SENDUM

PT300 Tracking System

Keeping your goods safe . . .

. . .and you in control.™

Easily track and monitor packages, shipments, and mobile assets, in real time, with the compact and portable PT300 Tracking System.

Compact Real-Time Tracking and Monitoring System

Know exactly where your assets are. And the conditions they are being subjected to. In near real time. Right to your computer or mobile device.

You've got valuable assets that are at risk for loss, theft, or damage. At any time, you must know where they are, how they are being treated, and what conditions they are being exposed to. You can't afford to lose track of them, or have them stolen, and you need to eliminate or minimize damage or mistreatment. For this, you need a tracking system that keeps you in touch at all times. That's the Sendum PT300 Package Tracker.

Key Benefits

Keeps your goods safe

- Through timely information, the PT300 system allows you to take immediate corrective action to protect or recover assets in the event of loss, theft, or mishandling.

Keeps you in control

- Be alerted immediately to any security, handling, or environmental issues related to your assets. Be in the know at all times.

Improves customer service

- You or your customers can access near real-time information quickly and easily using any web browser, as well as receiving alerts through text and email.

Minimizes complexity

- PT300 trackers are simple to use and reuse. They're compact, portable, and contain everything you need (cellular device, sensors, and power) in one integrated and easy-to-use package. No need for wires, power supplies, or complicated components.

