



TERRAFORM

E N E R G Y

ENERGY TRACK

ET SERIES DATA-LOGGERS

PRODUCT CATALOG - 2022



ET SERIES

SIMPLIFIED ENERGY TRACKING SOLUTIONS

Energy Track - ET Series of Data Loggers are our newest fleet of data acquisition & concentrator modems that can work in any residential, commercial or industrial data acquisition projects. These modems can perform both in standalone applications or situations where multi-modal networks need to be established. These data-loggers are designed with a view of maximizing efficiency & reducing packet drops in data intensive applications without the need to worry about network or hardware layers that make data acquisition or reception a challenge.

KEY FEATURES

- Plug n Play to all types of Inverters, Energy Meters, BMS and Switchgear
- Built in data storage ensures zero data loss
- Data pool during communication outage
- Battery feature captures real time outage alerts and outage time*
- Delivered with IP-55/IP-64/IP-65 Enclosures*
- 6 months to 2 Years local data storage**

COMMUNICATION SPECIFICATIONS

- Configurable Slave ID, Baud Rate, Parity, Stop Bits
- Supported Baud Rates – 4800 to 115200
- Supports MODBUS RTU, ASCII, TCP/IP Protocols**
- Extended software support for Proprietary Protocols**

ENVIRONMENTAL

- Operating Voltage 12VDC to 24VDC
- Operating Temperature -25° to +55 °Celsius
- Ambient Relative Humidity 5 ~ 95% RH, non-condensing

APPLICATIONS

- ✓ Automated Meter Reading (AMR/AMI)
- ✓ Energy Monitoring/Management Systems (EMS)
- ✓ Water Monitoring Systems (WMS)
- ✓ Gas Monitoring System (GMS)
- ✓ Temperature Data Logging
- ✓ Sensor Data Logging
- ✓ Industrial Control & Flow Measurements
- ✓ Data Acquisition Systems & PLC/SCADA
- ✓ Battery Management Systems

*Provided as per customer requirements

**Depending on Model

ET SERIES

SIMPLIFIED ENERGY
TRACKING SOLUTIONS

ET-WL-123C

ET-WL-123C is a smart RS232/ Serial/ RS485 to Wi-Fi converter modem, designed to transmit data transparently over Wi-Fi networks. This low cost modem is perfect for wired & wireless applications



DEVICE SPECIFICATIONS

TECHNICAL SPECIFICATIONS

- Model – ET-WL-123C
- Processor – Dual-core Arm Cortex M0+
- 264kB of SRAM, and 2MB of on-board Flash memory
- Data Log Flash Memory 64MB External
- Onboard RTC
- 802.11 b/g/n Wi-Fi @ 2.4GHz with a 32 BIT RISC Processor
- Mounting – Wall Mount
- Pluggable HV AC Screw Connectors

SAFETY & PROTECTION

- Inbuilt Over Current Fuse
- Reverse Polarity Protection
- Inbuilt Temperature Sensor & Voltage Sensor
- RS232/RS485 Port Protection – 600W Lightning-Proof and Surge-Suppress, 15KV ESD protection

KEY FEATURES

- 1 x RS485 Port
- 1 x RS232 Port
- LED Indications RX, TX, Network & Power
- Programmable Address Range
- Supports MODBUS RTU & ASCII Protocols
- Extended support for Proprietary Protocols.
- Configurable Slave ID, Baud Rate, Parity, Stop Bits
- Data Transfer Protocols: HTTP, HTTPS, MQTT
- Data Transfer Formats: JSON, String, Customizable

ET SERIES

SIMPLIFIED ENERGY
TRACKING SOLUTIONS

ET-RF-24G

ET-RF-24G is a smart RS232/ Serial/ RS485 to RF data converter modem, designed to transmit data transparently over RF networks. This modem is equipped with 2.4GHz RF transceiver module. Perfect for bi-directional short distance RF data transfer applications



DEVICE SPECIFICATIONS

TECHNICAL SPECIFICATIONS

- Model – ET-RF-24G
- Processor – Dual-core Arm Cortex M0+
- 264kB of SRAM, and 2MB of on-board Flash memory
- Data Log Flash Memory 64MB External
- Onboard RTC
- Mounting – Wall Mount
- Pluggable HV AC Screw Connectors

RF SPECIFICATIONS

- Frequency Band – 2.4 GHz ISM
- RF Channels – 126
- Range –
 - Indoor (Line Of Sight) – 300MTR
 - Outdoor (Line Of Sight) – 800 - 1000MTR
- Sensitivity –
 - -82dBm @ 2Mbps / -85dBm @ 1Mbps / -94dBm @ 250kbps

