

■ Product Introduction

D12 Series GPRS DTU enables various kinds of legacy devices with serial port to communicate over cellular network and the Internet easily and freely. It not only works as a cellular Modem, but also can construct a smooth "cellular Data Tunnel" between Host and Remote side, ensuring an efficient communication for data transmission and remote device management.

With 1 selectable RS-232/TTL/485 serial port, D12 Series GPRS DTU is an ideal solution for factory automation, environmental monitoring and remote device management for M2M industry. Meanwhile, it is supplied with simple

Software interface that streamline application development process, freeing system integrators from dealing with complex communication protocols of GPRS/CDMA and the Internet. Users do not need to change the existing system, saving cost and time for field maintenance, and making it a perfect solution for data transmission.



■ Application

- ◇ Remote Data Monitor and Control
- ◇ Water, gas and oil flow metering
- ◇ AMR (automatic meter reading)
- ◇ Power station monitoring and control
- ◇ Remote POS (point of sale) terminals
- ◇ Traffic signals monitor and control
- ◇ Fleet management
- ◇ Power distribution network supervision
- ◇ Central heating system supervision
- ◇ Weather station data transmission
- ◇ Hydrologic data acquisition
- ◇ Vending machine
- ◇ Traffic info guidance
- ◇ Parking meter and Taxi Monitor
- ◇ Telecom equipment supervision (Mobile base station, microwave or optical relay station)

■ Benefits and Features

- ◇ Industrial design with intelligent software capabilities, making it a reliable GPRS solution for data collection and transmission
- ◇ Plug-and-play design with easy-to-use software interface for easy integration
- ◇ No need to build expensive fixed line network, saving cost substantially
- ◇ Easily manage and control distributed remote devices over the air(only support by D12C111)

- ✧ Built-in Watch Dog
- ✧ Real-time Clock (RTC)
- ✧ Remote firmware upgrade over the air (OTA) (only support by D12C111)
- ✧ Connect to any serial device to GPRS and the Internet
- ✧ Support TCP,UDP, DNS,PPP,DHCP and so on.
- ✧ Reliable GPRS network connectivity, providing fast and cost-effective long-range
- ✧ Always-On-Line
- ✧ Support APN
- ✧ Industrial design with surge protection
- ✧ Local and remote configuration over the air(only support by D12C111)
- ✧ Multi-destination IP support(only support by D12C111)

■ Specification

Wireless	
Compatible Mobile Networks	GPRS Class10 Coding scheme: CS1 - CS4
Cellular Frequency	D12S211 GSMphase2/2+, GSM900MHz/GSM1800MHz D12Z111 D12H111 D12C111 GSM phase 2/2+, GSM850MHz/EGSM900MHz/DCS1800MHz/PCS1900MHz
Protocol	
Protocol Support	TCP/IP protocol stack
Bandwidth	Class 10: GPRS 4:1: Down-link: 85.6kbps Up-link: 21.4kbps GPRS 3:2 Down-link: 64.2kbps Up-link: 42.8kbps
Baud Rate	1200~115200bps
Interface	
Antenna	50 Ω SMA female interface
Serial port	DB9 (RS232, RS485, TTL option)
Led	Power Ring Data

UIM/SIM	1.8V/3V
Power	
Power supply	DC5V-25V , typical DC9V1A
Power consumption	peak current: 5A@+9VDC work average current: 300mA@+9VDC Idle average current: 3.5mA@+9VDC
Software	
User Interface	D12S211 D12Z111 D12H111 AT/AT+I Command Set D12C111 AT/AT+WIP Command set
Embedded development environment (D12C111)	Support(32M FLASH and 16M RAM) Open AT API develop kit
Physical	
Operating Temperature	D12S211 work temperature: -20℃~55℃ D12Z111 Work temperature: -30℃~75℃ storage temperature: -40℃~85℃。 D12H111 work temperature: -30~75℃ D12C111 work temperature: -30~85℃
Humidity	90% Maximum (Non-condensing)
Dimensions	Item (L x B x H): 75mm x 50mm x 16mm (5.3" x 3.7" x 1.4") Packaging (L x B x H): 260mm x 190mm x 65mm (10.3" x 7.5" x 2.6")
Weight	Item: 550g Packaging: 690g
Electronic Compatibility	Anlistatig test: Class 3 Radio electromagnetism test: Class 3
Others	
Warranty	1 Year
Package Contents	The D12 Series DTU DB9 Serial Cable DC 9V1A Power Adapter Antenna

	CD-ROM with Product Documentation
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▪ Products models

D12S211 GPRS DTU, Siemens MC39i module,

D12Z111 GPRS DTU, ZTE ME3000 module

D12C111 GPRS DTU, Wavecom Q39 module