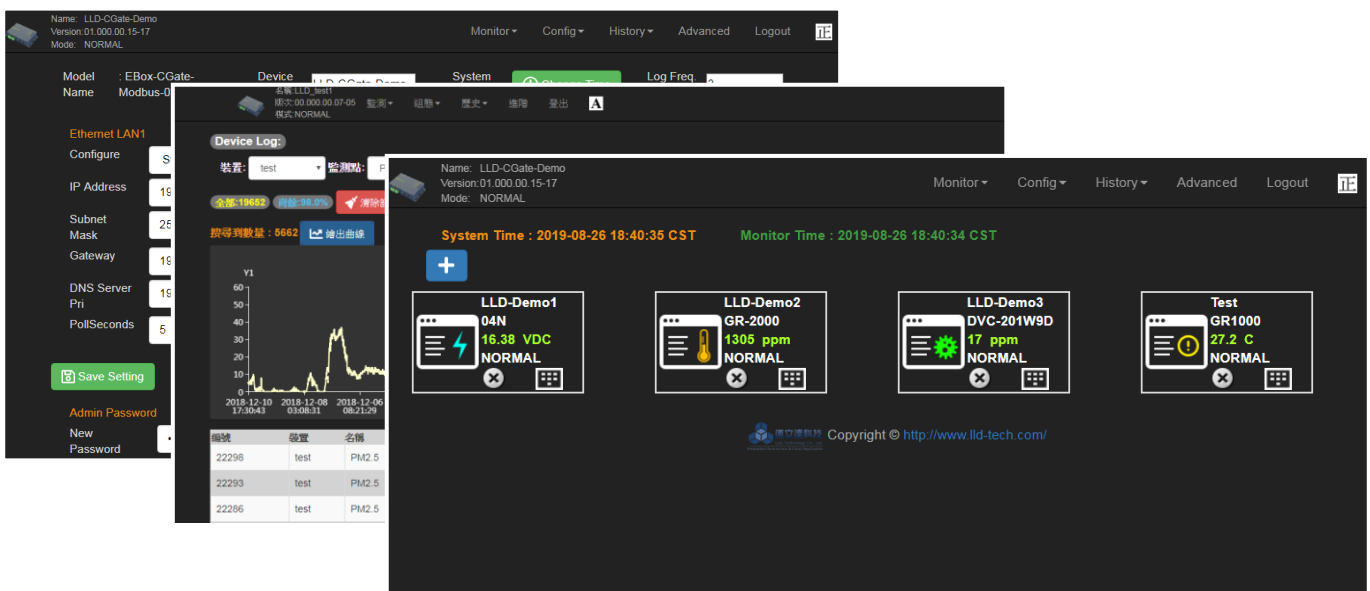
☒ Database Architecture, easy for Cloud application

CGate-06 adopts SQL-Based database architecture \ mainly recorded the machine and operation related settings, also stored in the system record of the machine ◦ CGate-06 operation status log (Log) can be stored in the local storage space, but also can be expanded by SD card capacity.

The database stored in CGate-06 can achieve the database synchronization request through standard SQL database functionality to be read from remote or cloud host, to facilitate the subsequent data analysis jobs

☒ MQTT communication function

CGate-06 supports MQTT information publishing (publish) and subscription (subscribe) functions, and with the JSON data format, it is easy to synchronize information with most current cloud platforms.



Product specifications

Applications

Modbus-RTU Instant device monitoring and management

- ▶ Type of Connecting devices : Modbus-RTU / Modbus-TCP Slave
- ▶ Total monitoring points : 1024 (per CGate-06)
- ▶ Single device monitoring points : 32 (each Modbus Slave device)
- ▶ Max. no. of connected devices@RS-485 : 8 (less than total 256 monitoring points)
- ▶ Max. no. of connected devices @Ethernet : 32 (less than total 1024 monitoring points)
- ▶ Monitoring : Real-time Status

Web Monitoring

- ▶ Function : Modbus device real-time status 、 System Parameters setting
- ▶ Protection : Login password
- ▶ Display language : TC 、 English
- ▶ Advanced function : Firmware upgrade
- ▶ Remote connection : 5 max.