SAFETY & PROTECTION

- Inbuilt Over Current Fuse
- Reverse Polarity Protection
- Inbuilt Temperature Sensor & Voltage Sensor
- RS232/RS485 Port Protection – 600W Lightning-Proof and Surge-Suppress, 15KV ESD protection

KEY FEATURES

- 1 x RS485 Port
- 1 x RS232 Port
- LED Indications RX, TX, Communication & Power
- Supports MODBUS RTU, ASCII, TCP/IP
- Programmable Address Range & extended support for Proprietary Protocols.
- Configurable Slave ID, Baud Rate, Parity, Stop Bits
- Payload Length: 1 to 32 Bytes dynamic with automatic packet handling
- Data Transfer Formats: JSON, String, Customizable

ET SERIES

SIMPLIFIED DATA
TRANSFER SOLUTIONS

ET-LR-10K

ET-LR-10K is a smart RS232/ Serial/ RS485 to LoRa wireless data converter modem, designed to transmit data transparently over LoRa networks. This modem is equipped with 868MHz LoRa transceiver module. Perfect for bi-directional long range wireless data transfer applications



DEVICE SPECIFICATIONS

TECHNICAL SPECIFICATIONS

- Model – ET-LR-10K
- Processor – Dual-core Arm Cortex M0+
- 264kB of SRAM, and 2MB of on-board Flash memory
- Data Log Flash Memory 64MB External
- Onboard RTC
- Mounting – Wall Mount
- Pluggable HV AC Screw Connectors

LoRa SPECIFICATIONS

- Frequency Band – 863-870 MHz EU
- Channels – Up to 81
- Range –
 - Indoor (Line Of Sight) – Up to 2KM
 - Outdoor (Line Of Sight) – Up to 5 KM
- Sensitivity –
 - Receiver -147dBm @ 0.3 kbps

SAFETY & PROTECTION

- Inbuilt Over Current Fuse
- Reverse Polarity Protection
- Inbuilt Temperature Sensor & Voltage Sensor
- RS232/RS485 Port Protection – 600W Lightning-Proof and Surge-Suppress, 15KV ESD protection

KEY FEATURES

- 1 x RS485 Port
- 1 x RS232 Port
- LED Indications RX, TX, Communication & Power
- Supports MODBUS RTU, ASCII, TCP/IP
- Programmable Address Range & extended support for Proprietary Protocols.
- Configurable Slave ID, Baud Rate, Parity, Stop Bits
- Payload Length: 1 to 240 Bytes dynamic with automatic packet handling
- Data Transfer Formats: JSON, String, Customizable

ET SERIES

SIMPLIFIED ENERGY
TRACKING SOLUTIONS

ET-LN-100G

ET-LN-100G is a smart RS232/ Serial/ RS485 to Wi-Fi/ LAN converter modem, designed to transmit data transparently over Wi-Fi/ ETHERNET networks. This modem is equipped with a 100 Gigabit Ethernet and supports 5GHz & 2.4 GHz Wi-Fi networks. Perfect for networked & wireless applications



DEVICE SPECIFICATIONS

TECHNICAL SPECIFICATIONS

- Model – ET-LN-100G
- CPU - Quad-Core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- RAM 2GB LPDDR4
- Memory Card 64 GB
- 2.4 GHz and 5.0 GHz IEEE 802.11b/g/n/ac wireless LAN
- Bluetooth 5.0, BLE
- Gigabit Ethernet
- 2 × USB 3.0 ports
- Mounting – Wall Mount
- Pluggable HV AC Screw Connectors

SAFETY & PROTECTION

- Inbuilt Over Current Fuse
- Reverse Polarity Protection
- Inbuilt Temperature Sensor & Voltage Sensor
- RS232/RS485 Port Protection – 600W Lightning-Proof and Surge-Suppress, 15KV ESD protection

KEY FEATURES

- 1 x RS485 Port
- 1 x RS232 Port
- 1 x Gigabit Ethernet 100GBits Port
- LED Indications RX, TX, Network & Power
- Read from Multiple Slave ID's
- Supports MODBUS RTU, ASCII, TCP/IP
- Programmable Address Range & extended support for Proprietary Protocols.
- Configurable Slave ID, Baud Rate, Parity, Stop Bits
- Data Transfer Protocols: FTP, HTTP, HTTPS, MQTT
- Data Transfer Formats: JSON, String, Customizable

ET SERIES

SIMPLIFIED ENERGY
TRACKING SOLUTIONS

ET-IOT-124G

ET-IOT-124G is a smart RS232/ Serial/ RS485 to 4G/ LTE data converter modem, designed to transmit data transparently over 4G/ LTE networks. This modem is equipped with multi-band SIM7600E module. Perfect for bi-directional remote data transfer applications



