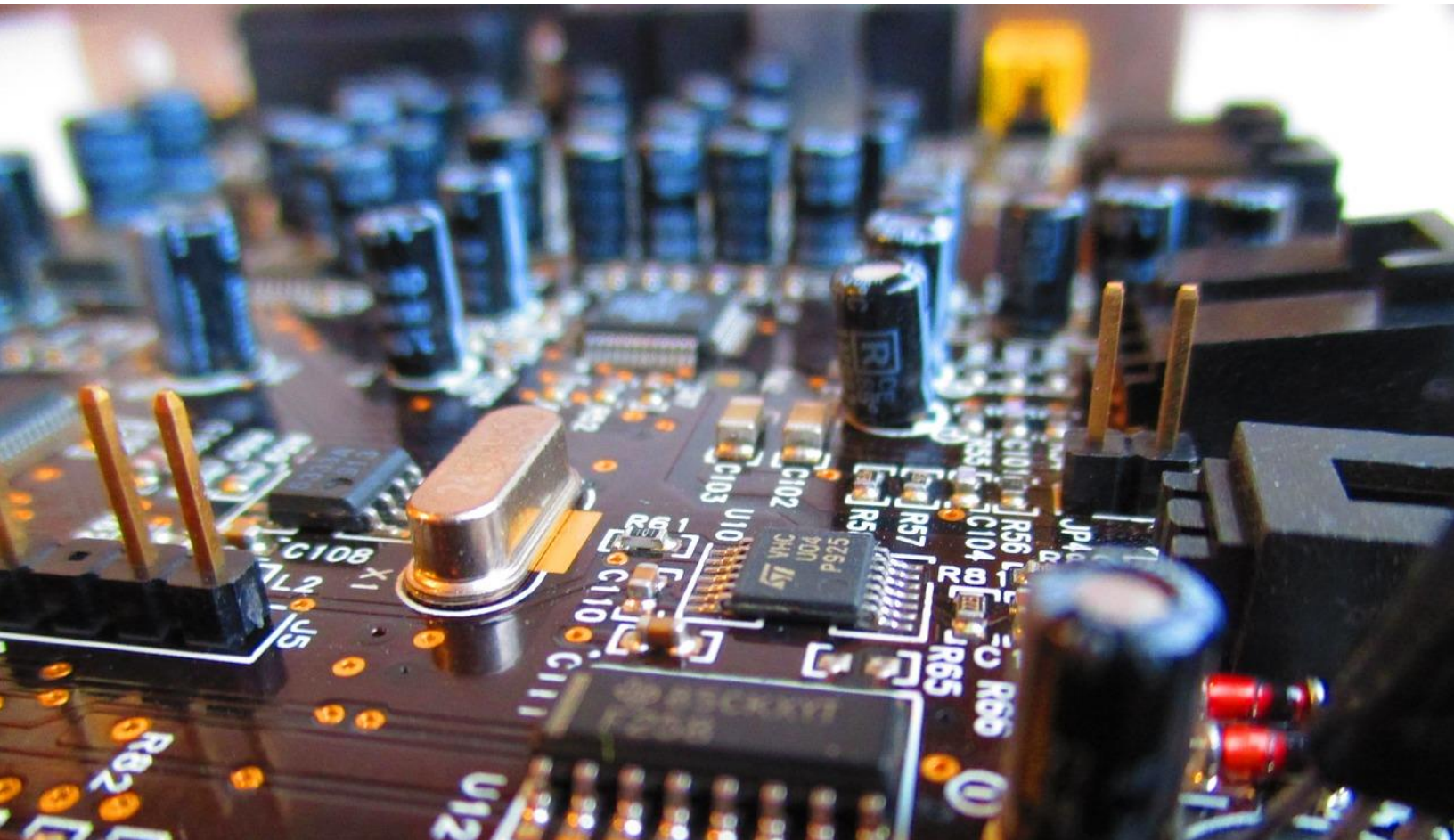




Solar PV Monitoring & Analytics

DATASHEET – DATALOGGER

TRACKSO ADV COMBO 4G-LAN -WT420M



A product of Free Spirits **Green Labs**

A RENEWABLE ENERGY COMPANY










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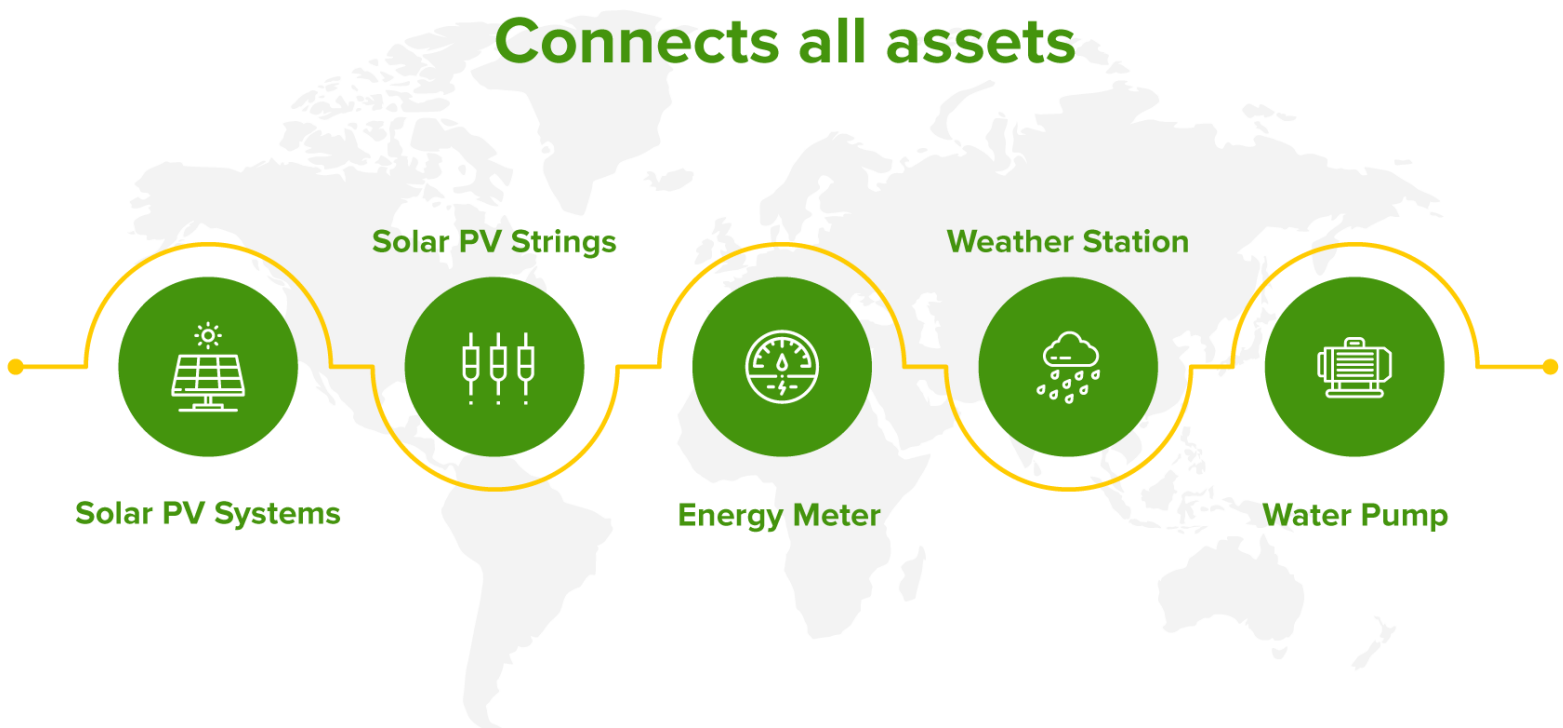
Smart IoT Data Loggers

TrackSo IoT data loggers are India's leading smart plug 'n' play gateways which can be connected with more than 100 brands of solar PV inverters, energy meters, weather monitoring stations, variable frequency drives [VFDs], string monitoring systems and all analog, digital and MODBUS enabled sensors.

