Forwarding each step towards a greener Earth

Energy Log™
monitor-optimize-save

NAMDHARI ECO ENEGIES PVT LTD

PRODUUCT CATALOGUE

SMART DEVICES TO MAKE THE WORLD SMARTER

COMPANY PROFILE

Namdhari Eco Energies Pvt. Ltd specialized in solving energy efficiency challenges in today's highly demanding environment. We also help companies in improving their energy efficiency by providing them the Remote monitoring Solutions for the real time monitoring of the Energy Efficiency Parameters. We are leader in designing innovative remote monitoring solutions. Backed up by experience of over a decade in IOT based remote monitoring solutions, our mission is to provide the best quality solution to our clients at affordable prices. Our Remote monitoring Solutions include Energy Monitoring System, Solar Performance Monitoring, Water Monitoring System, Chiller Optimizer, Motor Management Tool etc. We also provides hardware's for the Remote Monitoring for varied parameters

Our Motive

At Eco Energies, we exactly understand the customer requirements. Our Central task is to pay constant attention to new technology and therefore our highest priority is innovation. We as a market leader, take everything concerned with the product seriously. We commit our best before sale and as well as after sale support.

Products

Today, our product range has expanded to include a complete range of Power and Energy Monitoring Solution and Remote Monitoring Sensors: Data Loggers, Pyranometer, Wind speed sensor, Wind direction sensor, Ambient temperature sensor, Module temperature sensor, Smart Multi function power meter etc. We constantly keeps on adding new products in our umbrella.

Certification

- BEE Grade 3 Energy Service Company
- BEE Accredited Energy Audit Firm
- Team members have International Certification from AEE USA
- Empanelled with Powergrid for Energy Efficiency Projects
- ISO 9001:2015 Certified Company
- Our Products are Certified with applicable ISO/IEC Standards
- Our Calibration Lab is Certified with ISO 17025: 2017 Standard
- Our Softwares solutions are ISO/IEC 27001:2013 Certified
- Our Softwares solutions are inline with ISO 50001: 2018 Standard

ENERGY LOG MODBUS BETA (MBDL-03)

Modbus Beta Data logger (MBDL-03) helps user to collect the data in regular interval from different Modbus RTU's when output is generated and saves data in CSV files. Ethernet interface helps to download log files through LAN. Data can be accessed from the system in operating condition without any interruptions. All configuration pages are password protected. User can access from anywhere through LAN, do configuration and download desired files.