DEVICE SPECIFICATIONS

TECHNICAL SPECIFICATIONS

- Model – ET-IOT-124G
- CPU - ARM Cortex-A53 64-bit @ 1 GHz
- SDRAM 512MB
- Memory Card 64 GB
- IEEE 802.11b/g/n Wi-Fi @ 2.4 GHz
- Mounting – Wall Mount
- Pluggable HV AC Screw Connectors
- DB9 Connector for Serial RS232 Interface

GSM SPECIFICATIONS

Frequency Bands:

- LTE-TDD - B40/B41
- LTE-FDD - B1/B3/B5/B8
- UMTS/HSPA+ - B1/B8
- GSM/GPRS/EDGE - B3/B8

Data Transfer Rates:

- LTE CAT1 Uplink up to 5Mbps , Downlink up to 10Mbps
- HSPA+ Uplink up to 5.76 Mbps , Downlink up to 42 Mbps
- UMTS Uplink/Downlink up to 384Kbps
- EDGE Uplink/Downlink up to 236.8Kbps
- GPRS Uplink/Downlink up to 85.6Kbps

SAFETY & PROTECTION

- Inbuilt Over Current Fuse
- Reverse Polarity Protection
- Inbuilt Temperature Sensor & Voltage Sensor
- RS232/RS485 Port Protection – 600W Lightning-Proof and Surge-Suppress, 15KV ESD protection

KEY FEATURES

- 1 x RS485 Port
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- LED Indications RX, TX, Network & Power
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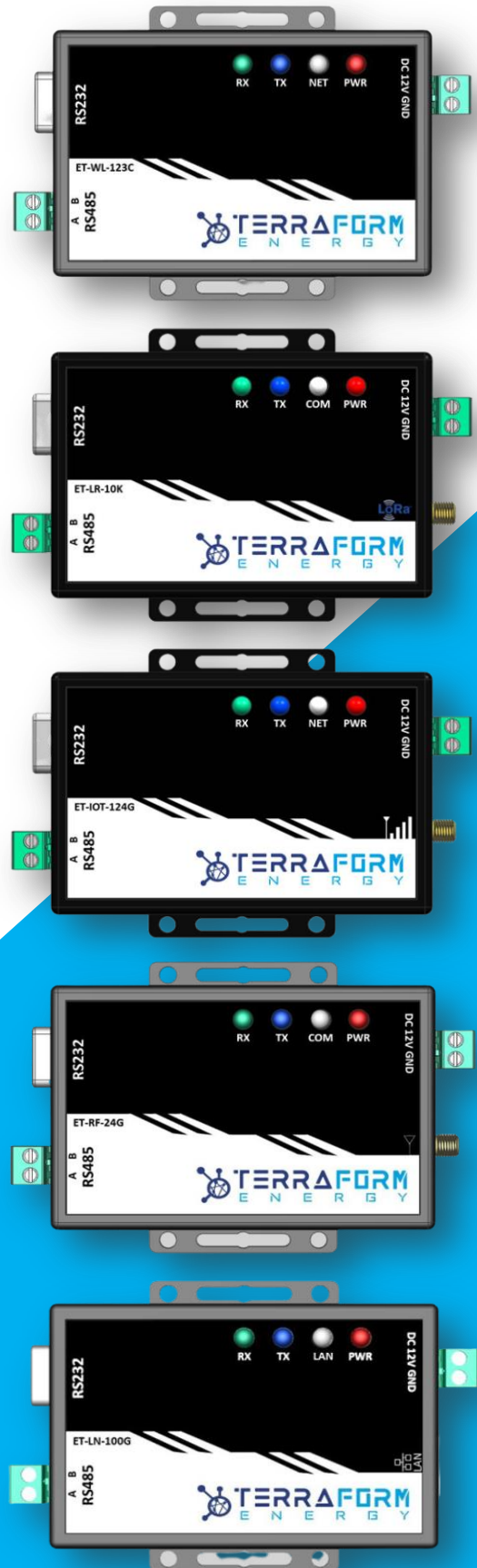
SIMPLIFIED ENERGY TRACKING SOLUTIONS

WARRANTY

ET Series products come with a limited time warranty of 2 years from the date of sales. The warranties can be extended. Please call our support for more information

SERVICES

Our products don't just come with warranty but we extend our services & support to our customers with customized data logging solutions, EMS Software & Solutions, Site Surveying, Solution Proposition, Prerequisites Identification, Pilot Test Run, Project Commissioning & Annual Maintenance Contracts (AMC's). To know more about our services get in touch with us.





TERRA FORM

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GSTIN# 27AGWPD5223A1ZN

Contact : 09370398883

For enquiries: energyterraform@gmail.com

Address: Plot No 512, Bhagyashree Colony, Parsoda Road, Ramtek, Nagpur, Maharashtra, India – 441106