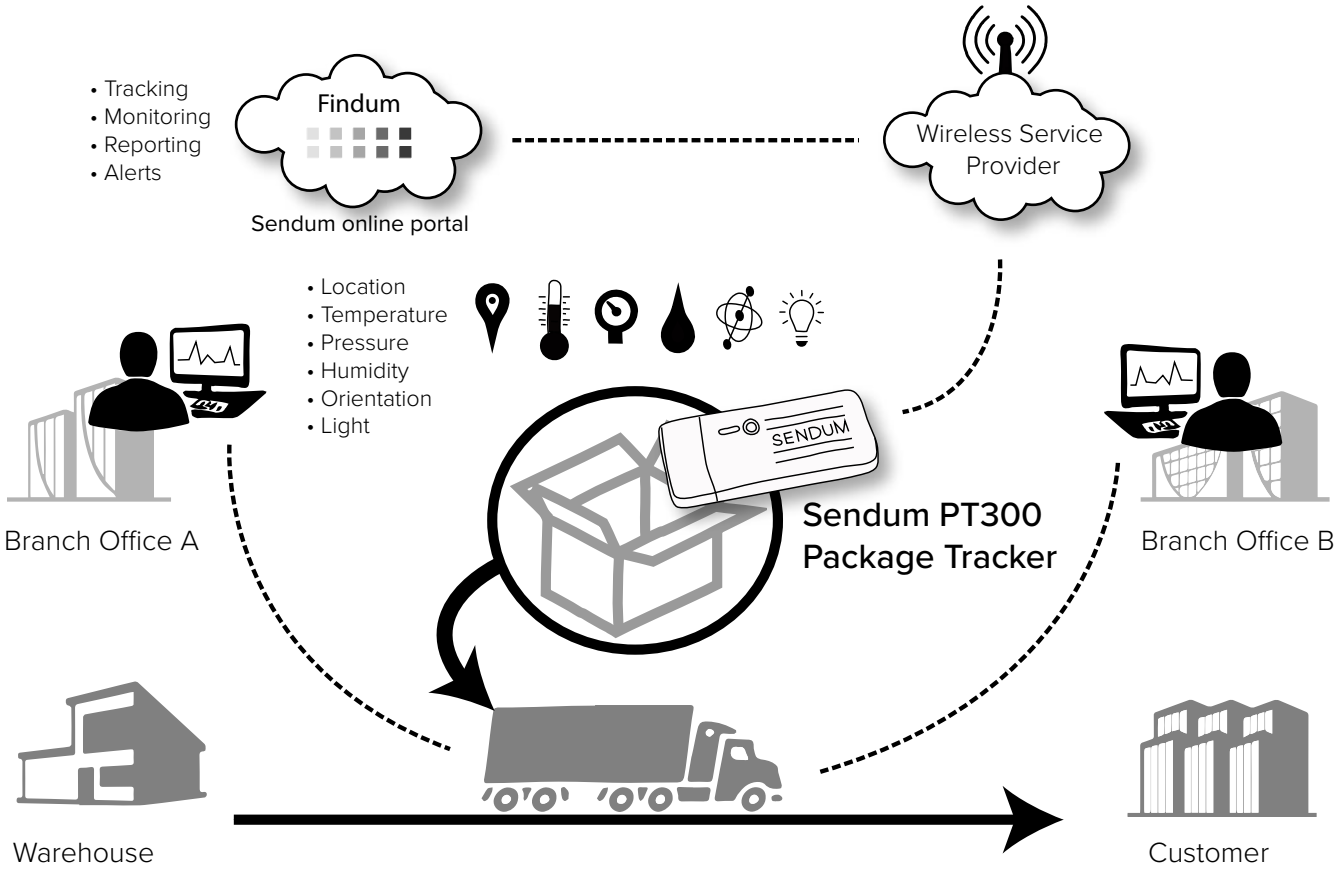
Modular Design

- Separate plug-and-play command module and power/sensor pack options alllow you to tailor your tracking solution to your application needs.

Tracker, datalogger, & cellular in one compact package

The PT300 is a compact cellular-based tracker and data logger that attaches, or rides along with, your valuable assets. From there, it continually and reliably reports important relevant data that you can view, as it happens, on your computer or mobile device.

This includes location, environmental conditions (temperature, relative humidity, and barometric pressure) and variables that indicate proper care and handling (motion, shock, vibration, and orientation). It also includes light sensors that can detect when a trailer door or package is opened, even if that happens in the dark.

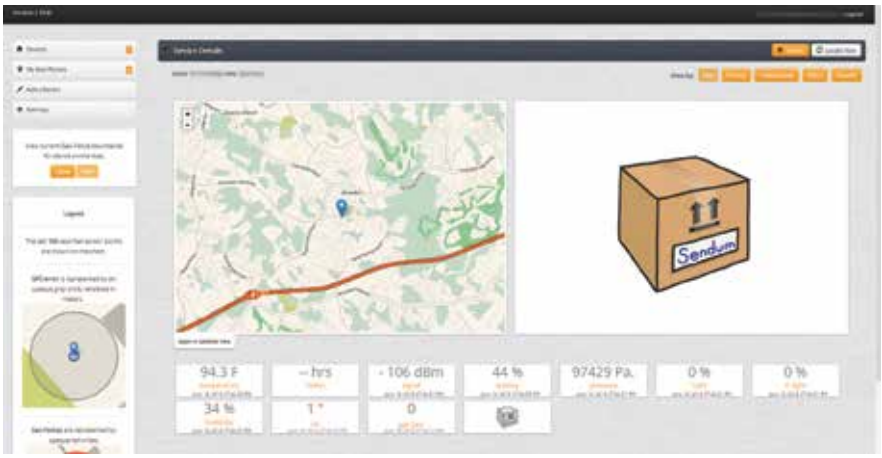


A typical deployment of a PT300 tracker. shipping assets cross-country while being monitored from multiple locations.

If it's valuable, you can track it with the PT300

The Sendum PT300 Package Tracker is used across a broad range of industries and applications. Monitor trucks, trailers, and vehicles. Track shipments for electronics, produce, clothing, pharmaceuticals, medical supplies, or financial assets. And much more. If the asset is valuable and you or others need to know what's happening at a moment's notice, the PT300 is the powerful yet convenient solution.

Up-to-the minute data right on your computer or mobile device



With Sendum's online portal (called Findum™), you can set up thresholds (i.e. maximum or minimum values) for all your data points so you can be notified through SMS text or email alerts. You can create virtual geographic boundaries (or "Geo-Fences") so you know exactly when your asset has left an area that you defined. You can also view historical data graphs, switch between devices, set sampling and reporting rates, and much more.

Worldwide Coverage

PT300 Trackers work worldwide. Employing both CDMA and GSM technologies on one device, you can track your assets throughout their travels both locally and abroad.

