



TD210 Series Industrial Cellular Modems

Introduction

The TD210 Series Industrial Cellular Modem, also referred to as a DTU or IP modem, is engineered to connect serial-enabled industrial end devices such as meters, sensors, controllers and RS232/RS485-equipped PLCs. It uploads on-site device data to cloud platforms via cellular networks and enables remote monitoring and control of field industrial equipment.

Featuring 4G LTE alongside optional LTE-M/NB-IoT connectivity, the TD210 supports mainstream protocols including Modbus RTU, MQTT and TCP/UDP, and integrates RS232 and RS485 serial ports. Equipped with a dedicated onboard industrial MCU and multi-layer hardware and software protection mechanisms, it delivers stable, reliable serial connectivity for mission-critical industrial deployments.

Powered by Bivocom's dedicated configuration tool, engineers can conveniently configure the device, and retrieve data from various sensors and controllers without any programming.

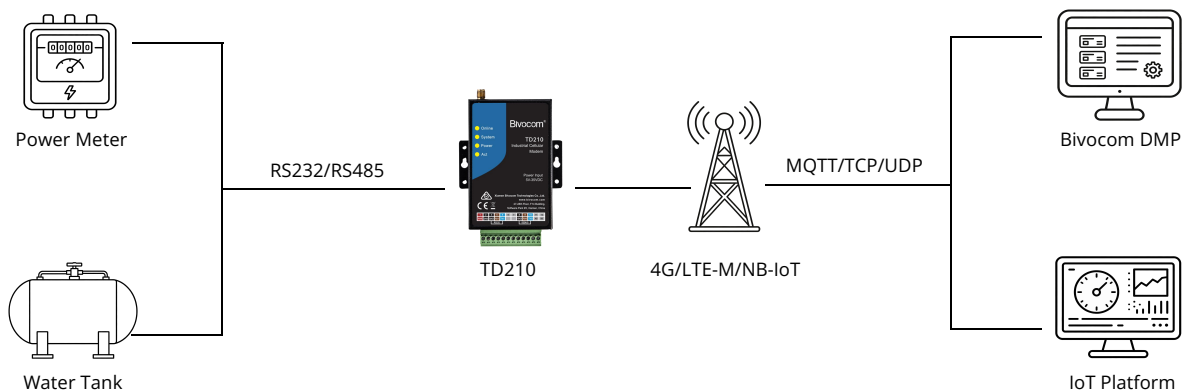
Key Features

- 4G LTE, or LTE CAT M1/NB-IoT (Optional)
- 2 × RS232 (1 for Debug), 1 × RS485
- Modbus RTU/MQTT/TCP/UDP, protocol conversion and transparent transmission
- SMS data backup, remote config, alarm notification (Optional)
- Remote management: SMS, AT commands, Bivocom DMP (Optional)
- Data backup: sync to max 5 remote servers
- TCP heartbeat detection for always-online operation

Applications

- Flow Meter
- Weather Station
- PLC
- Gas & Water Tank
- Pump
- Power Meter
- Water Level
- Air Quality

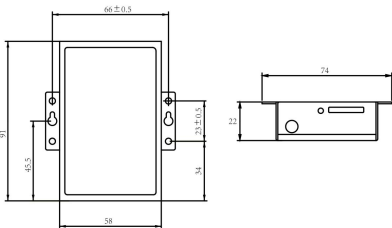
Diagram



Specifications

Systems		Physical Characteristics	
CPU	Industrial 32-bit MCU	Ingress Protection	IP30
Flash	512KB	Housing & Weight	Metal, 218 g (0.48 lbs), without accessories
SRAM	256KB	Dimensions	91 x 58 x 22 mm (3.58 x 2.28 x 0.87 in)
Cellular		Mounting	Desktop, Wall mounting
Antenna	1 x 50 Ω SMA-K	Environmental	
SIM Slot	1 Mini SIM (2FF)	Operating Temp.	-35° C to +75° C (-31°F to +167°F)
Serial		Storage Temp.	-40° C to +80° C (-40°F to +176°F)
Ports	2 x RS232 (1 x Debug), 1 x RS485	Relative Humidity	5% to 95% (non-condensing)
Baud Rate	300bps to 115200bps	Others	
GNSS (Optional)		LED Indicators	Online, Act, Power, System
Module	GNSS from cellular module	Built-in	Industrial MCU, Watchdog, RTC, Timer
Antenna	1 x 50 Ω SMA-J	Approvals	CE, RCM*, FCC, NBTC
Power		Warranty Period	Standard: 2-Year limited warranty Extended: 3-5 Years
Standard Power	12VDC/1.5A	Software	
Input Voltage	5-35 VDC	Network Protocols	MQTT, Modbus RTU, Transparent TCP/UDP Client/Server, DNS
Idle Mode	<0.4W (30mA@12VDC, 55mA@5VDC)	Management	Config Tool, SMS, Bivocom DMP*
Working Mode	<1W (85mA@12VDC, 155mA@5VDC)		

Dimensions



- Note:**
1. Region-specific cellular modules are available; consult Bivocom sales for details.
 2. Bivocom DMP (Device Management Platform) requires a license fee.
 3. *Optional functions rely on matching hardware/firmware versions; not all features supported on one device.
 4. Power consumption is measured under laboratory conditions and is for reference only.
 5. TW810-M has been renamed to TD210-M.
 6. *Listed certifications are pending.
 7. Extended warranty pricing varies.
 8. Digital user manuals are free to download from [Bivocom](#) official website for environmental protection.

Ordering Information

Model	Part Number	Cellular	Frequency Bands	Package Contents
TD210-LF	TD210-L<1>-<2>	4G LTE	4G LTE CAT 4* (Optional Global or Regional Version) • EMEA/Asia: B1/B3/B5/B7/B8/B20/B38/B40/B41 • ANZ/LATAM: B1/B3/B5/B7/B8/B28 • NA: B2/B4/B5/B12/B13/B14	1. TD210 x 1 2. Cellular Antenna x 1 3. RS232 Cable x 1 4. 12-Pin Terminal Block x 1 5. Power Adapter x 1 (Optional EU/UK/AU/US/CN Type)
TD210-M	TD210-M<1>-<2>	LTE CAT M1/NB-IoT	LTE CAT M1/NB-IoT* FDD-LTE: B1/B2/B3/B4/B5/B8/B12/B13 B17/B18/B19/B20/B25/B26/B28/(CAT-M1 only); GPRS/EDGE 850/900/1800/1900Mhz	
Part Number: <1>: Cellular module for different countries and regions <2>: GN=GNSS from cellular module				

About Bivocom

Founded in 2014, Bivocom specializes in industrial IoT communication technology. Our comprehensive product portfolio covers IoT sensors, cellular gateways, industrial routers, RTUs, modems, as well as self-developed IoT cloud management platforms. We deliver ruggedized industrial wireless hardware, full-lifecycle OEM/ODM customization services and end-to-end IoT connectivity one-stop solutions to industrial partners worldwide.

HQ: 27-28/F, Building F14, Software Park Phase III, Xiamen, 361022, China

W: [www.bivocom.com](#) P: +86 158 8026 2905
E: [sales@bivocom.com](#) E: [support@bivocom.com](#)

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