

## Product Introduction

This product adopts ARM9 industrial-grade high-performance embedded processor, takes real-time operating system as the software supporting platform, with super-large memory and embedded TCP/IP protocol stack with independent intellectual property rights. The device supports double-data center backup and multi-data center synchronous receiving data and support sending Alarm SMS; The equipment provides online maintenance technology to keep the data terminal permanently online, keep the data link unblocked at any time, and realize high-speed, stable and reliable TCP/UDP transparent data transmission function.



This product has been widely used in power centralized meter reading, water meter centralized meter reading, heat network monitoring, gas monitoring, water conservancy monitoring, environmental protection testing, meteorological testing, earthquake monitoring, traffic control and other industries.

## Model No.

Model No.	Interface Type	Network	RS232	RS485	Data Cache
CM510-62G	Terminal Interface	GPRS	Support	Support	8K
CM510-62C	Terminal Interface	CDMA	Support	Support	8K

# Technical Parameters

## Device Interface Diagram



## CM510-62X Accessories



<b>Model NO.</b>	<b>CM510-62X</b>
<b>Cellular Parameters</b>	
<b>Network</b>	GSM/GPRS
<b>Standards and Frequency Bands</b>	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
<b>Coding Scheme</b>	CS1 ~ CS4
<b>Communication Bandwidth</b>	Theoretical bandwidth: 171.2Kb/s; practical bandwidth: 100Kbits>X> 20Kbits
<b>Transmit Power</b>	GSM850/900 : <33dBm ; GSM1800/1900 : <30dBm
<b>Receiver Sensitivity</b>	<-107dBm
<b>Serial Port Parameters</b>	
<b>Data Bit</b>	8

Stop Bit	1/1.5/2
Parity Bit	No parity / Odd parity / Even parity
Serial Speed	300bps ~ 115200bps
Flow Control	None flow control

#### 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.
Power Interface	Standard 3-pin power jack.

#### Power Supply

Supply Voltage	DC6V to 32V. Over-voltage protection. Power reverse protection.
Standard Power Supply	DC9V/1500mA
Average Communication Current	52mA@+9VDC
Communicating Instantaneous Peak Current	120mA@+ 9VDC
Standby Current	<30mA@+ 9VDC

#### Operation System

OS	Linux
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#### 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 IP41; particularly suit for harsh industrial control environments.
Product Dimension	92*62*22 mm(Antenna and fixer are not included)
Package Size	298*226*60mm
Weight	0.41kg

#### Other Parameters

Operating Temperature	-25°C ~ +65°C
Extended Operating Temperature	-35°C ~ +75°C
Storage Temperature	-40°C ~ +85°C
Relative Humidity	95%(No condensation)