Ideal for your "Must Find" applications

PT300 trackers work in locations where conventional GPS trackers don't. With cellular network connectivity, Sendum devices don't rely solely on having a clear line-of-sight to GPS satellites. Instead, they determine location in multiple ways, through satellites, via cellular towers, even using local servers. Consequently, they work reliably outdoors, indoors, inside packages, and under vehicles. They can overcome obstructions like trees, buildings, bad weather, or rough terrain. If you need to know where your assets are at any time, Sendum trackers are the solution.

Flexible Power Options

Power your PT300 system by snapping in a Sensor Pack to your PT300 Command Module. Each Sensor Pack contains a rechargeable lithium battery energy source that provides long-lasting tracking and monitoring performance. If you prefer to use your own power source, you can plug in the optional Accessory Pack that includes an input connection that works with a wide range of power options.

Multiple Sensor Options

Many sensing options are available with the PT300 tracking system.

Common to all configurations is the ability to track location, sense movement, gauge orientation, and detect GPS jamming. Additional sensors include temperature, relative humidity, barometric pressure, and ambient and infrared light. So you can know not only where your package is but under what conditions it is being subjected to and how it is being treated. With each sensor, you can set up alerts based on threshold values, get up-to-the-minute readings, view graphs, and generate reports.

Modular System to fit your applications

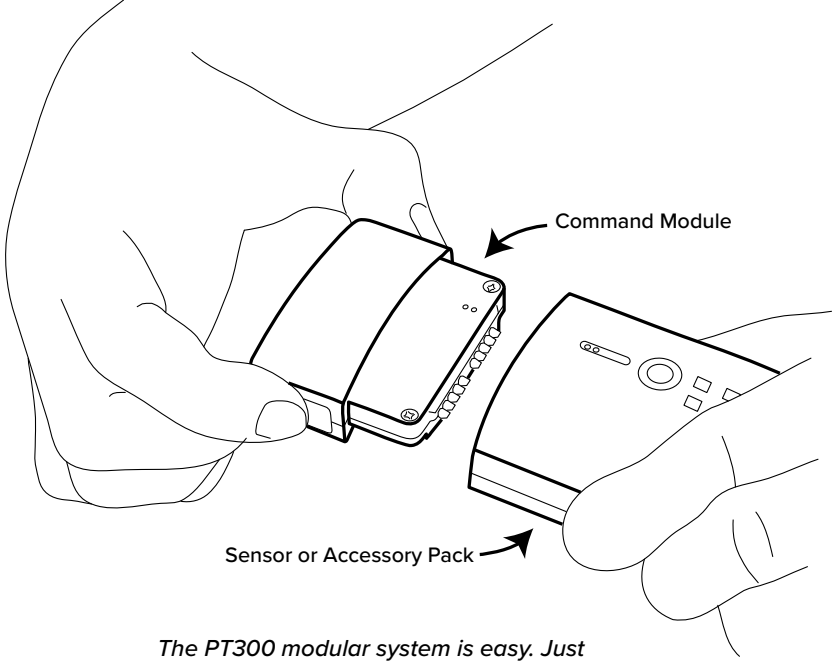
The hardware for the PT300 tracking system has two main components:

1) a Command Module, and

2) a snap-in Sensor or Accessory Pack.

Each component offers different functionality, allowing you to mix and match a system that best suits your application.

The Command Module, as the name implies, is the main processing center of the system and includes cellular communications and basic sensors. The Sensor or Accessory Packs provide additional sensors as well as the necessary power to operate the system.



The PT300 modular system is easy. Just snap the two components together.

Currently, there are two different Command Modules and three different Sensor or Accessory Packs, allowing for up to six different configurations available.

