4G DTU

WT07-D1

RS232/485 ↔ 4G

WT07-D1 Datasheet

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Wireless-Tag Technology

1. Product Overview

WT07-D1 is an easy-to-use DTU product launched by Wireless-Tag Technology. It supports data receiving and reporting through RS485 and RS232 interfaces, and supports TCP/UDP/HTTP/MQTT protocols. It can be connected to Alibaba Cloud or OneNET. It supports two transmission modes: pass-through transmission and Modbus to JSON, and supports local and remote parameter configuration and firmware upgrade. It supports 4G networks of China Mobile, China Unicom and China Telecom. The JSON gateway automatically parses Modbus packets into JSON format, which greatly eliminates the need for users to parse data and convert formats by themselves.

2. Main Features

- Support 100% transparent transmission of user data

- Supports peer-to-peer communication

- Support static IP and dynamic domain name resolution to connect to data center

- Real-time online, support LTE, GSM three-mode communication, and support China Mobile, China Unicom and China Telecom

- Support for sending custom registration packets and heartbeat packets online

- Supports active polling, custom acquisition instructions, and simultaneous communication with 5 servers

- Support SMS transmissions mode, can realize SMS sending and receiving data, SMS command configuration

- Support Level 4 electrostatic protection, reverse connection protection, overload protection, Level 4 surge protection, Level 4 pulse group interference, RS485 electrical isolation

- Support remote device management platform, which can be connected immediately after power-on, and easily realize remote upgrade, remote maintenance, and remote configuration for a device, which greatly reduces the project commissioning cycle and saves personnel costs

- Small and lightweight, wear-resistant and corrosion-resistant

3. Technical Parameters

Network Parameters	Operating frequency band	LTE-FDD：B1/B3/B5/B8 LTE-TDD：B34/B38/B39/B40/B41 GSM：900/1800MHz
	Transfer rate	LTE-FDD：Max 10Mbps(DL)/ Max 5Mbps(UL) LTE-TDD：Max 7.5Mbps(DL)/ Max 1Mbps(UL) EDGE：Max 236.8Kbps(DL)/Max236.8Kbps(UL) GPRS：Max 85.6Kbps(DL) Max 85.6Kbps(UL)
	Transmit power	LTE-FDD：23dBm±2dB LTE-TDD：23dBm±2dB EGSM900 8-PSK：27dBm±3dB DCS1800 8-PSK：26dBm±3dB EGSM900：33dBm±2dB DCS1800：30dBm±2dB
	Receiver sensitivity	FDD B1：-97.5dBm FDD B3：-94.3dBm FDD B5：-97dBm FDD B8：-96.5dBm TDD B34：-96.3dBm TDD B38：-97dBm TDD B39：-96.3dBm TDD B40：-97dBm TDD B41：-96dBm EGSM900：-105dBm DCS1800：-106dBm
Hardware Parameters	RS485	Support one-way RS485
	RS232	Support one-way RS232
	LED	Indicate network status, data status, connection status
Environment Parameters	Operating temperature	-40~85℃
	Storage temperature	-40~85℃
	Ambient humidity	10-90%RH (non-condensing)
Electrical Parameters	Operating voltage	DC:7 V~36 V
	Operating current	Peak current 2A
	Power	Terminal power supply

	connector type	
	Power protection	Anti-static, surge protection, ESD protection, anti-reverse connection
Mechanical Structure	Device size	91*65*24mm
	SIM card	1.8V/3.3 V
	Antenna	SMA outer screw inner hole
	Mounting method	Wall-mounted
Function	Network protocol	TCP, UDP, DNS, Modbus, HTTP, MQTT
	Connection	4-way connection
	Registration packet	ICCID/IMEI/Custom
	Heartbeat packet	Network Heartbeat / Serial Heartbeat
	Remote upgrade	Support
Serial Port	Standard	Plug-in screw terminal
	Data bit	Support 5, 6, 7, 8bit configurable, default 8
	Stop bit	Support 1, 1.5, 2bit configurable, default 1
	Check bit	Support None, Even, Odd configurable, default None
	Baud rate	1200~460800bps configurable, default 115200
	Cache	1000byte
	Protection	RS485: anti-surge, ESD protection, galvanic isolation

4.Contact Us

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