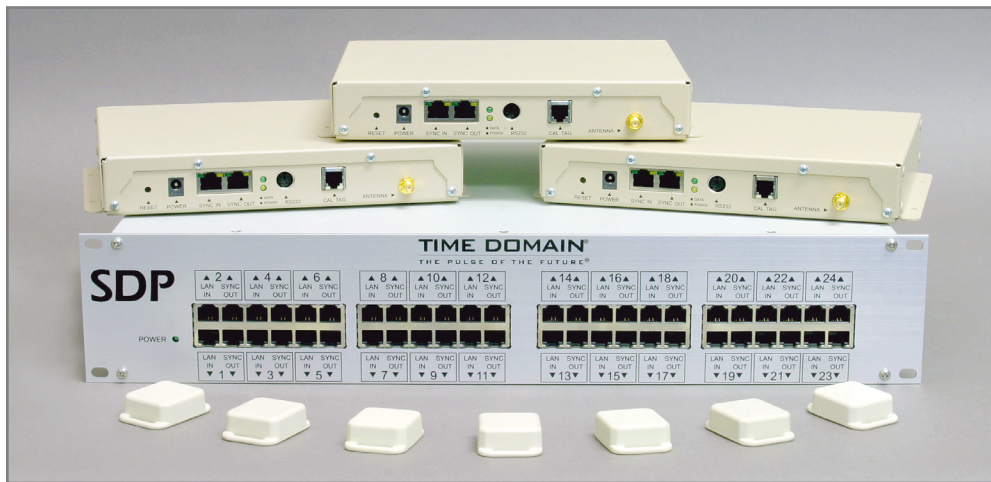


More than ever, businesses and organizations need reliable, real-time location information. Whether tracking equipment in a hospital, finding stock in a warehouse, or finding people in an industrial facility, knowing the location of your resources can be the difference between success and failure, and sometimes even life or death. In these scenarios, and many others, the demands on a tracking system are high, precision, reliability, scalability, and ease of use are crucial. The system must also be able to operate effectively in harsh environments, and must be affordable enough for widespread deployment.

For years, ultra wideband technology has held great promise for precision tracking systems. TrackIT Systems™, in partnership with Time Domain, will now unleash ultra wideband's full potential with the PulsON 350 (P350) Active Radio Frequency Identification (RFID) Tracking System. With unparalleled accuracy and reliability, the P350 system represents the state-of-the-art in active RFID tracking technology.



## System Features

- Provides presence detection, 1D, 2D and 3D location of tags
- Sub-foot accuracy in best-case environments, better than 3 feet typical
- Full scale deployments capable of tracking thousands of tags
- Battery powered active tags
- Indoor through wall operation
- Time Difference of Arrival (TDOA) based on positioning and tracking
- Time of Arrival (TOA) raw data available via Ethernet interface
- Mounted infrastructure of readers
- Power, data, and signing provided to readers through shielded Cat 5E cable
- FCC Certified
- ETL Certification approval pending (UL60950)



