

PowerTraker™ Monitor / Control / Log Data

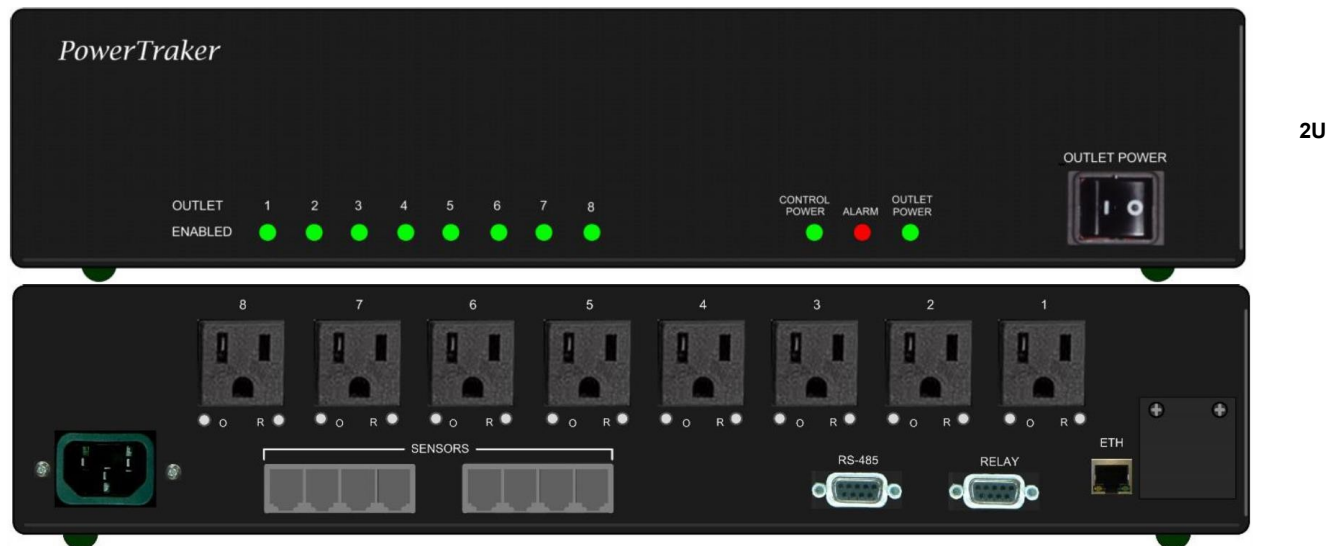
The *PowerTraker*™ (PT) is a controller that can be used to monitor AC power parameters, CO², temperature, humidity, soil moisture and parameters from a variety of other sensors, log the data and switch loads ON or OFF based on the measured parameters.

Programmable features allow you to view and plot power parameters, remotely switch loads ON or OFF, provide start up or shut down load sequencing and automatic status reporting.

There are four methods of communication with the PT that provide flexibility for many applications.

A wide range of hardware features are provided to fit many applications.

Specialized hubs are available to expand the system.



The PT can be provided in a rugged 19" rack mount product or bench top version. Optional features are available. Contact PDS for details.

The *PowerTraker* allows remote operation of the following features:

- Monitors voltage, load current, and power parameters for each AC load and monitors sensor data.
- Application configurable interface allows personal identification of outlets.
- Time stamped data logging for individual outlet parameters that are stored in internal memory for plotting or a Comma Separated Value (CSV) file data transfer to your PC.
- Allows individually switching outlets ON or OFF at programmed intervals or in response to changing AC load conditions or sensor inputs.
- Can send your customized email message using SNMP to any email address. Email notifications (alarms) can be triggered by over/under conditions of sensor data.
- Graph and display voltage, current, power parameters for individual outlets as well as sensor data.
- User programmed alarms for under/over current (or other parameters) may be used to activate the user controlled general purpose relay.
- Control of multiple *PowerTraker* installations.

Price: \$5,425. Includes one temperature sensor.

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Power Development Solutions, LLC pds-design.com 971-470-3139

Rev.3

PowerTraker™ Monitor / Control / Log Data

The PT software provides a user friendly interface to monitor and control outlets, sensors, hubs and plot data.

