CM310 DTU

Product Introduction

Caimore Industrial GSM/GPRS MODEM CM310, is a SMS and Internet access devices embedded with industrial wireless module. It is of standard industrial design, SMS support PDU and TXT formats, and has the function of sending and receiving Chinese and English and other language text message and accessing to Internet. It provides serial RS232 standard interface to connect directly with the user's computer or industrial control devices.

The company provides text messages sending and receiving software for customers to test products, send and receive text messages; also provides Short Message group-sending software, enable customers to send mass messages such as news and greetings; company also offers DLL (dynamic link library), for customers to develop their own message software. The device supports serial I / O hardware reset, to restart at any time. Supports standard AT command.

CM310 has been widely used in water conservancy alarms, base station alarms, centralized electricity meter reading, water meter centralized meter reading, heating network monitoring, gas monitoring, water conservancy monitoring, environmental protection testing, weather testing, earthquake monitoring, traffic control and other

Model No.

Model No.	Interface Type	Network	RS232	English Version
CM310	DB9 Interface	2G	Support	Support

Technical Parameters

Device Interface Diagram

CM310 Accessories

Power Connector	Serial Cable	Antenna

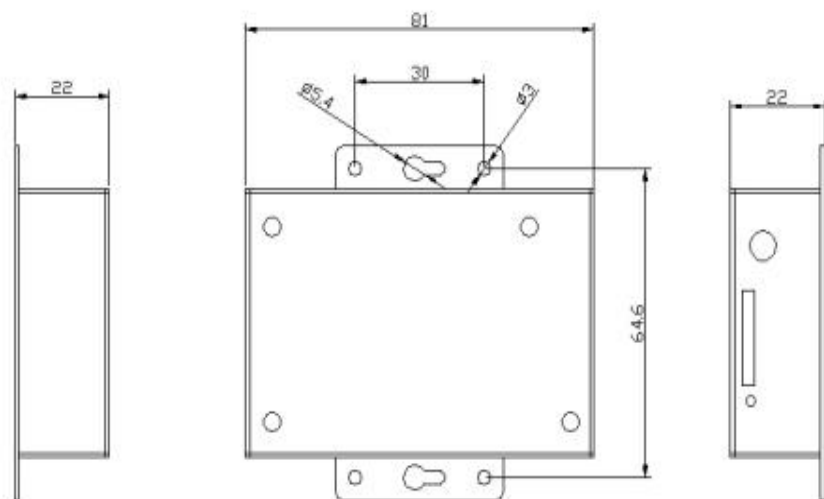## Industrial Design

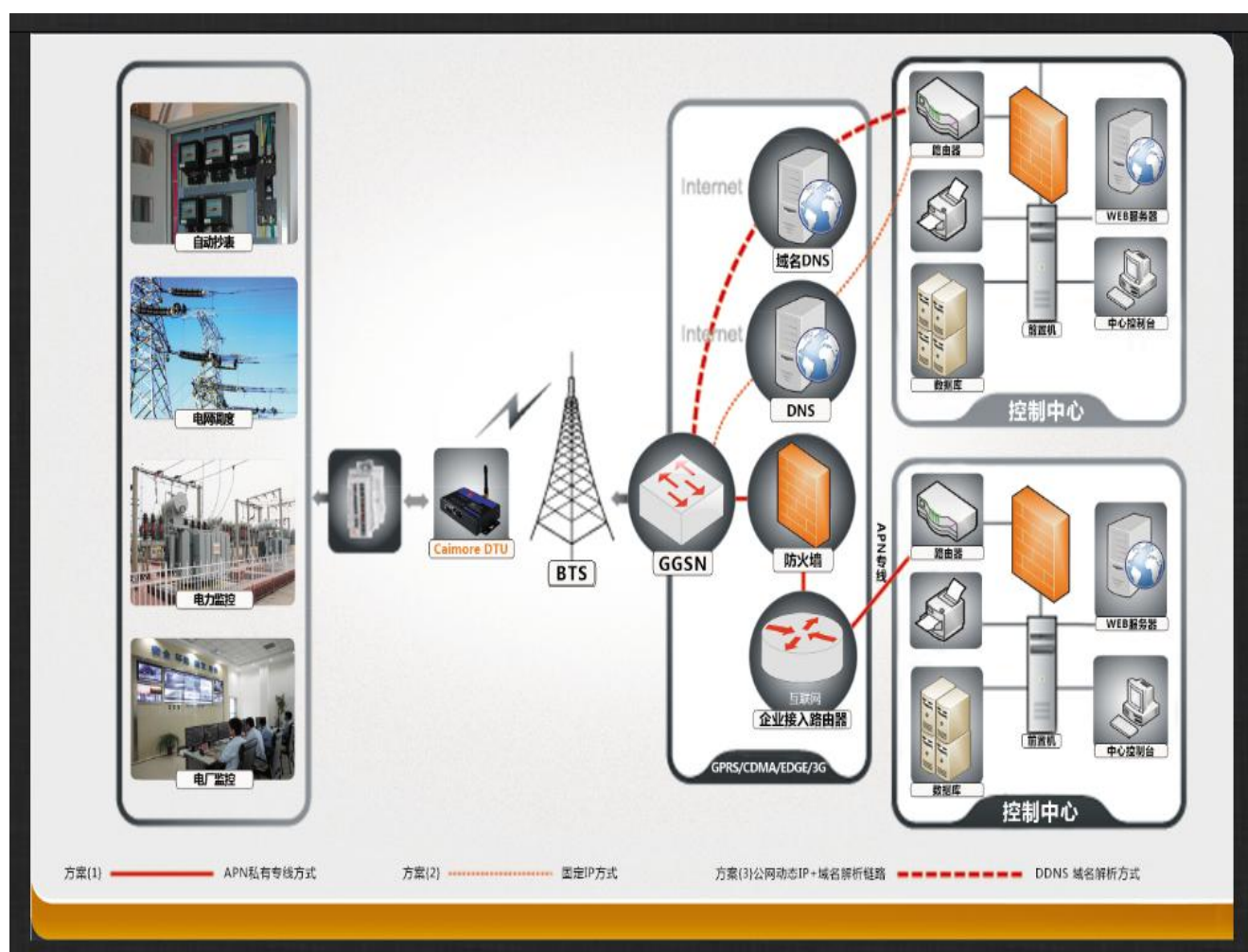| Industrial wireless module	Using industrial wireless module, with strong anti-interference and stable transmission.
Strengthened circuit board	PCB followed the principles of 20H and 3W, meanwhile all products of circuit boards used high-quality materials to ensure the plate material stable and reliable.
Industrial components	Device components use strictly screened industrial-grade components.

Model NO.	CM310
Cellular Parameters	
Network	GSM/GPRS
