

# Model: UT-9101 Series

(Product Name: 4G LTE Industrial Router)

## Datasheet



### **UOTEK TECHNOLOGY (SHENZHEN) CO., LTD.**

Add: Floor 9-10, Building 7, Skyworth Innovation Valley, No. 8, Tangtou No.1  
Shiyan Old Street, Bao'an District, Shenzhen

Tel: +86-755-81202008

Fax: +86-755-27886083

Http: [www.uotek.com](http://www.uotek.com)

## 1. Overview

UT-9101 is a DTU device based on Qualcomm MDM9X07 platform. It supports 4G, WIFI, AP function. It provides with 1 10M/100M/1000M Ethernet port, auto negotiation, automatically assigns IP address by default. PC can use 4G network function by this device after connecting with network cable. This device provides with RS232/485 port, which can be used as DTU transparent data transmission. User can set the parameters through WEB configuration. With high industrial standard design and the surge protection, this router is widely used in the field of industrial control, data communication system and industrial automation.

## 2. Major Functions & Features

- Supports 4G to RS-232/485/422/TTL/RJ45/WIFI/GPS

## 3. Technical Parameters

The name of the specifications		The descriptions of the specifications	Remarks
Product name		UT-9101	
Network Format		4G	Fits all kinds of networks
Ports	Antenna	SMA	
	SIM	1.8V/3.0V	Self-ejecting card slots
	Serial data ports	RS232/RS485/RS422/TTL	Data port optional (4 options) Debugging port RS232 (optional)
	Serial data rates	Standard 1200~921600bps	Default 115200bps
	5 Pin Terminals	3.81mm Plug-in terminals	Can be connected to 14 to 24AWG wire
Operating voltage		DC12~36V	
Operating power consumption	Power consumption during operation	200-230mA@12V	
	Average power consumption at idle	200mA@12V	
Weight		Net. Weight 275g	Including Package 605g

The name of the specifications	The descriptions of the specifications	Remarks
Dimension(Height with screws)	Length×Width×Height 100mm×80mm×30mm	
Normal operating temperature	-30~+75°C	
Ultimate operating temperature	-40~+85°C	
Storage temperature	-40~+85°C	
Relative humidity	5~95%	
SIM Supports	Supports for single cards	
EMC Anti-interference	Electrostatic discharge immunity to meet contact discharge air discharge disturbance (severity class: Class 3 ±6kV/±8kV air) test standards	Under normal atmospheric conditions, when the sample is in working condition, the shell of the sample is subjected to electrostatic discharge immunity test, contact discharge air discharge disturbance (severity level: Class 3 ±6kV/±8kV air), each polarity, each discharge part 10 times, the sample should work normally, communication is normal, operation indication function is normal.
	Meets electrical fast transient pulse group level 3 (±2kv) interference test standard	Under normal atmospheric conditions, with the sample in working condition and earthed, the sample's power circuit (L,N,PE) is subjected to electrical fast transient pulse group 3 (±2kv) test frequency (5khz and 100khz), test time 1 minute sample should test normal, normal operation function and normal communication.
	Lightning surge protection for power supplies Class 3 Common mode 2KV, differential mode 1KV	Waveform 1.2/50ns at power up Positive and negative 10 communication normal

The name of the specifications	The descriptions of the specifications	Remarks
	Serial lightning surge protection Common mode 600W	Waveform 10/700ns at power up Positive and negative 10 communication normal

## 4. Parametric Characteristics

### 4.1 Hardware systems

Item	Contents
CPU	Qualcomm Cortex-A7 1.2GHz, ARMv7. Total 192 MIPS
FLASH	512MB
RAM	256MB

