












iRZ TL21

The new **TL21** GSM/LTE-modem transmits data through cell communication networks that support 2G/3G/4G. The modem supports the following frequency bands depending on the connection standards: LTE (800, 900, 1800, 2100, 2600 MHz); WCDMA (900, 2100 MHz); GSM/GPRS/EDGE (900, 1800, 1900 MHz).

TL21 is equipped with a USB interface, which allows directly connecting the modem to a computer without using an external power source. If necessary, the modem power is supplied through a TJ-6P6C connector.

TL21 supports the main communication functions: data transfer through LTE/UMTS/HSPA+/EDGE/GPRS technologies, reception and transfer of faxes and SMS text messages. The modem is controlled with standard AT commands, and a set of own control commands. The modem is equipped with a GPS function when connecting an antenna to the external pin. The use of diversity antennas is supported. The built-in watchdog timer prevents the device from lagging.

The highest data transfer speed, a wide range of operating temperatures and a compact case body allow using **TL21** modem in various industrial applications: telemetry and telecommand, automated data collection systems, vending systems, payment terminals, and various systems requiring wireless data transfer.

	SIX-BAND		4G		HSPA+
	EDGE CLASS 12		GPRS CLASS 12		USB POWER FUNCTION
	GPS		INDUSTRIAL INTERFACES		WATCHDOG TIMER
	SIM ACCESS PROFILE		EXTENDED TEMPERATURE RANGE		



Frequency Band:

- LTE 800/900/1800/2100/2600 MHz;
- HSDPA+/UMTS 900/2100 MHz;
- GSM/GPRS/EDGE 900/1800/1900 MHz;
- GPS 1575.42 MHz

Features:

Available network protocols:
TCP, UDP, HTTP, FTP, SMTP, POP3

Control through AT commands (Hayes 3GPP TS 27.007, TS 27.005)

SIM applications tools
Timer reset function
Power sleep mode
Reset options set

Multiplatform support:
Windows 2000/XP/Vista/7/Linux

Communication Standards:

- LTE down – up to 100 Mbps;
- LTE up – up to 50 Mbps;
- HSPA+ down – up to 21.1 Mbps;
- HSPA+ up – up to 5.6 Mbps;
- EDGE class 12 – up to 236.8 Kbps;
- GPRS class 12 – up to 85.6 Kbps;
- MS class B;
- SMS: MT, MO, CB, Text and PDU modes;
- USSD;
- Fax – group 3: class 1

Connectors and Interfaces:

- DB9 connector to connect a communication cable (RS232 interface) (! only for service mode);
- USB-B connector (USB 2.0);
- TJ-6P6C power connector;
- SMA jack to connect a GSM antenna;
- SMA jack to connect an additional antenna;
- SMA jack to connect a GPS antenna

Electrical Characteristics:

A possibility of USB power supply

Voltage: 9 – 30 V

Maximum current:

- 200mA at 12V;
- 100mA at 24V

Physical Characteristics:

Aluminum casing

Dimensions: 76 x 77 x 31 mm max.

Weight: 125 g max.

Operating temperature range: -30°C to +60°C