Standards and Frequency Bands	Support EGSM900/GSM1800MHz dual-band, GSM800/900/1800/1900MHz quad band optional Support GSM phase 2/2+ Support GPRS multi-slot class 10, class 12 optional
Coding Scheme	CS1 ~ CS4
Communication Bandwidth	Theoretical bandwidth: 171.2Kb/s; practical bandwidth: 100Kbits>X> 20Kbits
Transmit Power	GSM850/900：<33dBm；GSM1800/1900：<30dBm

Receiver Sensitivity	<-107dBm
Serial Port Parameters	
Data Bit	7, 8
Stop Bit	1, 2
Parity Bit	No parity, Odd parity, Even parity, SPACE and MARK parity
Serial Speed	110bps ~ 230400bps
Flow Control	None flow control, RTS / CTS hardware flow control or XON / XOFF software flow control
Interface	1 * RS232 serial port
Interface	
Indicator	Power / ACT / Online
Antenna Interface	Standard SMA female interface,50ohm, optional 3M/5M/10M/15M antenna extension cable, meet the different needs of customers.
UIM Interface	1.8V/3V/5V standard putter user card interface, built-in 15KV ESD protection.
Voice Interface	Standard headset interface (requires software)
Power Interface	Standard 3-pin power jack.
Power Supply	
Supply Voltage	Wide voltage design, DC7V to the DC32V power supply directly to the device, and built-in power supply over-voltage protection and reverse current protection
Standard Power Supply	DC9V/500mA
Average Communication Current	90mA@+9VDC
Communicating Instantaneous Peak Current	1.0A@+9VDC
Standby Current	<15mA@+ 9VDC
Operation System	
OS	WINDOW / LINUX
Physical Features	
Shell	Metal shell: metal case, anti-radiation, anti-interference, shell and system security isolation, lightning protection design, meet the power requirements of safety regulations, protection rating IP30, particularly suit for harsh industrial control environments.
Product Dimension	81*55*20 mm(Antenna and fixer are not included)
Package Size	298*226*60mm
Weight	0.41kg
Other Parameters	
Operating Temperature	-25ºC ~ +65ºC
Extended Operating Temperature	-35ºC ~ +75ºC
Storage Temperature	-40ºC ~ +85ºC
Relative Humidity	95%(No condensation)