Command Modules

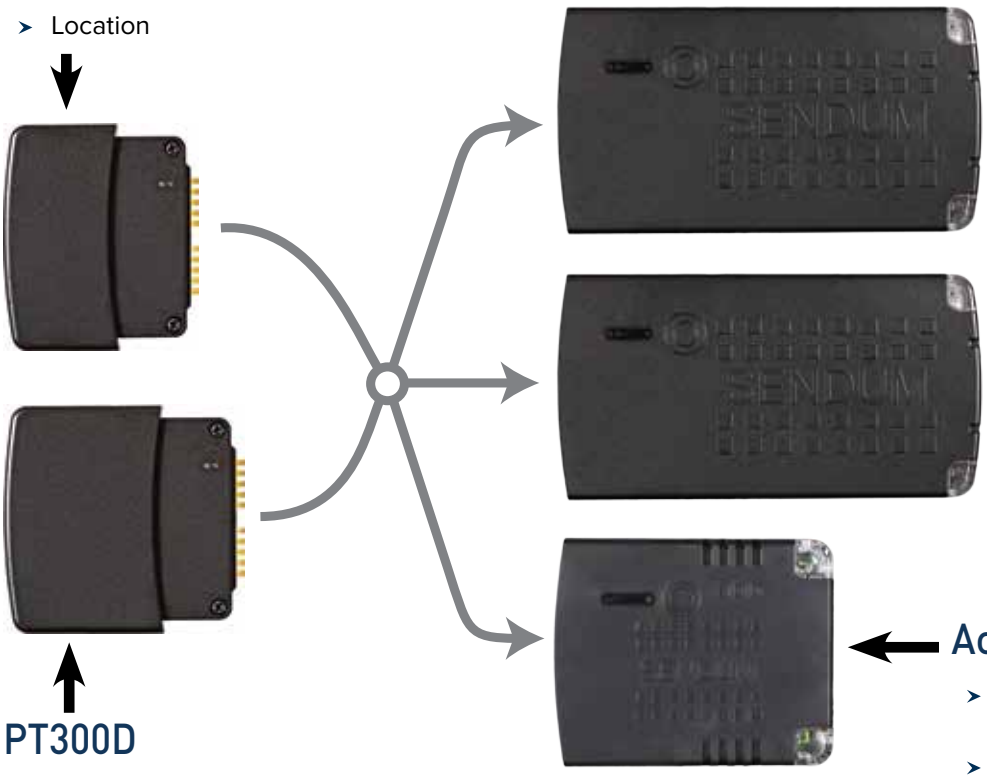
PT300

- CDMA (USA only)
- Location

PT300D

- Dual Mode (CDMA & GSM)
- Worldwide Coverage (including the USA)
- Location

Sensor/Accessory Packs



Basic Sensor Pack (BSP)

- Rechargeable 3760 mAh lithium-ion battery
- Includes sensor for battery level indication

Advanced Sensor Pack (ASP)

- Rechargeable 3760 mAh lithium-ion battery
- Sensors for battery level, temperature, relative humidity, barometric pressure, and light

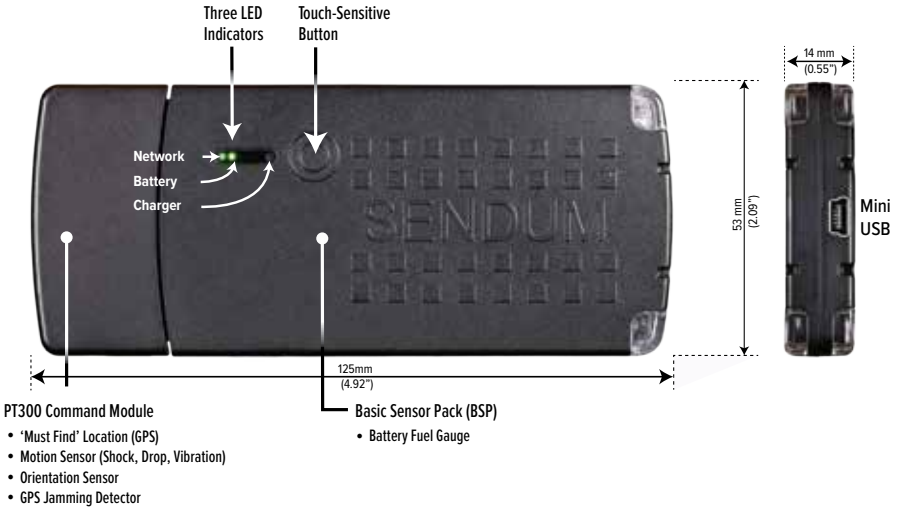
Accessory Pack (AP)

- Sensors for temperature, relative humidity, barometric pressure, and light
- Power input connection for external battery or power
- One digital input, one regulated output
- No internal battery

PT300 Configurations - with PT300 Command Module (CDMA)