Features

Communication

- RS 485 output for communication with multiple devices.
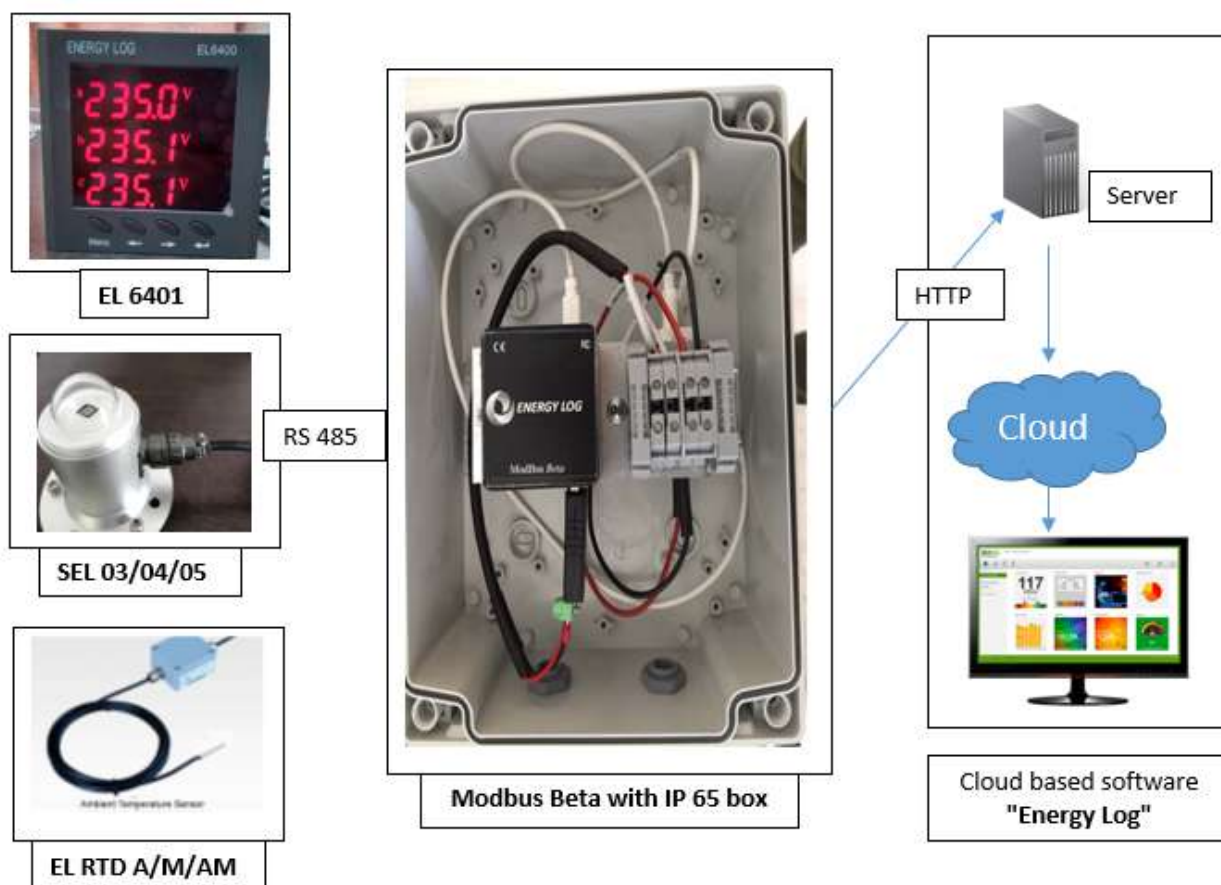- Support Modbus RTU protocol.

Ease of use

- Configurable serial settings and baud rate.
- Supports up to 32 RTU's
- Logging interval is configurable.
- Automatic data recording with regular interval.

Storage
- Memory card 16 GB

Architecture

EL 6401

SEL 03/04/05

EL RTD A/M/AM

RS 485

Modbus Beta with IP 65 box

HTTP

Server

Cloud

Cloud based software
"Energy Log"

Specification

Description	Range
Data rates	9600 bps to 115.2 kbps
Communication port	RS 485 – 2 Wire & 10/100 base Ethernet
File format	CSV files
Storage	MicroSD card 16GB
Power supply	<2 Watt
Operating temperature	5 °C/60 °C
Storage temperature	-40 °C/85 °C
Connectors	• RJ45 for LAN connection • USB 2.0 port
Dimensions	50*55*35 mm
Ordering code	MBDL-03

Benefits

- Useful in data logging for monitoring and analysis purpose
- Paperless operation.
- Less power consumption.
- Ease of operation and configuration.
- Customization as per requirement.
- Ease of accessibility through web.·

Operation

- Data logger manages set of slaves connected in RTU mode.
- Variables are defined in configuration files.
- All the data associated with variables is traceable.
- All the collected data is sent/transferred to server.

Accessories

- +5V Power Supply
- USB to RS485 Connection
- Memory Card 16 GB
- Ethernet Cable

Applications

- **Industrial data logging**
- **Energy audit and monitoring applications.**
- **Process parameter monitoring**
- **DG set synchronization.**

Strengths

- **Lower power and data consumption.**
- **Compatibility with Modbus protocol.**
- **Integration of data by Modbus RTU**
- **Customizable and user friendly**

Other products
MBDL 04

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Power Meter

ENERGY LOG POWER METER(EL6400)

This Energy Log Power Meter product is a multi-function power meter used to measure alarms, power pulse output, power parameters, to monitor switch status and transmits output functions.