Installation Dimension

Product Application

Typical application

Power Industry
- ✧ Street lamp monitoring
- ✧ Meter monitoring
- ✧ Computer room monitoring
- ✧ Automatic remote control system for power distribution network
- ✧ Remote meter reading

Transportation Industry
- ✧ Traffic instructions
- ✧ Vehicle induction
- ✧ Highway monitoring
- ✧ Traffic light control and photo transmission

Water conservancy industry
- ✧ Water conservancy monitoring
- ✧ Real-time transmission monitoring of water supply network

Environment, meteorology, oil field and other industries
- ✧ Monitoring of key pollution sources
- ✧ Environmental monitoring
- ✧ Weather monitoring
- ✧ Real-time noise monitoring
- ✧ Oilfield monitoring
- ✧ Heat network monitoring
- ✧ Coal monitoring
- ✧ Earthquake monitoring
- ✧ All kinds of PLC with serial port or 485 interface;
- ✧ DTU realizes wireless data

Corporate Qualification

Item	Content
	2011, it was rated as "the best supplier for customer satisfaction in China's industrial control industry", the company's GPRS DTU product was rated as "innovative product award".
	2012, the company became a member of "China Quality Travel".
	2013, the company became a member of the "Technical Innovation Strategic Alliance of Intelligent Power Transmission and Distribution Equipment Industry".
	2014, it was rated as an innovative pilot enterprise .
	2014, the company's Zhanjiang Wi-Fi coverage project was awarded the "Sample Engineering Award" by the 13th China Automation Annual Conference.
	2015, its video products were rated as "Top Ten Video Transmission Enterprises" by China's industrial control industry.

Corporate Honor	2015, the noise monitoring project was awarded the "Sample Project Award" by the 14th China Automation Annual Conference.
	2015, its video products were rated as "Top Ten Video Transmission Enterprises" by Huaqiang Security Network.
	2016, the video products was rated by Huaqiang Security Network as "2015-2016 High-quality Supplier in China's Security Industry".
	2016, it was rated as the "best supplier of charging equipment parts" by charging pile communication equipment.
	2016, won the " Product Gold Award of 2016 7th Guangzhou International New Energy Automobile Industry Exhibition ".
	2016, The 3rd China Good Wi-Fi Organizing Committee awarded Caimore "2016 Best Wi-Fi Industry Application Solution Provider".
	2018, the company's industrial router was rated as "China's Top Ten Industrial Router Brands", and DTU was rated as "China's DTU Top Ten Brands"
	2018, it was rated as a key listed reserve enterprise in Xiamen City.
	2019, it was rated as a key listed reserve enterprise in Xiamen City.
	2019, it was rated as a key listed reserve enterprise in Fujian Province.
	2019, Shortlisted for China Telecom Corporation Limited, DICT solution partner of Shanghai branch
	2020, Selected as a key listed reserve company in Xiamen
High-tech Enterprise	2009, it was recognized as a high-tech enterprise by the country
Double-soft Enterprise	2010, it was recognized as a double-soft enterprise by the country
Occupational Health and Safety Management System Certification	ISO9001:2015 quality management system conforms to the standard ISO14001:2015 environmental management system conforms to the standard ISO45001:2018 occupational health and safety management system conforms to the standard
Copyright	The company has 7 patented technology certificates to maintain equipment stability and 31 software copyright certificates.
Offices	Nine regional offices have been established nationwide to provide customers with close and considerate services.
Registered Capital	The company has a registered capital of 20.58 million, it is a key high-tech enterprise supported by Xiamen City.
Historical Accumulation	18 years of industry R&D accumulation and industry application test.