

ECL-BGS5



GSM/GPRS Java Terminal

ECL-BGS5 has been developed for machine-to-machine (M2M) and telemetry solutions, communicating over cellular telecommunication network for reading, monitoring and controlling functions.

Can be used for many solutions with the help of integrated Java™ Application Platform. Builds a transparent communication platform between field devices via serial ports and remote servers or applications over GSM/GPRS.

The theoretical limit to one RS485 port connection of a terminal is up to 255 field devices in a distance of 1,2 km.

Different types of data input can be processed through JAVA platform applications via serial port connections on field devices, digital inputs/ outputs and optional sensors.

With the over the air (OTA) protocol, application software and firmware can be updated remotely. Therefore updates, upgrades and troubleshooting can be done remotely without the need to go to the field.

It has integrated hardware watchdog feature which protects the device against hardware and firmware crashes.

Real-time clock feature can be used for timestamp applications.

AMR firmware, developed on JAVA J2ME platform is installed specially for AMR applications. Runs as a transparent device to transmit the queries of the central AMR software and simultaneously runs as a field device to read the meter and transmit data to central AMR software.



Can change the serial port speed according to IEC1107 Mod C. So it can attune itself to the meter speed while reading data and provides fast reading.

To establish secure data transfer, IP addresses, phone numbers, and SMS numbers can be restricted on the device. A secured server address can be specified for firmware update where the downloadable content will be controlled and update can commence automatically.

Configuring and reconfiguring, parameter changes etc. can be done via serial interfaces locally or over GSM/GPRS remotely. During the communication, it will initiate ID and password control/authentication.

ECL-BGS5 and the AMR firmware is 100% compatible with TeleMetriX AMR system. Remote control via TeleMetriX can be done easily.

Physical Specifications

- Size : 98 x 101 x 60 mm
- Weight : ~300 gram
- Sealable Terminal Cover

Environmental Specifications

- -40 ... +70°C operating temperature
- -40 ... +85°C storing temperature

Power Input

- 100 ... 240 VAC or 9 VDC—48 VDC
- 6 KV Impact Resistance

Wireless Features

- Quad Band GSM 850/900/1800/1900 Mhz
- 850/ 900 MHz – Class 4 (2 Watt)
- 1800/1900 MHz – Class 1 (1 Watt)
- GPRS Class 12
- 9.6 kbit/sec CSD
- SMA Antenna Connector
- Easy use push-n-eject SIM card connector and M2M SIM
- 2 Sim Card Connector and 1 Embedded Sim Card (Optional)
- Fully compatible with all GSM operators

Serial Interfaces

- 2 x RS485 Interface OR 1 x RS485 Interface + 1 x RS232 Interface
- 300bps - 460kbps communication speed
- 7E1, 7O1, 8N1, 8E1, 8O1 frame
- RS485 Automatic Data Direction Control (ADDC)

Other Inputs/Outputs

- 2 x 250 VAC 2A Relay Output (NC/NO/Shared)
- 3 x Dry Contact Input (Standart)

Other Hardware Features

- ARM Microprocessor
- Real Time Clock (RTC)
- Built in Flash Memory
- Hardware Watchdog

- Multi SIM support, supports both M2M SIM and Regular SIM
- Integrated TCP/IP Stack, UDP/TCP/POP3/SMTP/HTTP/HTTPS/FTP support
- Can send alerts to central server by the help of supercapacitor in case of power cut-off (Optional)

JAVA Features

- JSR 139 CLDC 1.1
- J2ME IMP-NG
- JAVA OTAP
- SDT/HTTPS/SSC

Application Features

- Java applications for AMR solutions
- Push/Pull/Poll communication
- Configuration via Serial Cable, GPRS, CSD or SMS
- Firmware update over GPRS
- Ability to restrict IP / Port / Phone numbers
- Trasparent communication / gateway
- Direct meter reading and transmit meter data to server/central software
- IEC1107 Mod C automatic speed change
- ID and password authentication
- Detailed event log and troubleshooting
- TCP/IP Server and Client Mode
- Saving readout data on flash memory and prevent data loss
- Server or gsm network based time synchronization