Technical Specification

Specification	Power Meter EL6400
Precision Class	0.5 Class
Baud Rate	1200-19200 bps
Display mode	12 bit LED Display
Voltage	AC 380V/AC 100V
Current	AC 5A/ AC 1A
Temperature	-10 to 55℃
Relative Humidity	93%
Frame Size	120 X 120mm
Aperture Size	11 X 11mm
Communication Interface	2-way RS485 communication

Measures

- **Voltage**
- **Current**
- **Power -KW, KVA, KVAr**
- **Power Factor**
- **Frequency**
- **KWh, KVArh, KVAh**

Products

- **EL6400-1: Power Meter with 0.5% accuracy.**
- **EL6400-2: Power Meter with 1% Accuracy**

SUN ENERGY LOG (SEL)

A pyranometer is a sensorr used for measuring solar irradiance on a planar surface and it is designed to measure the solar radiation flux density (W/m^2) from the hemisphere.e

Technical Specification

Specifications	SEL03
Sensitivity	10 µV/W/m2
Impedance	20 to 200 Ω
Expected voltage output range	0-5V
Current Range	4-20mA
Distance range	Up to 800 m
Maximum operational irradiance	2000W/m2
Spectral range	0.3-3µm
Resolution	1 W/m2
Operating and storage temperature	-50 ℃ to 85℃
Field of view	180◦
Sensor line length	2.5m
Humidity Range	0-100%
Product Power consumption	1.8mW
Ingress Protecting rating	IP 65
Detector Type	Thermopile
Recommended applications	Economical solution for routine measurements in weather stations field testing

Particular	ISO Specifications	SEL03
ISO 9060:2018	Second Class	Second class
Response time	<60 s	<5 seconds
Zero Offsets		
a) Thermal radiation	+7 W/m2	<7 W/m2
b) Temperature changes	±2 W/m2	<2 W/m2
Non stability (Change/year)	± 3%	<±2%
Non-Linearity (100-1000W/m2)	± 3%	<±2%
Directional Response	± 20 W/m2	<20 W/m2
Spectral Selectivity	± 10%	<3 %
Temperature response	8%	<5% (-10 ℃to +40℃)
Tilt response	5%	<1% (0◦—90◦ at 1000 W/m2)

Products

- SEL03: Class 2 Pyranometer
- SEL04: upto 200000 LUX with RS485 Output.
- SEL05: upto 200000 LUX with RS485 Output with ambient temperature sensor.

TEMPERATURE LOG

TL-01-A offers best-in-class smart sensors for ambient temperature measurement. The TL-01-A sensor comes integrated with a sensing element that is placed in a Stainless steel Cylinder which is directly glued to the rear of the measuring PV module with Thermal tape. These sensors are compact, easy-to-install and provide very high accuracy.
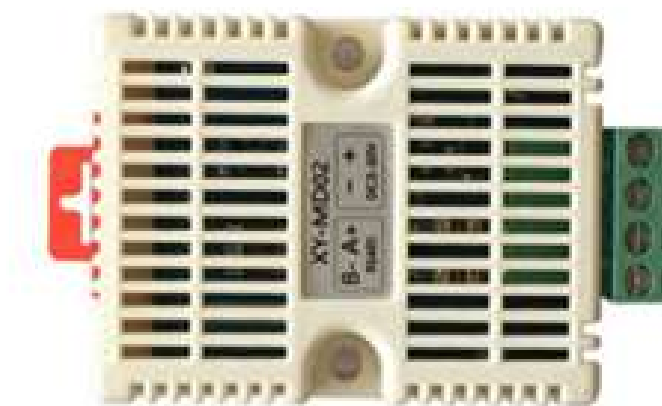
Technical Specification

Specification	TL-01-A
Temperature Accuracy	Class A
Measurement Range	-40°C to 125°C
Sensor Element Type	RTP
Temperature Stability	<0.1°C per year
Output	RS485
Max Working RH	95%
Power Supply	200-250 Volts AC/DC 4.5-5.2 Volts
Sensor Cable Insulation	Silicon Insulated

Products

- **Temperature Log TL-01-A with IP65 Box (Combined Ambient and Module Temperature)**
- **Temperature Log TL-02-A (Ambient Temperature)**
- **Temperature Log TL-03-A (Module Temperature)**

TEMPERATURE & HUMIDITY SENSOR

A humidity sensor, senses, measures and reports both moisture and air temperature. The ratio of moisture in the air to the highest amount of moisture at a particular air temperature is called relative humidity. Relative humidity becomes an important factor when looking for comfort.