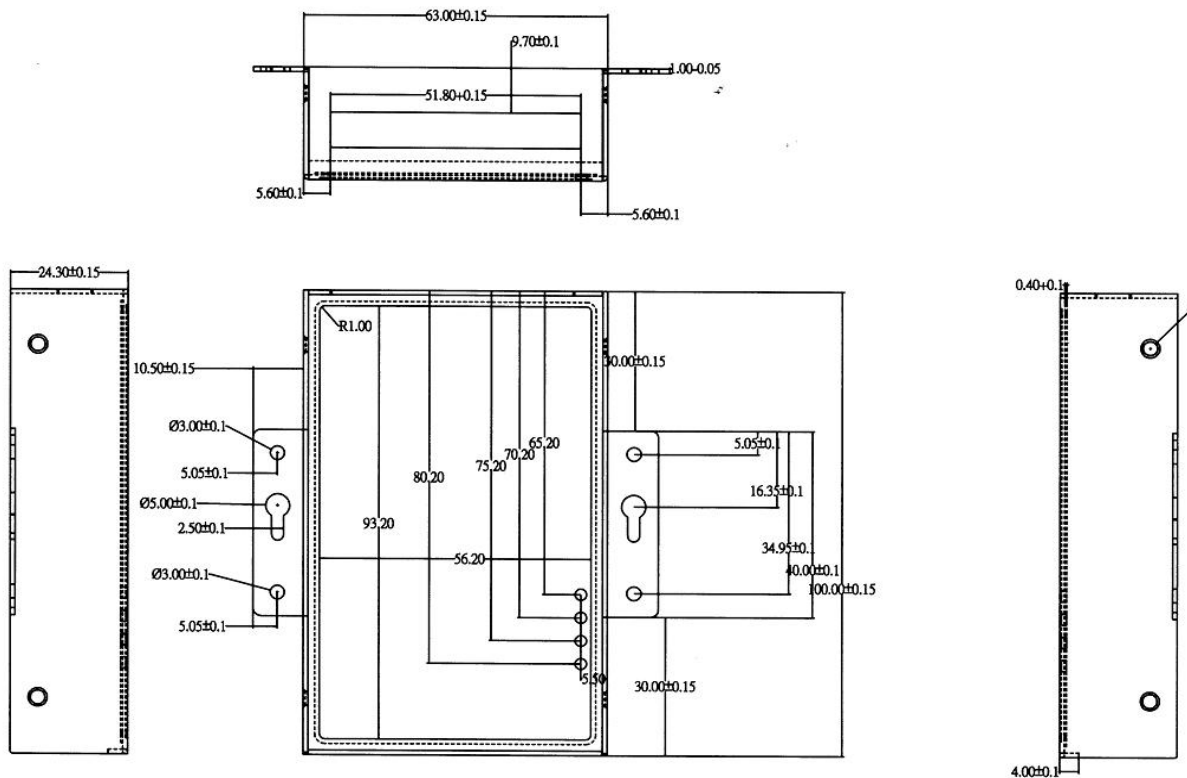
#### Terminal Interface Definition

Interface Drawing	<table border="1" style="width:100%; text-align:center;"> <tr> <td>9V</td><td>GND</td><td>485A</td><td>485B</td><td>RX</td><td>TX</td><td>GND</td><td>DRX</td><td>DTX</td><td>SW</td><td>IO1</td><td>IO2</td><td>IO3</td><td>IO4</td> </tr> </table>													9V	GND	485A	485B	RX	TX	GND	DRX	DTX	SW	IO1	IO2	IO3	IO4
9V	GND	485A	485B	RX	TX	GND	DRX	DTX	SW	IO1	IO2	IO3	IO4														

NO.	Name	Function	Default Function	Input / Output	Electrical Characteristics
1	Power	Power	Power supply + pole	-	Power supply range: 6V - 32V
2	GND		Power ground	-	
3	485A	RS485	RS485 interface A	-	-

