# ECL-65T AMR

## GSM/GPRS Java Terminal



INFORMATION TECHNOLOGIES

ECL-65T was 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<sup>™</sup> Application Platform. Builds a transparent communicaiton platform between field devices via serial ports and remote servers or applications over GSM/GPRS.

One terminal can communicate with up to 256 field devices over RS-485, in a distance of 1,2km.

Different types of data inputs and environmental datas 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 time stamp applications.

It has AMR firmware installed, developed on JAVA J2ME platform specially got AMR applicaitons. Can communicate transparently for direct meter reading between the meter and server, and also able to read the meter data and transmit datas to server after.



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 a fast reading.

To establish a secured data transfer, IP addresses, phone numbers, and SMS numbers can be restricted by a number depending on the user choice. A secured server address can be specified for firmware update where the downloadable content will be controlled and commenced automaticly.

Configuring and reconfiguring, parameter changes etc. can be done via serial interfaces locally or over GSM/GPRS remotely. While these communications, it will initiate ID and password control.

ECL-65T and the AMR firmware is 100% compatible with TeleMetriX AMR system. Remote control via TeleMetriX can be done easily.

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## **Pysical Specifications**

Size : 58 x 106 x 31 mm Weight : ~100 gram

#### **Environmental Specifications**

- -30 ... +85°C running temperature
- -40 ... +85°C storing temperature

#### **Power Input**

- +8 ... +28 VDC max. 1 A
- 100 ... 240 VAC (adapter Đle)

#### **Wireless Features**

- Quad Band GSM 850/900/1800/1900 Mhz
- 850/ 900 MHz Class 4 (2 Watt)
- 1800/1900 MHz Class 1 (1Watt)
- GPRS Class 12 ve CSD
- FME Antenne Connector
- Easy Use Push-n-Eject SIM Card Connector
- Can be used with all GSM Operators

#### **Serial Interfaces**

- 1 x RS232 Interface
- 1 x RS485 Interface
- 300bps 460kbps communication speed
- 7E1, 7O1, 8N1, 8E1, 8O1 frame
- RS232 Flow Control
- RS485 (ADDC)

### **Other Input/Outputs**

- 1 x Relay
- 2 x Digital Input
- 1 x PT1000 Temperature Sensor (Optional)
- 1 x Dijital Sıcaklık/Nem Sensoru (Optional)

### **Other Device Features**

- ARM9 Microprocessor
- Real Time Clock (RTC)
- Internal Flash Memory
- Hardware watchdog
- GSM/GPRS/EDGE LED Status Indicator

#### **JAVA Features**

- JSR 139 CLDC 1.1
- J2ME IMP-NG
- JAVA OTAP

#### **Application Features**

- JAVA Application for AMR Solutions
- Configuration over serial cable, GPRS, CSD or SMS
- Firmware update over GPRS
- Restriction for IP / Port / Phone Number communications
- Transparent communication / gateway
- Direct meter reading and transport meter data to server
- IEC1107 Mod C automatic speed change
- ID and password control
- Detailed event log and troubleshooting
- TCP/IP Server and Client Mod support
- Saving datas on flash memory and prevent data loss
- Remote and local time synchronization