- Easy to install, economical to maintain and upgrade.
- Support all major brands of inverter with Modbus RTU RS-485 & Modbus TCP/IP
- Possible to connect different brands of inverters within a single plant.
- Stores all data to the on-board memory during internet unavailability.
- LED Indicators to identify the power, signal, Modbus connection status.
- Very low consumption of data on mobile networks

	Retrofit for all MODBUS networks		Up to 20 days of On-board data storage		Connects up to 20 slave devices
	Remote configuration available Over the air		Integrates with all sensors Analog 0-10V,4-20ma		Delivered with IP-65 Enclosure
	SMS enabled Slave control ability		Optional Battery Backup		Connectivity SIM (4G/3G/2G Network) & LAN

Connects all assets



Specifications

Category	Component	Details
System	CPU	ARM Cortex
	SRAM	32 Kbytes
	Flash Memory	256 Kbytes
	Data Log Flash Memory	64MB (17,000 Offline Records)
	WDT (watchdog)	Yes
Modem	LTE	LTE FDD: Max 150Mbps (DL)/Max 50Mbps (UL) LTE TDD: Max 130Mbps (DL)/Max 30Mbps (UL)
	UMTS	DC-HSDPA: Max 42Mbps (DL) HSUPA: Max 5.76Mbps (UL) WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)
	GPRS/EDGE	EDGE: Max 296Kbps (DL)/Max 236.8Kbps (UL) GPRS: Max 107Kbps (DL)/Max 85.6Kbps (UL)
	Transmitting Power	Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class E2 (27dBm±3dB) for EDGE 900MHz Class E2 (26dBm±3dB) for EDGE 1800MHz Class 4 (33dBm±2dB) for EGSM900 Class 1 (30dBm±2dB) for DCS1800
	Interface	RJ45 Ethernet 10BASE-T or 100BASE-TX (Auto)
	Speed	10/100 Ethernet Half/ Full Duplex (Auto negotiating)
Serial ports	USB Utility port	use for device configuration and debug
	RS485	1 x RS-485 use for communication with slave device
	Ethernet	Allows Modbus TCP communication
	Slaves	Upto 20
	Baud Rate	Supports: 2400, 4800, 9600, 19200, 38400, 57600, 115200
I/O Port (Optional)	Analog Inputs	2 x Voltage Measurement (DC): 0-10 V 1 x Current Measurement (DC): 4 -20 mA
	Digital Inputs	2 DI ports (0-24V)
Power	Operating Voltage	12VDC to 24VDC
Mechanical	Casing	Plastic Casing
	Degree of Protection	IP 20 (Indoor)
	Dimensions (W x L x H)	100mm x 118mm x 34mm
	Installation	Wall Mounting
Environmental	Operating Temperature	-25 °C to +55 °C
	Ambient Relative Humidity	5 ~ 95% RH, non-condensing

Note:

1. UPS Power Supply for the Device is required.
2. To be installed indoors or in an IP65 Enclosure for Outdoor Installation

ADV COMBO 4G & LAN



Pin Diagram

	Pin	Name	Description
RELAY	12	NO	Replay (Optional)
	11	COM	
DI IN	10	DI2	Digital Input (Optional)
	9	DI1	Digital Input (Optional)
4-20ma	8	A-	Analog A Input - (4-20ma) (Optional)
	7	A+	
0-10V	6	AD2	Analog V Input 0-10V (Optional)
	5	AD1	Analog V Input 0-10V (Optional)
RS485	4	D-	RS485 - / Data-
	3	D+	
PWR	2	GND	Ground Pin
	1	+12V	
	1	+12V	DC IN - Input voltage: 12V~24V/1A.

LED Patterns

LED	NAME	DESCRIPTION	
GREEN	POWER	Light when device is powered ON	
RED	GSM	LED Status	
		Connection State	
		Flashing (ON for 100ms and OFF for 100ms)	SIM Card not found
		Flashing (ON for 500ms and OFF for 500ms)	Searching for GSM Network
		Flashing (ON for 0.1s and OFF for 2.9s) Once at every 3sec	GSM Network Registered
		Flashing twice at every 3sec	GPRS IP Connected
		Flashing 5times	GPRS IP Sending data
		LED OFF	GSM Fault
GREEN	COM TX	Blink on data transmission in RS485 port	
YELLOW	COM RX	Blink on data reception in RS485 port	

FREE SPIRITS GREEN LABS PVT. LTD.

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