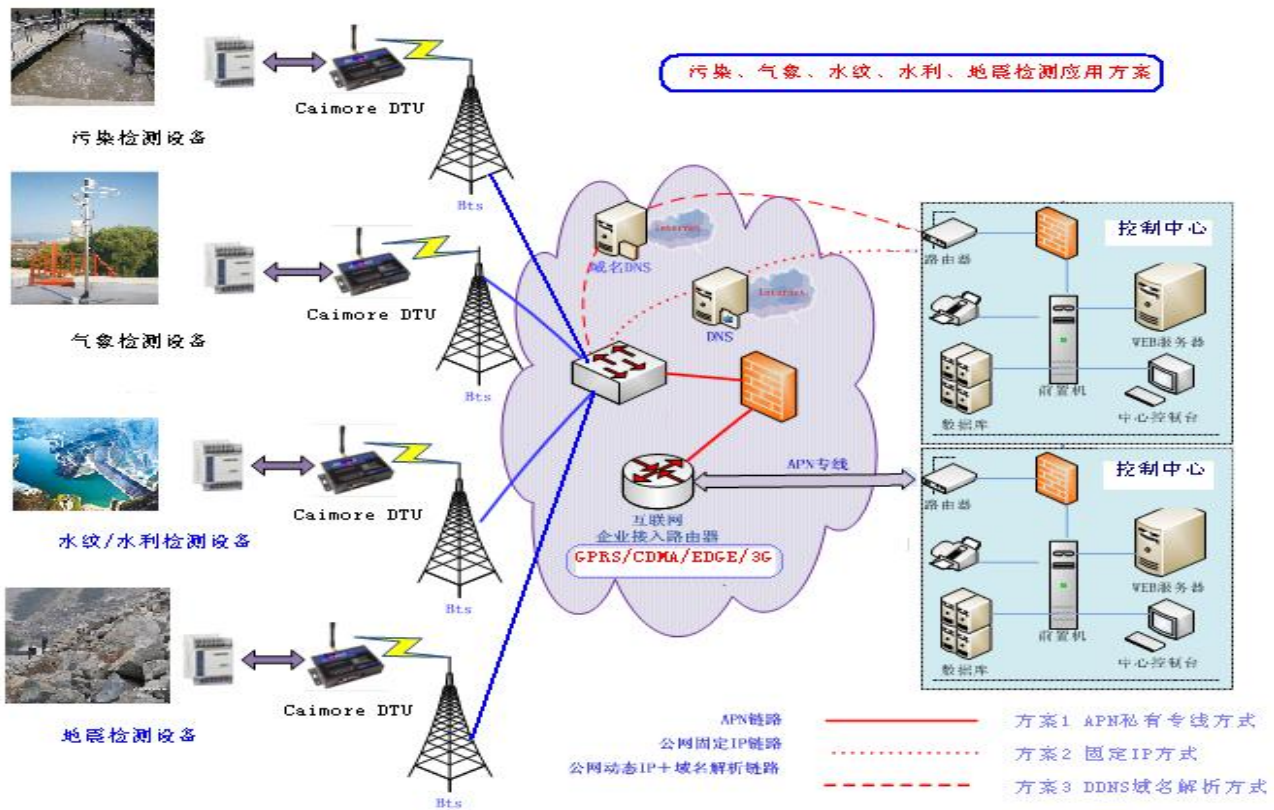
4	485B		RS485 interface B	-	-
5	RXD	RS232(used to transmit data, configure or download)	RS232 interface, receiver pin (assuming that DTU is connected to the computer, the flow direction of this pin is: DTU <- computer)	Input	-
6	TXD		RS232 interface, sender pin (assuming DTU is connected to the computer, the data flow of this pin is: DTU -> computer)	Output	-
7	GND	RS232	RS232 interface, GND pin	-	-
8	DRX	RS232(used to debug)	RS232 interface, receiving pin	Input	-
9	DTX		RS232 interface, sending pin	Output	-
10	SW	Enable pin	Enable pin	Input	When the input voltage of 0V DTU power supply is cut off; When suspended or input high level, DTU power is connected.
11	IO1	IO	Switch measure and control	Input & Output	IO control, IO alarm
12	IO2			Input & Output	IO control, IO alarm
13	IO3			Input & Output	IO control, IO alarm
14	IO4			Input & Output	IO control, IO alarm

