

RS485 GSM Modems, RS485 to GPRS



USR-GPRS232-734 is a RS485 to gprs modem, used for data transparent transmission.

- 1 RS485 serial port
- Operation temperature Range of -25°~85°
- Quad-Band GSM/GPRS 850/900/1800/1900MHz

Introduction

USR-GPRS232-734 is a new GPRS device developed by USR IOT in 2016. Maturation software functions, covering mostly conventional application scenarios. Users can realize Serial to Network bidirectional transparent data transmission via simple configuration. Supporting custom registration package, heart beat package. Supporting 2 Socket Connection, and USR cloud join in.

USR-GPRS232-734 use DC power supply and terminal power supply, supporting 5.0V~36.0V wide voltage power supply. RS485 circuit using electrical isolation scheme, has anti-interference ability, suitable for strong electromagnetic interference environment, such as utility industry.

Features

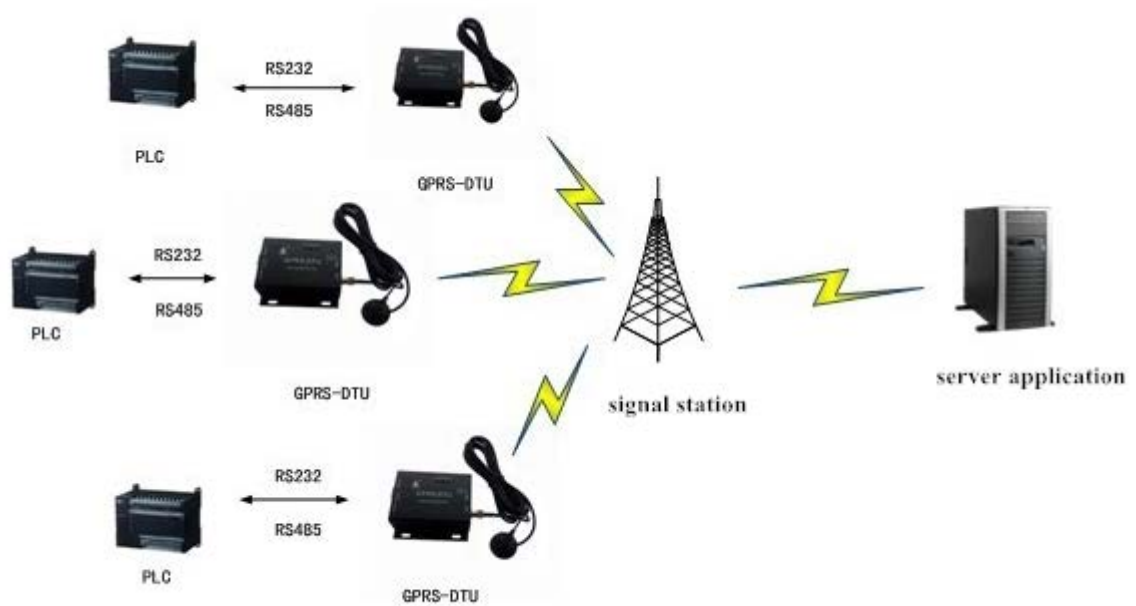
- Support:GSM850/900,DCS1800/1900, able to be used around the world
- Support GSM/GPRS/EDGE and 2G/3G/4G card, but don't support 3G/4G network
- Each connection support 4KB data cache, when in abnormal connection choosing data cache to avoid data lost
- Support sending registration package and heartbeat package data
- Support remote configuration via SMS
- Support multi work modes: SMS transmission mode, network transmission mode and HTTPD mode
- Support basic instruction set and extension instruction set
- Support establishing, maintaining and closing network connection by using extension instruction set, more flexibility in application
- Support sending Chinese/English SMS via simple instructions, avoiding PDU sending Chinese SMS which complex and hard use
- Support class RFC2217,can modify module serial parameter via network dynamically
- Support wide voltage 5~36V power supply, using DC power supply and terminal power supply
- RS485 circuit using electrical isolation scheme, has anti-interference ability