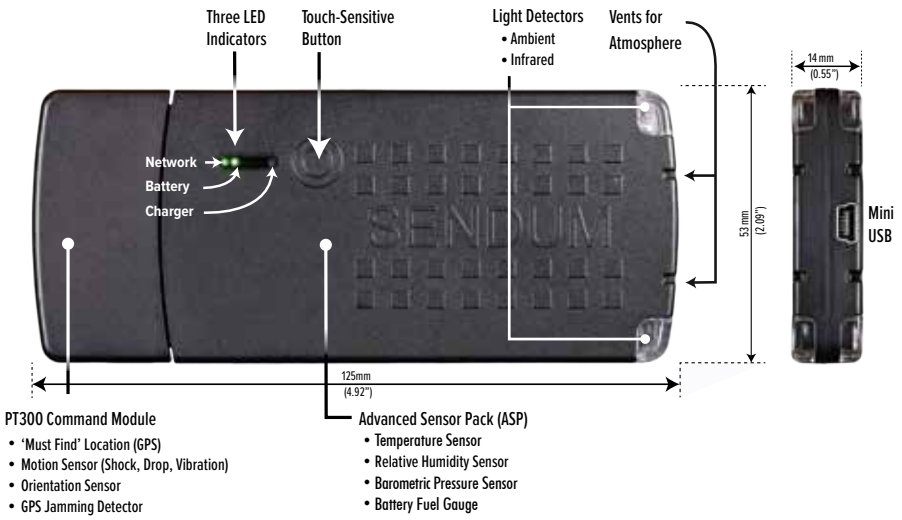
PT300 with Basic Sensor Pack

Ideal for basic location tracking in the USA.



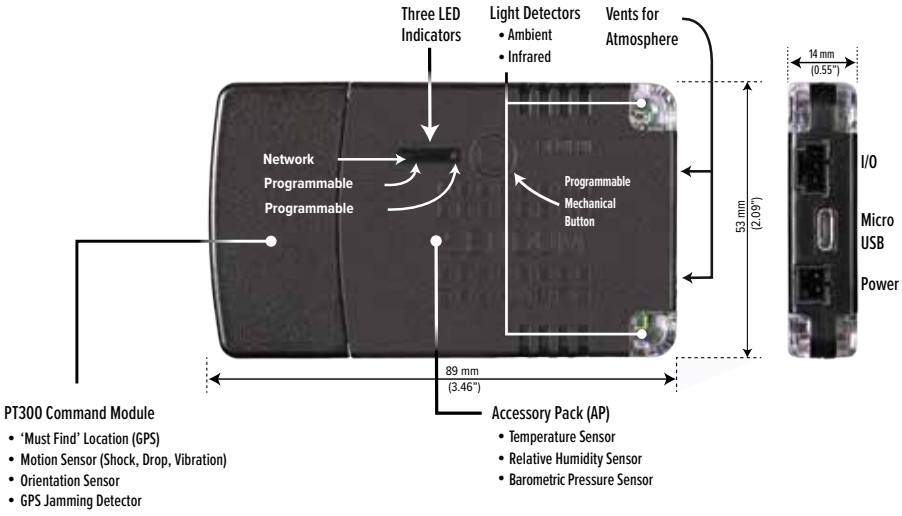
PT300 with Advanced Sensor Pack

Ideal for tracking and in-depth quality monitoring (with additional sensors) in the USA.