## Installation Dimension

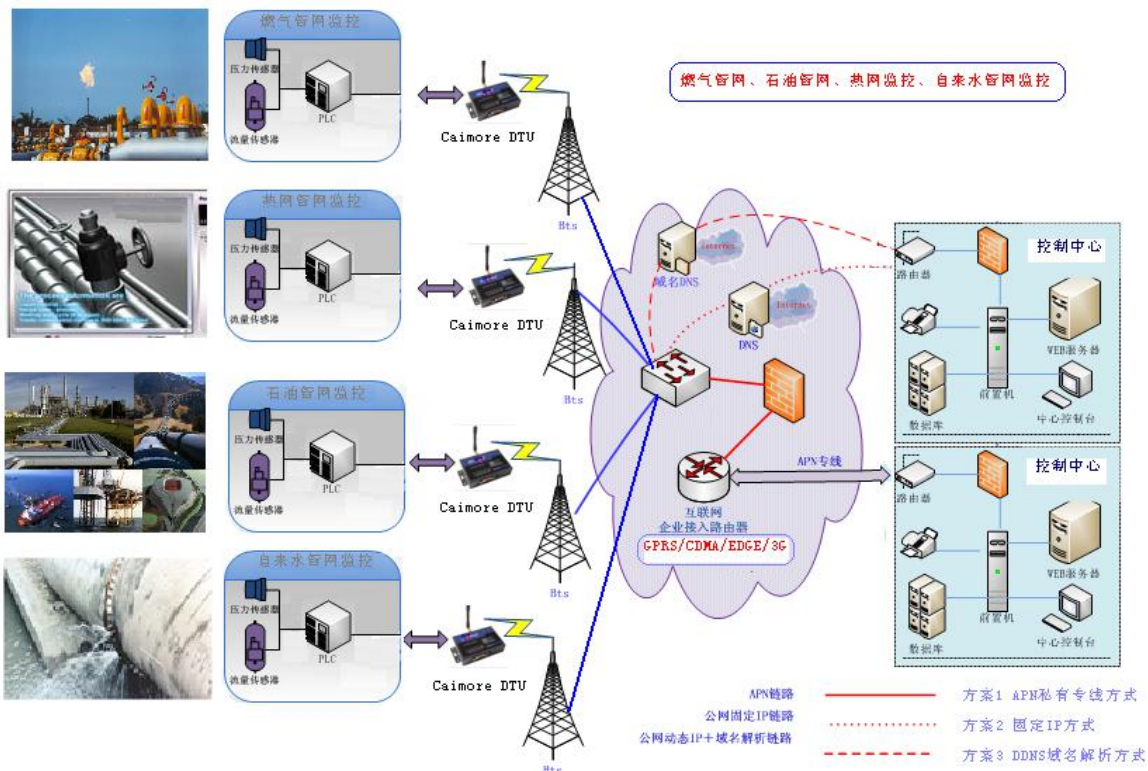


# Product Application

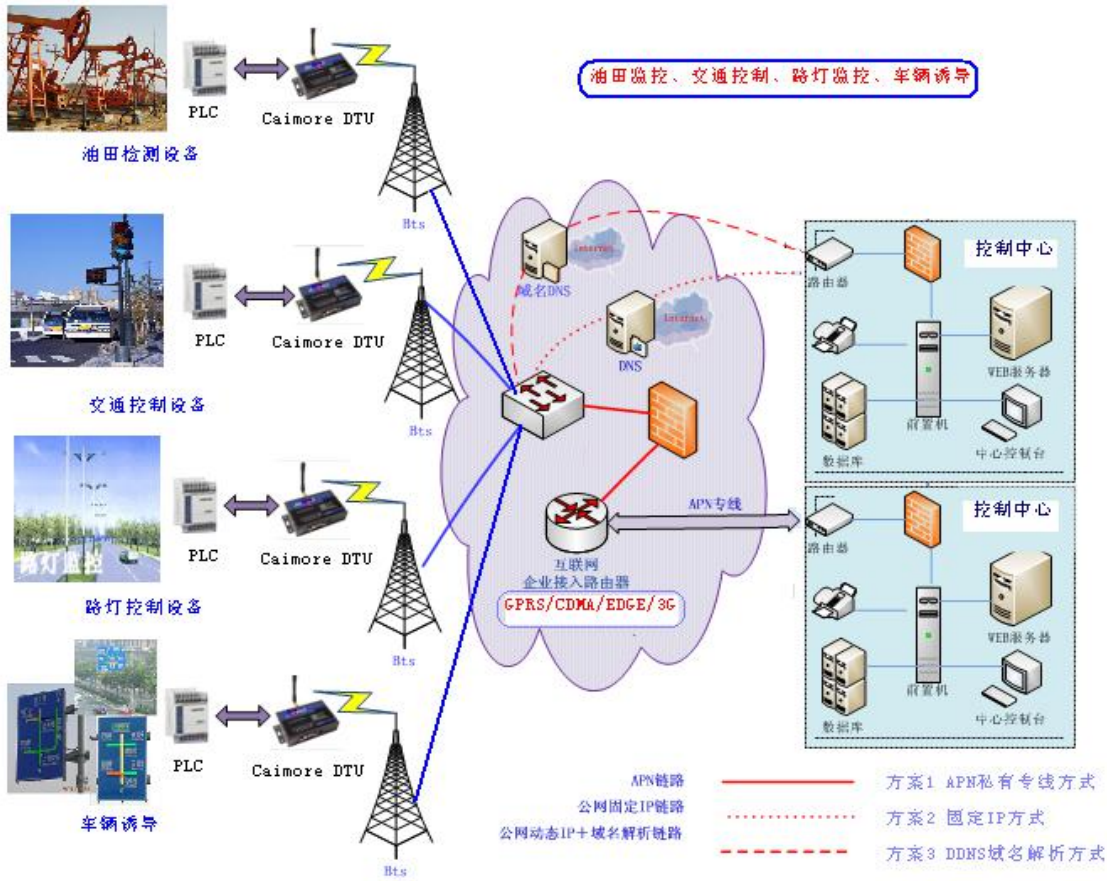
## 1. Application in detection industry (pollution, weather, watermark, water conservancy, earthquake, etc.)



