Bivocom

TD210 Series Industrial Cellular Modems

Introduction

TD210 Series Modem is a type of industrial cellular Modem (also called DTU, IP Modem), which adopts high-powered industrial 32-bits CPU, with multi-layer software detection and hardware protection mechanism to ensure reliability and stability of the device. It supports worldwide carrier 4G/3G/2G cellular network, including FDD-LTE, TDD-LTE, and WCDMA, EVDO, TD-SCDMA, EDGE, CDMA 1X and GPRS. With rich and flexible interfaces, such as RS232, RS485, I/O(Option) and TTL GPIOs is also customizable.

TD210 Series Cellular Modem can help users to quickly access the Internet, to ensure secure and reliable data transmission. It's ideal for IOT (Internet of Things) and M2M (Machine to Machine) applications, and has been widely used in many applications, such as Intelligent Transportation, Oil and Gas, Smart Grid, Vending Machine, Agricultural Irrigation, Environmental Protection, Industrial Automation, Energy Saving, Smart Home, etc.

Key Features

- Rich Industrial interfaces, 1x RS232, 1x RS485, 5x I/O(Option).
- Transparent data transfer, with built in standard TCP/IP stack.
- Multi data centers (up to 5) and TCP server, able to access center with domain name and IP address.
- TCP heartbeat link detection, keep device always online.
- SMS backup, data will be transferred by SMS when TCP/UDP disconnects.
- Rich online and offline trigger modes: SMS, Ring, Data
- Hardware and software auto inspection technology, enable operation fault auto repairing.
- SMS Alarm
- MODBUS protocol supported
- Can be configured as an SMS Modem

Specifications

Cellular Interface

4G/3G/2G for option (FDD-LTE, TDD-LTE, HSPA/WCDMA, EVDO, TD-SCDMA, EDGE, CDMA 1X and GPRS)

Cellular Antenna Interface

Number of Ports: 1

Note: Standard SMA female antenna interface, characteristic impedance 50Ω

SIM Interface

Number of Ports: 1

Note: Standard drawer type card holder, support 1.8V/3V SIM/UIM card, built-in 15KV ESD protection

Serial Interface (Industrial terminal block)

Number of interfaces: 1x RS232, 1x RS485

Serial Communication Parameters

Baudrate: 300~230400bits/s

Data Bit: 5, 6, 7, 8 bits

Stop Bit: 1, 1.5, 2 bits

Check: No, Even-parity, Odd Parity, SPACE and MARK

Analog Input (Industrial terminal block)

Number of Ports: 2(Can be customized to 3)

Note: 10-bit AD, support 4-20mA current signal input, optional 0-5V voltage signal input

I/O (Industrial terminal block, Option)

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Numbers of Ports: 3x GPIOs, able to configured as input and output, communication level: 3.3V

Note: Built in 15KV ESD protection, TTL GPIOs is customizable.

Power Requirements

Standard Power: DC 12V/0.5A

Power Range: DC 5~35V

Communication Current: <85mA(12V)

Note: Built-in power inverting protection and over voltage protection

Power Consumption

Communication: <1W

Note: 12V(<85mA), 5V(<155mA)

Standby: <0.4W

Note: 12V(<30mA), 5V(<55mA)

Sleep: <0.1W

Note: 12V(<0.8mA), 5V(<18mA)

LED Indicators

Online, Act, Power, System

Reliability

Ultra-low consumption design, includes sleep mode, scheduled online and offline mode

EMC up to level 3

Use NTP technology, build-in RTC

SIM/UIM card port built-in 15KV ESD protection

Warranty

Warranty Period: 12 months

Environmental Limits

Operating Temperature: -35~+75ºC(-31~+167 ºF)

Storage Temperature: -40~+80ºC(-40~+176 ºF)

Ambient Relative Humidity: 95%, non-condensing

Physical Characteristics

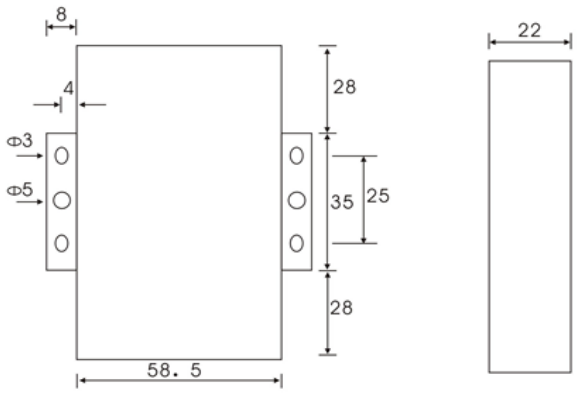
Protection Class: IP30, Housing and system are isolated safely, ideal for industrial automation application

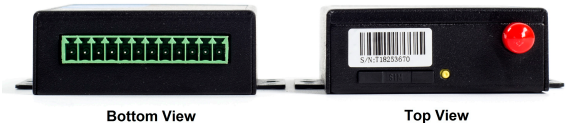
Housing: Iron

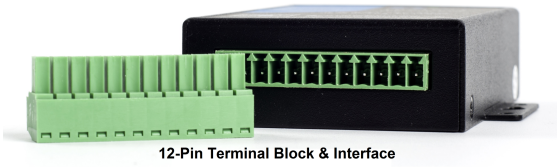
Weight: 208g (0.46lbs)

Dimension: 91x58.5x22 mm (3.58x2.30x0.87 inches), Antenna and other accessories not included

Dimension







Order Information

Models to choose

TD210-LF: Industrial LTE/WCDMA Modem

TD210-W: Industrial WCDMA Modem

TD210-G: Industrial GPRS Modem

Package Content

- TD210 Modem Host
- Cellular antenna(SMA Male)
- Power Adapter(12VDC/0.5A)
- 3- Pin RS232 cable
- 12-Pin Terminal Block

Note: Please visit our website for available frequency band of Bivocom industrial cellular modems, or contact sales@bivocom.com for more information.

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