



iRZ ATM3-232












iRZ **ATM3-232** is a three-band (900/1800/2100 MHz) GSM/3G modem designed for data transmission via cellular network. The modem supports HSDPA/HSUPA/UMTS/EDGE/GPRS and TCP/IP protocol stack.

iRZ **ATM3-232** automatically connects to the Internet and establishes connection with the server supporting permanent connection with it or scheduled operation. It enables transparent interaction between the target software and the external device connected to the modem. For ease of the modem integration into the existing data acquisition systems the iRZ Collector customized server application can be used. The modem is equipped with the RS232 COM port for the connection of the data cable and three additional GPIOs for the external device management. GPIO operations are controlled by SMS.

iRZ **ATM3-232** provides communication redundancy by switching to the second SIM card. The modem supports switching to the redundancy server both in case of connection loss with the main server and by the signal from the modem GPIOs or by SMS commands.

The modem is equipped with the watchdog timer and can operate in a wide input voltage and temperature range.

iRZ **ATM3-232** is designed for use in data acquisition systems and process control systems, telemetry and telemechanics, as well as in automated power consumption measurement systems.

| | | | | | |
|---|----------------|---|----------------------------|---|-----------------------|
|  | TRI-BAND |  | GSM |  | 3G |
|  | GPRS CLASS 12 |  | EDGE CLASS 12 |  | iRZ COLLECTOR |
|  | DUAL-SIM |  | TCP/IP CONNECTIVITY |  | INDUSTRIAL INTERFACES |
|  | WATCHDOG TIMER |  | EXTENDED TEMPERATURE RANGE | | |



The modem key features:

- the support of client and server modes
- transparent TCP/IP-to-COM mode
- Modbus RTU, ASCII mode
- capable to operate with the backup IP address of the server or the backup server
- dual SIM operation
- CSD mode
- sending SMS to a specified number at the loss of connection with the server
- various operating modes with the server (always connected, connection on schedule, at times, on phone or by SMS command)
- automated tracking of the GSM module state and two types of watchdog timers for pending protection
- GPIO management by SMS commands
- sending SMS to a specified number by GPIO signals
- ATM Control setup programme with the visual interface
- easy configuration of the modems with similar parameters
- the support of the the iRZ Collector customized server software
- remote configuration and updating of the embedded software when working with iRZ Collector
- fault tolerance at embedded software updating

Frequency band:

- GSM/GPRS 900/1800 MHz
- UMTS 900/2100 MHz

Communication standards:

- HSDPA - up to 7.2 Mbps
- HSDPA - up to 5.76 Mbps
- UMTS PS – up to 384 Kbps
- EDGE Class 12 - up to 236.8 Kbps
- GPRS Class 12 - up to 85.6 Kbps
- SMS
- USSD

Connectors and Interfaces:

- DB9 connector for the data cable connection (RS232 interface)
- Terminal connector (1 GPO (up to 500 mA) + 2 GPIO)
- USB Mini connector
- Microfit4 power connector
- SMA connector for GSM antenna connection

Electrical characteristics:

- Power supply voltage: from 7°C to 40°C
- Current consumption - not exceeding:
 - at power supply voltage 12V - 250 mA
 - at power supply voltage 24V - 125 mA

Physical parameters:

- Plastic case
- Dimensions – not exceeding TBD 75 x 83 x 25 mm
- Weight – not exceeding 120 grams
- Temperature range: -40°C ...+65°C