Application Field

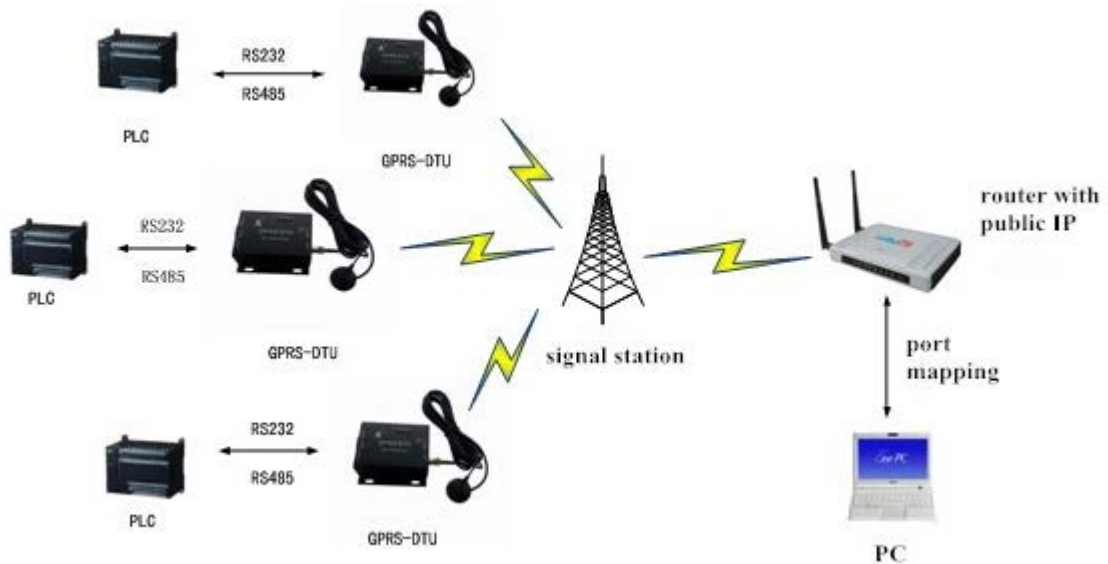
- Power industry: power remote meter reading, substation monitoring, power line monitoring
- Municipal industry: street lamp remote monitoring management, pipe network remote monitoring, urban energy consumption monitoring
- Oil industry: remote monitoring of oil-gas well, GPRS remote oilfield automation detection monitoring system, Gas pipe network monitoring system solutions
- Environmental protection industry: pollution sources monitoring, atmospheric environment monitoring, noise monitoring, dust monitoring
- Agricultural application: greenhouse remote monitoring and management, aquaculture monitoring management, agricultural water pump monitoring management

Application

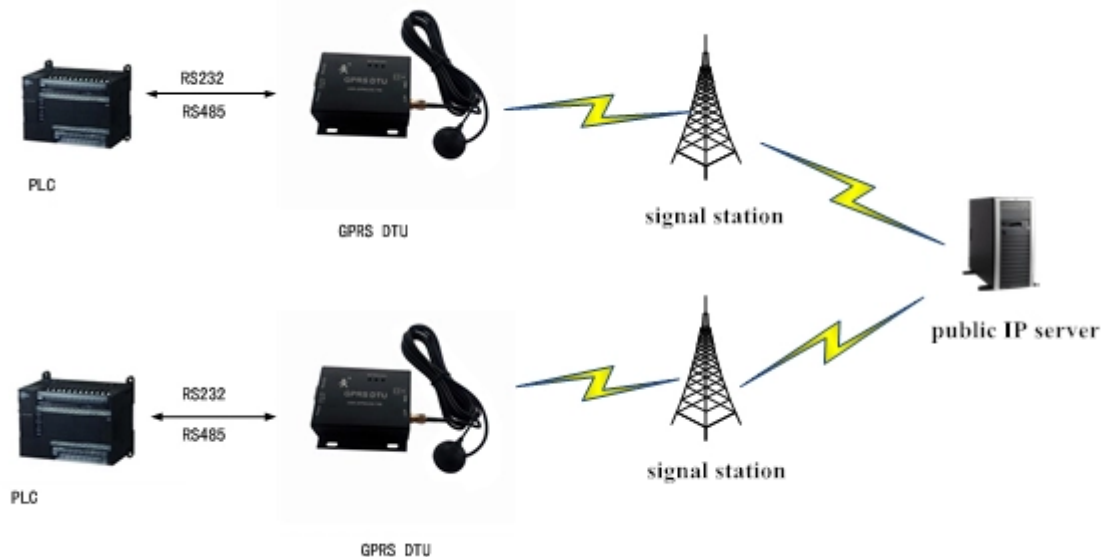
1. Application in public server



2. Use network to extend serial communication distance



3. Server transit mode



Specification

Wireless Parameter	
Wireless Standard	GSM/GPRS/EDGE
Standard Frequency Band	850/900/1800/1900MHz
Transmitted Power	GSM900 class4 (2W) DCS1800 class1 (1W)
GPRS Terminal Device Class	Class B
GPRS Multi-slot Class	GPRS Class 10
GPRS Coding Schemes	CS1 ~ CS4
Antenna Option	SMA interface
Hardware Parameter	
Data Interface	RS485 level, 5.08*3 terminals
Baud Rate	2400bps - 921600bps
Working Voltage	DC 5V~36V
Working Current	59mA ~ 65mA (12V)
Operating Temp.	-25° - 85°
Storage Temp.	-40° - 125°
Size	82.5 * 86.0 * 24.0 mm
RS485 reliability	Electrical Isolation ESD air 15KV Surge 4KV (8/20us)
Software Parameters	
Wireless Network Type	GSM/GPRS/EDGE
Working Mode	Transparent transmission mode, SMS transparent transmission mode and HTTPD mode
Setting Command	AT+ Command structure
Network Protocol	TCP/UDP/DNS/HTTP
Max. TCP Connection	2
User Configuration	Serial AT command, network AT Command, SMS AT Command
User Internet Applications	Support custom application software
Software Functions	
DNS	Support
Simple Transparent Transmission mode	Support TCP Client /UDP Client
HTTP protocol transmission	Support
SMS transparent transmission	Support
Heartbeat Package	Support
Class RFC2217	Support
Registration Package Mechanism	Support custom/ICCID/IMEI registration package