Technical Specification

Specification	Temp & Humidity
DC Power Supply	5-30V
Output Signal	RS485 Signal
Communication Protocol	Modbus- RTU Protocol and Custom General Protocol
Baud Rate	9600
Temperature Precision	±0.5%(25℃)
Humidity Precision	±3% RH
Temperature Range	-40℃ to +60℃
Humidity Range	0% RH to 80% rh
Temperature Resolution	0.1℃
Humidity Resolution	0.1%RH
Power Consumption	<0.2W

WIND ENERGY LOG

Wind Speed Sensor is designed with rugged components stand up to hurricane-force wind yet is sensitive to a light breeze. It includes sealed bearings for long life. The range and accuracy specifications have been verified in wind-tunnel tests. In areas where icing of the anemometer is a problem, drip rings deflect water from the joint between moving parts.

Technical Specification

Specification	WEL-01
Sensor Type	Three Cups
Material	Control head UV- Resistant ABS
Wind Cups	Polycarbonate
Range	0-30 m/s
Startup Wind Speed	0.5 m/s
Accuracy	±3%
Output	RS-485
Cable Length	2 meter
Temperature	-40 to 85°C
Potential Lead	Two Wire

Products

- **WEL-01 : Wind Speed Sensor**
- **WEL-02 : Wind Direction Sensor**
- **WEL-03 : Wind Speed and Direction Sensor**

PRESSURE SENSOR

A pressure sensor is a device for pressure measurement of gases or liquids. A pressure sensor usually acts as a transducer; it generates a signal as a function of the pressure imposed.

Technical Specification

Specification	Pressure Sensor(SS302+)
Brand	Sendo
Capacity	6000psi gauge
Pressure Range	6000psi
Voltage Supply	5V dc
Output Signal	0.5- 4.5Volt
Electrical Connect	DIN43650A
Pressure Connect	G1/4
Material of Housing	Stainless steel 304
Material of Wetted Part	Stainless steel 316L
Sealing Rating	IP65
Accuracy	0.50%

DIESEL FLOW METER

DIESEL FLOW METER

DFM is a tool for direct measurement of fuel consumption, which is used as a part of GPS tracking system, vehicle telematics system or as an stand-alone (autonomous) solution for fuel consumption monitoring.

Technical Specification

Specification	Diesel Flow Meter
Brand	Barry Century
Measurement Range	6000psi gauge
Joint Pipe Bore Size	0.5"
Coupling Type	Join
Max. Pressure	1.0 Mpa
Temperature	-10℃ to +70℃
Pulse Unit	mL/p

BTU METER

BTU meters measure the energy content of liquid flow in British thermal units (BTU), a basic measure of thermal energy

Technical Specification

Specification	BTU Meter	
Accuracy	Linearity: 0.5%	
	Repeatibility: 0.2%	
	Accuracy: ±1%	
Measuring Range	Pipe Size from DN15mm to DN600mm	
Transmission Distance	up to 1000m	
Communication Interface	RS 485	
Current Output	4-20mA	
Current Input	4-20 Ma	
Power Supply	Primary Meter:8-36V DC Secondary Meter: AC 220V or DC 24 V	

Products

- **WFM-01: Flow meter 1/2 inch SS**
- **WFM-02: Flow meter 1 inch SS**
- **WFM-03: Plastic Flow Meter**

WATER FLOW METER

A water flow meter is an instrument capable of measuring the amount of water passing through a pipe.

Technical Specification

Specification	Diesel Flow Meter
Water Pressure	>1.75MPa
Operating Voltage Range	DC 5V-15V
Insulation Resistance	>100
Accuracy	±3%(in the 1-25L)
Rated Voltage	DC 5V
Size	G1/2"
Communication Interface	RS 485

Products

- **WFM-01: Flow meter 1/2 inch SS**
- **WFM-02: Flow meter 1 inch SS**
- **WFM-03: Plastic Flow Meter**

Eco energies pvt. ltd

CONSERVE TO PRESERVE

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