PT300 with Accessory Pack

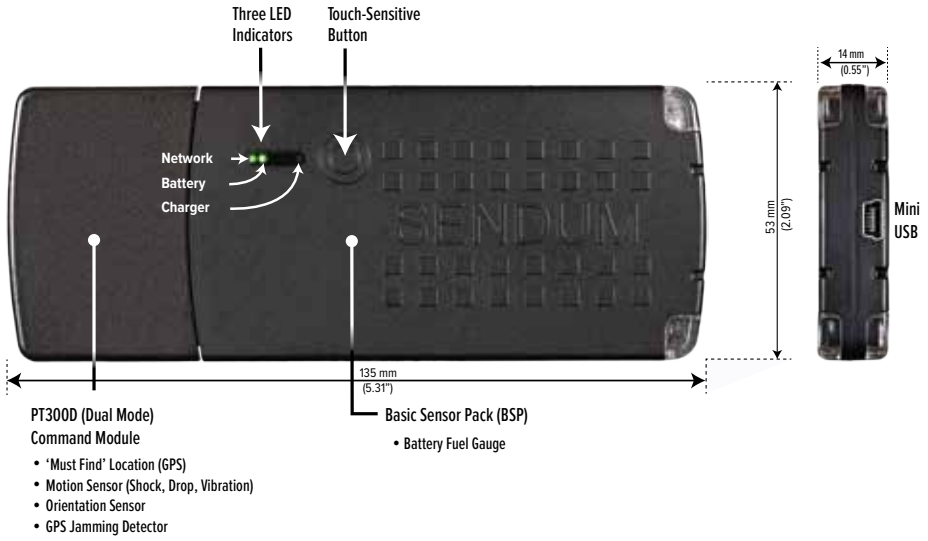
Ideal for tracking and in-depth quality monitoring (with additional sensors) in the USA. Allows for a separate power source to be used, providing greater deployment flexibility.



PT300 Configurations - with PT300D Command Module (CDMA & GSM)

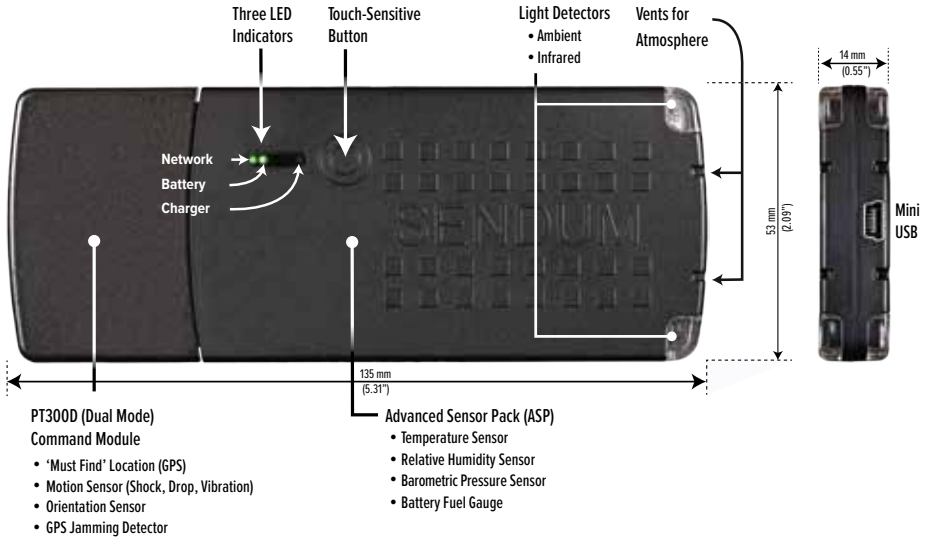
PT300D with Basic Sensor Pack

Ideal for basic location tracking across the USA and worldwide.



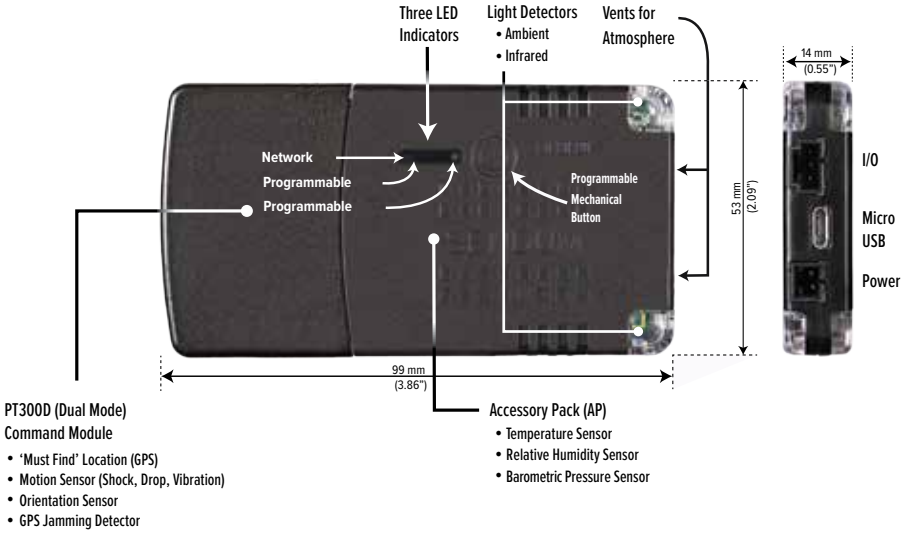
PT300D with Advanced Sensor Pack

Ideal for tracking and in-depth quality monitoring (with additional sensors) across the USA and worldwide.



