

Smart RTU- IOT Platform

E Track -550i

E track is a smart Modbus/RTU to GPRS gateway, designed to transmit data transparently over GSM/GPRS cellular networks. Gateway is integrated with 32bit ARM Cortex, with application firmware to communicate with GSM/GPRS engine. It can operate as server or client mode; accept with dynamic IP or static IP. As compare to PSTN or GSM dialup or lease line, the E track with GPRS communication link provide a cost economical approach to achieve a “always ON” packetized data network. Easy to plug and play allows to migrating your traditional serial communication system to the advance GPRS link, without tedious application development and in depth knowledge on AT command or GPRS. You can view the device like “virtual serial wire over the air” that links all your remote equipments to the central PC/Server. It is a full transparent protocol independent gateway. It is easy to configure, manage, and monitor remote devices on a private network over the Internet. The products also come with built in I/O that can be configured to indicate the priority of events. The device can configured or update firmware over the air (OTA).



Application Segment

- Automatic Meter Reading
- Power Monitoring and Control
- Fault Indicators
- Temperature Alerts, Indicators
- Pump Control, Flow Measurements
- Windmill, SCADA, Data Exchange
- Central Monitoring and Control Systems
- Base Station, ATM Monitoring and Control



Features

- Support Automatic GPRS network connection (no AT commands required)
- Virtual COM Extend Real COM Ports via GPRS
- Virtual COM1 x RS232 port, 1 x RS485 port for Virtual COM 1 x Utility port for Configuration
- Built-in Watchdog Function
- Read from Multiple Slave IDs, Selectable Address Range
- Data Logger during Server Disconnection
- SMS through Authorized numbers list for commanding
- Serial Port for External data Acquisition (RFID readers, Energy meter...)
- Remote Configuration through SMS/GPRS OTA (Over The Air) Firmware upgrade.
- LED indicators and Device status. Auto GPRS Connect/Reconnect
- Keep Alive command to maintain socket connection
- Packetization methods: Packet length / Time interval / Special End Char
- Multiple AIs to connect weather sensors
- Multiple DI to log input status



GSM Specification

| | |
|---------------------------|---|
| Frequency | Quad band: 850/900/1800/1900 MHz Compliant to GSM Phase 2/2+ -Class 4 (2W @ 850/900 MHz) -Class 1 (1W @ 1800/1900 MHz) |
| GPRS | GPRS multi-slot class 12 GPRS mobile station class B |
| Transmitting Power | Class 4 (2W for GSM 850 and GSM 900) Class 1 (1W for DCS 1800 and PCS 1900) |
| SIM Interface | Internal SIM 1.8V & 3V |

General Communication

| | |
|------------------------------|--|
| Transmit Protocol | TCP,UDP,HTTP |
| Operation Mode | Server/ Client |
| SIM Card IP | Static / Dynamic IP |
| Data Buffering | 512bytes |
| Packetization Methods | Packet Size / Time interval / Special End Char |
| Command | Authorized Number listing for commanding |
| OTA | Firmware Updating via GPRS |

Serial Specifications

| | |
|----------------------------|---|
| Electrical Standard | TTL or RS232 or RS485 or RS422 |
| Connector | Micro Fit-5.0 (4 pins/6 pins for I/O) |
| Baud Rate | 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps |

Interfaces

| | |
|----------------------|--|
| Input Port* | Configurable 1 No Analog/Digital Input |
| Output Port* | 1 Open Collector output Max Sink 100mA |
| GSM Antenna | External Only |
| LED Indicator | Power, GSM, Signal Strength, Serial Rx, Tx |
| Serial Port1 | PC Utility to Configure the device Eg. RFID, Energy Meter etc., |
| Serial Port2 | PC Utility to Configure Device |

General Specifications

| | |
|------------------------------|---|
| Connector Interface | Micro Fit-5.0 (4 pins/6 pins for I/O) |
| Dimension | 105mm x 95mm x 24mm (L x W x H) |
| Weight | 160 grams |
| Operating Voltage | 8V - 32V DC |
| Operating Temperature | Operating: -10C to +55C |
| Supply Current | 0.08A at 12VDC (GPRS online, no transmission) |

UNIQUE FEATURES OF RTU

Auto Configurable through server- no need for person to configure through laptop or on site troubleshooting
Can support any modbus device- device interchangeable from one site to another , intermixing of devices
Battery Option- Data pool during communication outage, server disconnection
SMS alerts to 3 authorized person in case of power outage and power restoration
Provision for direct connectivity to sensors, knowing status and analog values through potential free contacts
Option for digital output through 5 amp relay/ 12 V pulse to remote connect/ disconnect inverter / any other device



* Indicates Optional Feature

We pursue a policy of continuous research and product development, Specifications and features are subject to change without notice