Operation Log

- ▶ Content : System operation status
- ▶ System status record : 10,000 nos. (System log)
- ▶ Monitoring point status record : 8GB (>10M nos. device log.)

Database Application

- ▶ Function : Modbus device real-time status 、 System record
- ▶ Specification : MySQL Compatible

Communication Function – Monitoring points

- ▶ Instant Status Upload : MySQL 、 MQTT 、 Modbus-TCP
- ▶ Control order issued : MQTT 、 Modbus-TCP

Advanced Modbus protocol application: Modbus Agent

- ▶ Integrating information from Modbus-RTU devices becomes the monitoring points of CGate-06 itself
- ▶ Protocol : Modbus-TCP Slave
- ▶ Modbus-TCP Slave device integration : 1,024 points max.
- ▶ Remote Modbus-TCP Master connection : 4 max.

Parameters Configuration

- ▶ Connection Interface : Ethernet 、 Wi-Fi (LLD-WiFi-A needed)
- ▶ Operation Interface : Web

Type of Connecting Devices

User defined Modbus Slave Equipment

- ▶ Communication Format : Modbus-RTU 、 Modbus-TCP
- ▶ Modbus-RTU Slave Address 1~127 / UID : 0~127
- ▶ Coil/Register : 32 max @ 1 Modbus Slave device
- ▶ Communication Interface : RS-485, Ethernet
- ▶ RS-485 Baud Rate : 1,200 ~ 115,200 bps
- ▶ RS-485 Parity Bit : None, Even, Odd,
- ▶ RS-485 Data Bits : 5, 6, 7, 8
- ▶ RS-485 Stop Bit : 1, 2 bits

Ordering Information

- CGate-06** IoT Modbus Devices Cloud Gateway
- CGate-06-4G** IoT Modbus Devices Cloud Gateway 4G version

Optional Accessories

- LLD-ModbusIO-02** Modbus I/O Expandable Control Module
- LLD-WiFi-A** 2.4GHz USB2.0 WiFi Adapter
- LLD-4G-A** Mini-PCIe 4G Module (SIM Card excluded)
- DK-P02** Plastic DIN-Rail Kit

Hardware

- ▶ System Core : Allwinner H3 1.2GHz (ARM® Cortex-A7)

Wired Network Interface

- ▶ Quantity : 2
- ▶ Type : 10/100BaseT Ethernet
- ▶ Connector : RJ45

Wireless Network Interface - Expandable

- ▶ 4G Mobile communication : Advanced 4G version support
- ▶ Wi-Fi : Optional WiFi adapter needed(for configuration only)

RS-485 Modbus-RTU Interface

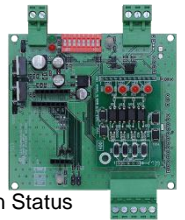
- ▶ Quantity : 2
- ▶ RS-485 Signal : Data+, Data-, GND
- ▶ Built-in Terminal Resistor : 120/600 Ω · setup by DIP Switch
- ▶ Pull High/Low resistor : 1K/10K Ω · selected by DIP Switch
- ▶ Protection : 2KV ESD Static protection, 400W Surge protection
- ▶ Connector : 5.00mm 3-pin Pluggable Terminal Block x 2

Instant Alarm DO

- ▶ Corresponding I/O Module : Modbus-RTU Modules
eg. LLD-ModbusOI-02 + ModIO-4DO

Simple Human Interface

- ▶ Dip Switch : 2 points
- ▶ LED Indicator : power, network, serial port, operation Status
- ▶ Buzzer : 1 set



Log backup expansion

- ▶ Micro SD * 1 (need to open the case)

Power

- ▶ Working Voltage : DC 9~24VDC
- ▶ Power Connector : 5.00mm 2-pin terminal block
- ▶ Power Consumption : <24W (Not include USB device connected)

Reserved Interface

- ▶ USB: 1 (A Type)

Others

- ▶ Real Time Clock : 1 set
- ▶ Applicable Temperature/Humidity : -20~70°C / 20%~80% RHG
- ▶ Material/Dimensions : 102.6 x 130.8 x 40 mm
(fix boarder incl., terminal block excl.)

- ▶ Certification : CE, FCC

Exterior Schematic diagram