PT300D with Accessory Pack

Ideal for tracking and in-depth quality monitoring (with additional sensors) across the USA and worldwide. Allows for a separate power source to be used, providing greater deployment flexibility.



Specifications

Command Modules

Model	PT300	PT300D
Coverage	USA Only	Worldwide (including USA)
Carriers	Sprint / Verizon / Sendum	Contact Sendum for an up-to-date list
Radios		
Cellular and Wireless		
CDMA 1XRTT	800(BC0)/1900(BC1)	800 (BC0 / BC10) / 1900 (BC1)
CDMA EVDO	N/A	800 (BC0 / BC10) / 1900 (BC1)
GSM/GPRS/EDGE	N/A	850 / 900 / 1800 / 1900
UMTS/HSPA+	N/A	800 (B6) / 850 (B5) / 900 (B8) / 1900 (B2) / 2100 (B1)
GPS	1575.42 MHz (L1)	1575.42 MHz (L1)
GLONASS	N/A	1602 MHz
Wi-Fi	N/A	2.4G Hz 802.11bgn
Regulatory		
North America	FCC: Part 15, 22, 24	FCC: Part 15, 22, 24,27; IC: RSS132, RSS133 IC: RSS132, SS133, RSS139; NAPRD.03 V5.11
European	N/A	3GPP TS 51.010-1; ETSI EN 301 511 V9.0.2; GCF-CC V3.45; ETSI EN 301 489-01 V1.8.1
General		
SIM	N/A	Embedded SIM (Soldered)
Antenna	Internal CDMA, GPS	Internal CDMA, GSM / GPRS / EDGE / UMTS / HSPA+, GPS, GLONASS
For use on aircraft	Yes (when used with Advanced Sensor Pack)	Yes (when used with Advanced Sensor Pack)
Radio Sensors	RSSI for CDMA	RSSI for CDMA, GSM, UMTS, HSPA+, and Wi-Fi
Temperature Range		
Storage	-20° C to +65° C / -4° F to +140° F	-20° C to +65° C / -4° F to +140° F
Active Use	-20° C to +40° C / -4° F to +104° F	-20° C to +40° C / -4° F to +104° F
Sensors		
Motion	Three Axes ±2.0g, ±4.0g, ±8.0g, ±16.0g	Three Axes ±2.0g, ±4.0g, ±8.0g, ±16.0g

Specifications (continued)

Sensor and Accessory Packs

Packs	Basic Sensor Pack (BSP)	Advanced Sensor Pack (ASP)	Accessory Pack (AP)
Model Number	BFA10062	BFA10063	BFA10077
Operating Range	-20°C to +60°C / -4°F to +140°F	-20°C to +60°C / -4°F to +140°F	-20°C to +60°C / -4°F to +140°F
	Sensors		
Ambient Light	N/A	0...20,000 lux (0...30,000 lumens/m2)	0...20,000 lux (0...30,000 lumens/m2)
Infrared Light	N/A	0...20,000 lux (0...30,000 lumens/m2)	0...20,000 lux (0...30,000 lumens/m2)
Relative Humidity	N/A	0% to 80% RH +/- 3% 80% to 95% RH +/- 5%	0% to 80% RH +/- 3% 80% to 95% RH +/- 5%
Barometric Pressure Sensor	N/A	260 to 1260 mbar absolute pressure range	260 to 1260 mbar absolute pressure range
Temperature	N/A	-10°C to +85°C +/- 0.4°C -20°C to -10°C +/- 1°C	-10°C to +85°C +/- 0.4°C -20°C to -10°C +/- 1°C
Battery Fuel Gauge	Sendum proprietary fuel gauge provides % full, cycle count	Sendum proprietary fuel gauge provides % full, cycle count	N/A
Radio Sensors	Refer to Command Modules Section	Refer to Command Modules Section	Refer to Command Modules Section
	Housing		
Button	Programmable Non-Mechanical Touch	Programmable Non-Mechanical Touch	Programmable Mechanical Button
LEDs	Three Cellular Coverage (programmable) Battery Capacity (programmable) Battery Charge	Three Cellular Coverage (programmable) Battery Capacity (programmable) Battery Charge	Three Cellular Coverage (programmable) Not Defined (programmable) Not Defined (programmable)
Enclosure	Plastic	Plastic	Plastic
Handling Drop	1 Meter / 3 Feet onto concrete	1 Meter / 3 Feet onto concrete	1 Meter / 3 Feet onto concrete
Humidity	<95% non-condensing	<95% non-condensing	<95% non-condensing
Vibration	Up to 500Hz random 1.25G rms	Up to 500Hz random 1.25G rms	Up to 500Hz random 1.25G rms