PowerTraker
Designed and Assembled in the USA

Home Sensors Plot Settings Admin Settings Logout Instructions
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Device ID PT00001
Device Name DevTraker
Wired IP 192.168.0.102
Wireless IP

OUTLETS

Loads	Current	Power	PF	Phase	Relay Status	Outlet State
1: 5 Volt Supply	0.00 Arms	0.10 W	0.00	87.5 °	ON	<input checked="" type="checkbox"/>
2: 12 Volt Power Supply	0.00 Arms	0.00 W	0.00	0.0 °	OFF	<input type="checkbox"/>
3: Rack Fan	0.00 Arms	0.00 W	0.00	0.0 °	OFF	<input type="checkbox"/>
4: Main Computer	0.00 Arms	0.00 W	0.00	0.0 °	OFF	<input type="checkbox"/>
5: Backup AC Supply	0.00 Arms	0.00 W	0.00	0.0 °	OFF	<input type="checkbox"/>
6: Pump	0.00 Arms	0.00 W	0.00	0.0 °	OFF	<input type="checkbox"/>
7: G.H. Fan	0.00 Arms	0.00 W	0.00	0.0 °	OFF	<input type="checkbox"/>
8: Humidifier	0.00 Arms	0.00 W	0.00	0.0 °	OFF	<input type="checkbox"/>
					All	<input type="checkbox"/> ON <input type="checkbox"/> OFF
						Action <input type="button" value="RESUME"/>

INTERNAL MEASUREMENTS

Total Current	0.00 Arms
Total Power	0.10 W
Voltage	121.9 Vrms
Frequency	60.00 Hz
Sample Rate	10 Sec.

Outlet data and status is available. Outlets can be manually switched ON or OFF, or can be controlled automatically by Alerts and Actions.

ALERTS

Add	ID	Active?	Type	Duration	Device	Sensor	Value	Send Email?	Time I	
<input type="button" value="Delete"/>	<input type="button" value="Edit"/>	1	No	Over Limit	5 Sec.	DevTraker	Voltage	0.01 Vrms	No	10 Min

ACTIONS

Add	ID	Delay	Start Time	Repeat Every	Alerts to Activate	Alerts
<input type="button" value="Delete"/>	<input type="button" value="Edit"/>	1	0 Sec.	10/12/2020 02:41:13 PM	0 Y / 0 M / 1 D / 0 h / 0 m / 0 s	1

Alerts and Action allow the automatic control of AC outlets and other switchable functions based on AC current parameters, time of day, and sensor data. Emails can be sent with your custom message.

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SENSORS

ID	Label	Value	Unit	Sample Rate
Remote 2	remote 2	21.3	° C	5 Sec.
ONEWIRE 28.D6CC170A0000	ONEWIRE 28.D6CC170A0000	20.3	° C	5 Sec.
ONEWIRE 10.7DB879030800	ONEWIRE 10.7DB879030800	20.3	° C	5 Sec.
ONEWIRE 28.71C5170A0000	ONEWIRE 28.71C5170A0000	20.2	° C	5 Sec.

The real time status of Sensors and Hubs are available. The sample rate is manually settable.

PowerTraker Accessories

Below are Sensors and Hubs available to use with the PowerTraker. Contact Power Development Solution for details.

Temperature
Relative Humidity
CO²
Soil Moisture
Lysimeter
PH level

Light Lux level
PAR Light Level
Camera Visible
Camera Infrared
Air flow rate
Water flow rate

DC Voltage & Current
AC Voltage & Current
Watt/voltage/amps/PF
Barometric pressure
Altitude
Wind Speed

Sensor Hub
Power Hub
Water Hub
Soil Moisture Hub
Camera Hub
Field Hub

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ADMIN TOOLS

Current Data Storage: 1 days | Oldest Data Entry: 10/07/2020 11:26:11 AM

Filesystem: /dev/root | Size: 30G | Used: 22G | Avail: 6.1G | Use%: 79%

Remember Status On Bootup

DevTraker

Acquire IP address automatically.
 Use IP address settings below:

IP Address: _____ Gateway: _____ Netmask: _____

Select Netmask:

Select Wifi: SSID: _____ PSK: _____ Username: _____ Password: _____

America Los_Angeles

mm/dd/yyyy --:--:--:--

Last Updated: 05/08/2019 01:29:01 PM | Software Version: 1.0.0

NETWORK INFORMATION

Wired IP: 192.168.0.102
Wireless IP: _____
MAC Address eth0: B8:27:EB:BC:E0:92
lo: 00:00:00:00:00:00

The Administration page provides tools for control of access to the PT and setting software operating parameters.

PLOT

Start Time: Device:

End Time: Sensor:

X

Arms

90
89.5
89
88.5
88
87.5
0

11:30 11:32 11:34 11:36 11:38 11:40 11:42 11:44 11:46
Oct 7, 2020

— 5 Volt Supply (Arms) — 5 Volt Supply (°)

All data can be plotted or uploaded. Data can be plotted individually or on the same plot.