### 4.2 Wireless parameters

Item	Contents
Wireless modules	Industrial grade LTE wireless communication modules
Standards & Bands	Full network support: FDD-LTE, TDD-LTE, EVDO, WCDMA, TD-SCDMA CDMA1X, GPRS/EDGE
Theoretical bandwidth	FDD-LTE: 150Mbps(Downlink speed), 50Mbps(Uplink speed) TDD-LTE: 135Mbps(Downlink speed), 35Mbps(Uplink speed) CDMA2000 1X EVDO RevA:3.1Mbps(Downlink speed), 1.8Mbps(Uplink speed) WCDMA: 42Mbps(Downlink speed), 5.76Mbps(Uplink speed) TD-SCDMA: 4.2Mbps(Downlink speed), 2.2Mbps (Uplink speed)
Transmitting power	<23dBm
Receiving sensitivity	<-93dBm

## 5. Product View (Appearance)



4G Antenna (standard)

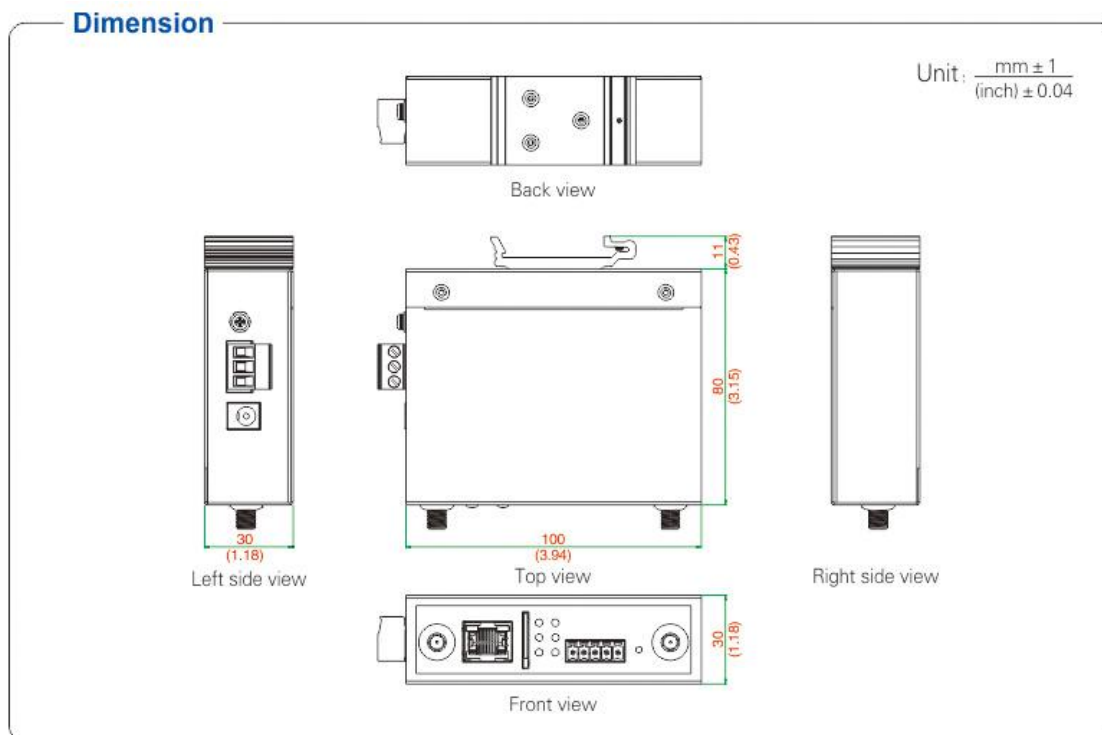


GPS Antenna(optional)



WiFi Antenna (optional)

## 6. Structure Dimensions View



## 7. Selection sheets

Module	Description
UT-9101	RS-232/485/RJ45/WIFI interfaces
UT-9101A	RS-232/485/RJ45/GPS interfaces
UT-9101B	RS-232/485 interfaces(RJ45 RS-232 Configuration ports)
UT-9101C	RS-422 interfaces(RJ45 RS-232 Configuration ports)
UT-9101D	TTL interfaces(RJ45 RS-232 Configuration ports)
UT-9101E	RS-232/485/RJ45/WIFI interfaces ( EU export version )
UT-9101F	RS-232/485/RJ45/WIFI interfaces ( Dual 4G antennas )