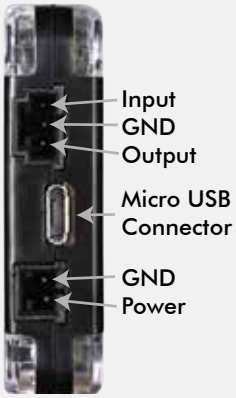
Specifications (continued)

Packs	Basic Sensor Pack (BSP)	Advanced Sensor Pack (ASP)	Accessory Pack (AP)
Weight	100 g	100 g	30.4 g

Battery[1]

Battery Size	3760 mAh lithium-ion	3760 mAh lithium-ion	N/A
Rechargeable	Yes	Yes	N/A
Battery Cycles	300 full charge cycles to 80% 500 full charge cycles to 70%	300 full charge cycles to 80% 500 full charge cycles to 70%	N/A
Temperature Range			
Active Use	-20°C to +60°C / -4°F to +140°F	-20°C to +60°C / -4°F to +140°F	N/A
Storage	-20°C to +25°C / -4°F to +77°F	-20°C to +25°C / -4°F to +77°F	N/A
Charging	0°C to +40°C / 32°F to +104°F	0°C to +40°C / 32°F to +104°F	N/A
Battery Life	Refer to “Battery Life of Sensor Packs” on page 11		N/A
Regulatory	1. Meets the testing requirements as per the UN Manual of Tests and Criteria, part III subsection 38.3[2] 2. All batteries have short circuit protection 3. Batteries are manufactured under a quality management program in accordance with DGR 3.9.2.6 and IMDG 2.9.4.5[3] 4. Lithium Ion batteries have watt-hour rating of less than 100 Wh 5. Batteries have watt-hour rating shown on the outside of the sensor pack casing		

General

For use on aircraft	No	Yes	Contact Sendum
Power Adapter	100V - 240V 5W AC Charger (North America Connector)	100V - 240V 5W AC Charger (North America Connector)	N/A
Power Input	N/A	N/A	3V to 5.3V
Data Cable	Standard USB to Mini USB	Standard USB to Mini USB	Standard USB to Micro USB
Power Input via USB	Yes	Yes	N/A
I/O	N/A	N/A	A. Input - one digital input B. Output - one regulated output
Connectors			

Footnotes

1. Sendum sources batteries from world leading battery manufactures. Specifications are as provided by battery manufacturer.

2., 3. Per Lithium Ion battery manufacturer; excluded from Sendum warranty.

Battery Life of Sensor Packs

Always on - 21 day battery life is based on:

- The device is in average-to-good cellular coverage
- The device is on 24 hours a day
- Sensors (temperature, humidity, etc.) are polled internally every 30 seconds
- Location and status messages are transmitted every 2 hours
- The device is operated in non-freezing temperature conditions

Each device can be set to operate in “Deep Sleep Mode” which allows for much longer battery life

Sendum. Keeping your goods safe and you in control.

For more information on the Sendum PT300 Series of Trackers, please visit www.sendum.com/pt300

Sendum Wireless Corporation, 4500 Beedie Street, Burnaby, BC V5J 5L2 www.sendum.com

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Note: Specifications are subject to change without notice. Some features may only be available in specific firmware or hardware releases.