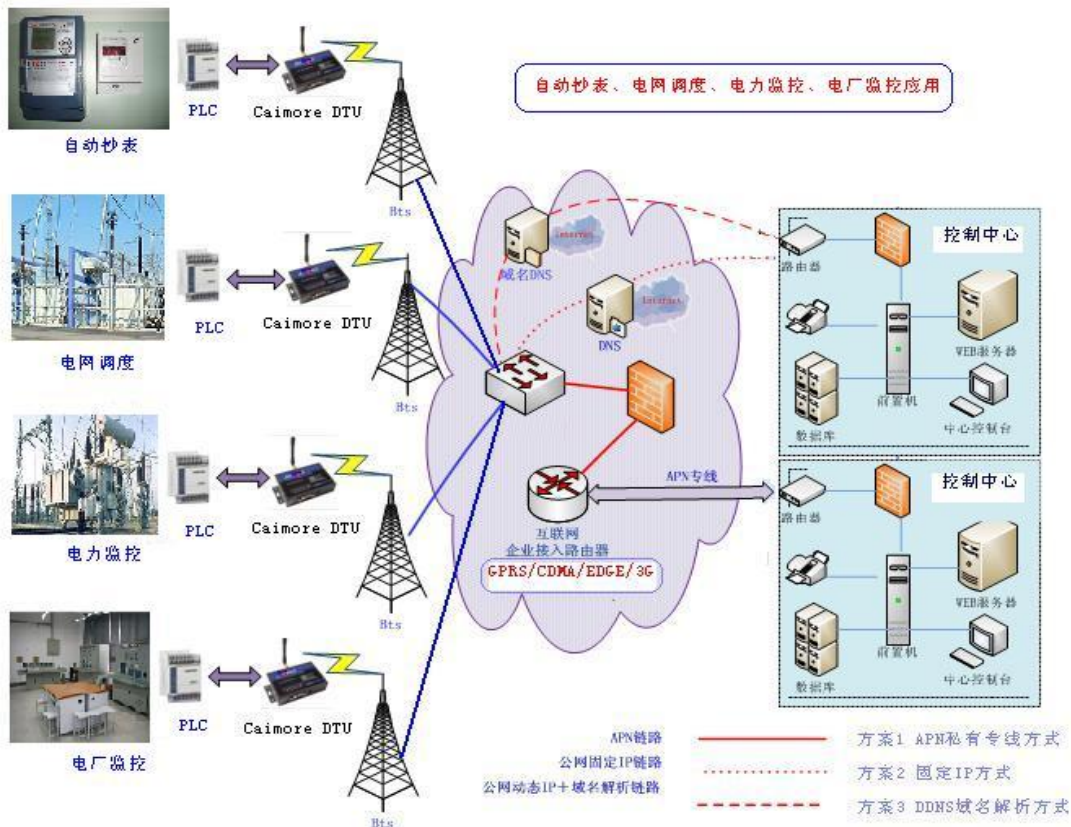
## 2. Network management monitoring industry application (gas pipe network, oil pipe network, heating network monitoring, tap water pipe network monitoring, etc.)



### 3. Oilfield monitoring, street light control, traffic control, vehicle guidance



### 4. Power industry application cases (distribution monitoring, grid automation, automatic meter reading, grid dispatching)



## 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 transmission

## Corporate Qualification

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

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