LOGISTICS



SECURITY



SAFETY

# System Components

## Tag:

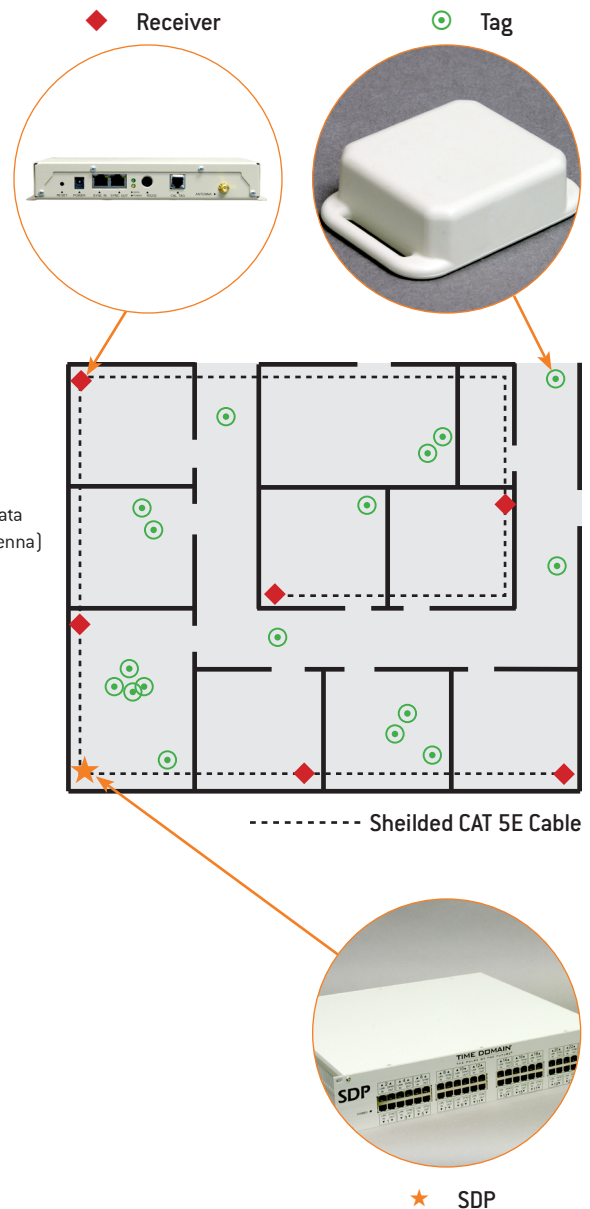
Function:	Transmits RF packets
Battery Type:	Lithium Manganese Dioxide, non-replaceable
Battery Life:	4 years
Packet Rate:	1Hz
Range:	75 Feet typical line of sight
Dimensions:	1.4" wide x 1.3" D x 0.5" T (36mm x 33mm x 13mm) (body) 1.83" W x 1.3" D (46mm x 33mm) (wrist strap)
Weight:	0.74 oz (22 g)
RF Emissions:	Center to frequency 6.6 GHz, 1/2 Max FW 2ns, burst emissions
Operating Temperature:	-20C to +50 C
Storage Temperature:	-30 C to +60 C
Housing Material:	HDPE
Flame Rating:	V0
Cleaning:	Surface wipe only, do not immerse
FCC Certification:	FCC 15.250 compliant, FCC ID: NUF-P350-1006

## Reader:

Function:	Receives tag transmissions, determines time of arrival and decodes data
Dimensions:	8.5" W x 6.5" D x 1.5" T (216mm x 165mm x 38mm) (not including antenna)
Reader Weight:	1.8 lbs (816 g)
Assembly Weight:	6.2 lbs (2.8 kg), includes reader and antenna assembly
Mounting:	Replaces a standard 2' x 2' acoustic ceiling tile. Need a minimum of 2" above framework for installation
Power Interface:	Input — Sync In port or auxiliary power connector Output — Sync Out port
Power Consumption:	5.2 W typical
Input Power:	20W maximum (supplies local unit plus units later in chain)
Output Power:	15W maximum
Mounting:	Ceiling tile replacement, or custom options available
Antenna Gain:	2 dBi
I/O Ports:	RJ45 Input provides power, data, and synchronization signal RJ45 Output for pass-through of power, data and timing signal to upstream readers
Network Data Interface:	10/100 Mbps Ethernet for RFID and tracking data
Configuration Interface:	RS 232
RF Interface:	SMA input for connection to TDC supplied antennas
FCC Certification:	Class B digital device per CFR FCC Part 15

## Synchronization Distribution Panel (SDP):

Function:	Provides power and timing synchronization to all readers, pass-through for Ethernet data
Dimensions:	18.95" W x 16.2" D x 3.47" T (481mm x 411mm x 88mm)
Weight:	11.5 lbs (5.2kg)
Mounting:	19" rack mount or table operation
Power Output:	420 W with maximum reader load @ 50 Vdc +/- 1.0V
Power Draw:	20W with no reader load, 565 W for maximum reader load
I/O Ports:	24 LAN In Ports 24 Sync Out ports
Port Capacity:	Up to 3 readers/Sync Out port (72 total) powered by SDP, powered by SDP .6 readers/port (144 total) if auxiliary power applied
Cable Length:	90 meters maximum from SDP to last reader in chain
FCC Certification:	Class A digital device per CFR FCC Part 15



# P350 Demostration Kit

The P350 Demonstration Kit provides a fast, out-of-the-box mechanism for setting up, evaluation, and interfacing to P350 system. The demonstration kit includes all the components needed to quickly set up a 2D tracking system. These components include one SDP, four readers, four tags, position solver software, and visualizer display software for real-time display of tag positions. The visualizer also includes diagnostics to assist with the system setup and assessment of performance. Quick start documentation enables the first-time user to have a system operating in an under and hour. **A Reader Interface Control Document (ICD) is provided to enable TrackIT™ and other software developers to integrate the P350 data stream into custom software applications such as workflow analysis, process analysis and building automation.**