iRZ TG43-485

iRZ **TG43-485** is a compact quad-band 2G terminal encased in a robust plastic housing with DIN rail mounting option. iRZ **TG43-485** key benefits: Java™ support, integrated PSU enabling operation from the industrial network of ~220V 50/60Hz, 3 digital inputs/outputs and an ADC channel. The embedded Java platform offers easy and fast application development, a broad set of tools, high code reusability, easy maintenance, a proven security concept, on-device debugging, multi-threading programming and multi-application execution.

The iRZ **TG43-485** main communication functions - data communication over CSD and GPRS, SMS communication. The modem is controlled by standard AT commands. The watchdog timer prevents the device from hanging up.

iRZ **TG43-485** is designed for deployments in RS485-based industrial applications. This interface enables simultaneous connection of several external devices to the modem. All connections to the modem are made with the use of the terminal block.

Open source Java development environment is one of the most common programming standards across the globe, which is of key importance for successful development of M2M technologies. With an extended temperature range, embedded Java platform and compact housing iRZ **TG43-485** can be used in various industrial M2M applications, automatic meter reading systems, vending machines, self-service terminals as well as in systems requiring wireless communication.

- QUAD-BAND
- GSM
- GPRS CLASS 12
- JAVA™
- TCP/IP CONNECTIVITY
- BUILT-IN POWER SUPPLY
- SIM ACCESS PROFILE
- INDUSTRIAL INTERFACES
- WATCHDOG TIMER
- EXTENDED TEMPERATURE RANGE

The Modem Key Functions and Features:

- Frequency bands: GSM 850/900/1800/1900 MHz
- GPRS Class 12
- CSD
- USSD
- SMS
- JavaTM ME 3.2
- Control via AT commands (Hayes 3GPP TS 27.007, TS 27.005)
- Timer reset function
- Integrated PSU

Java™ Parameters:

- Java™ ME 3.2
- Secure data transmission with HTTPS/SSL
- Multitasking and multithreading, running several applets at once
- 5 MB RAM and 10 MB Flash File System

Interfaces:

- TJ6-6P6C (RJ12) power connector - the modem power supply at 12V, 3 digital inputs/outputs, 1 ADC channel
- Terminal connector - connection of data communication cable (RS485), AC 220V or DC 12V power supply
- SMA-F antenna connector - GSM antenna connection

Electrical Specifications:

When powered by an internal AC PSU:

- Power supply voltage:100 to 240V
- Input voltage frequency: 50/60 Hz
- Current consumption: max 300 mA
- The 6P6C modular plug and terminal connector output voltage: 12V +/- 5%
- Maximum total current drawn from the 6P6C plug and the connector must not exceed 100 mA

When powered by an external DC PSU:

- Power voltage: 9 to 30V
- Current consumption, max:
  - at power voltage of 12V: 400mA
  - at power voltage of 24V: 200mA

Physical Specifications:

- Dimensions: max 90x54x59 mm
- Plastic housing
- Weight: max 115 g
- Operating temperature: -20°C to +65°C
- Storage temperature: -50°C to +85°C