

Zebra WherePort III HD



Zebra Location Solutions offers a heavy duty version of the WherePort III Tag Exciter that is designed for mobile outdoor environments. The WherePort III HD Tag Exciter is used to indicate proximity between mobile devices in harsh environments. It is capable of withstanding higher levels of shock and vibration than the standard WherePort III. It is sealed against dust and water, and it has been designed to be utilized in rugged outdoor applications.

The WherePort III HD provides proximity localization by triggering a WhereTag to transmit a series of “blinks” containing the unique ID of the WherePort III HD. These WherePort “blinks” provide enhanced visibility as the mobile device moves within range of a tagged asset. The WherePort III HD can also enable or disable an alternate “blink” pattern in a WhereTag. Typically, this alternate “blink” pattern is a faster blink rate for a fixed period of time, which provides enhanced visibility for subsequent movements of the tagged asset.

The WherePort III HD Tag Exciter is compliant with the ISO/IEC 24730-2 standard. It also supports an RS-232c interface that enables the user to easily configure the tag exciter. The WherePort III HD Tag Exciter emits a magnetic field that is nearly spherical and its range is adjustable from approximately 1m (3ft) to 7.5m (25ft) with proper orientation. The WherePort III HD requires either 24VAC or 36VDC input power.

A WhereTag can be used and configured as a WherePort Health and Status Asset Tag to broadcast real-time WherePort III health and status information to the RTLS infrastructure and Middleware software applications.

The Benefits of WherePort III HD

- Ruggedized for Outdoor Use
- RS-232c Serial Interface
- BAA/TAA Compliant

PART NUMBERS

Part Number	Description
WPT-3200-02DA	WherePort III Heavy-Duty
WPT-3200-02DB	WherePort III HD with Internal DC/DC

PRODUCT ACCESSORIES

- WherePort III Adapter Cables
- WherePort Installation Tool
- WherePort III Heavy Duty Mounting Kit for Mobile Applications
- WherePort III Power Supplies

PRODUCT SPECIFICATIONS

PHYSICAL	
Diameter	229mm (9.0in)
Depth	133mm (5.25in)
Weight	2.5kg (5.6lbs)
ENVIRONMENTAL	
Operating Temperature	-30°C to +60°C (-22°F to +140°F)
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Environmental Sealing	IP65 (Dust-tight and Water Jets)
POWER	
Power Consumption	24VAC or 36VDC, 250mA (max), 4.2W(max)
Power Supply	• PS-031-00: 90-264VAC Input, 47 to 63Hz, 36VDC Output, 40W
PERFORMANCE	
ISO 24730-2 Proximity Exciter	<ul style="list-style-type: none"> • Frequency Range: 2.4GHz to 2.483GHz • Field Intensity Limits: 125A/m (ANSI/IEEE C 95.1) or 51.5dBuV/m at 10m (ETSI) • Propagation Limits: 18.9uV/m at 300m (FCC) • Location Accuracy: 0.9m R50, 1.6m R95
COMMUNICATIONS	
RS-232c Serial Interface	19.2kbps Data Rate, 8 Data Bits, 1 Stop Bit, No Parity
REGULATORY APPROVALS	
Europe	<ul style="list-style-type: none"> • EN 55022 Class A • EN 55024 • EN 60950 • EMC Directive 89/336/EEC
North America	• FCC Part 15 Class A
Worldwide	<ul style="list-style-type: none"> • ISO/IEC 24730-2 Compliant • DartUWB Compliant

EXTENDED ENVIRONMENTAL CONDITIONS

Sine Sweep Vibration

The WherePort III HD Tag Exciter is capable of withstanding a logarithmic sine sweep from 10Hz to 500Hz using a 1/2G sine shape input in an ascending and descending mode of 5 minute durations each.

Random Vibration

The WherePort III HD Tag Excite exceeds MIL-STD-810 D, Method 514, for basic transport. It can withstand increased input levels to accommodate 5GRMS levels from 5Hz to 500Hz in all three axes. These extreme levels are greater than ANSI and the ISTA standards for random vibration testing. The level of power spectral density is more severe than the environmental conditions expected to be encountered by vehicular transport equipment.

Shock

The WherePort III HD Tag Exciter exceeds MIL-STD-810 D, Method 516, for basic transport of ground-based equipment under 100lbs and in any transport vehicle, including forklifts, trailers, transports, and truck and trailer transport vehicles; 40g, 11ms sawtooth or half-sine shock pulse in all three axes. The WherePort III HD Tag Exciter is designed to endure 100 shocks of 80G for all three axes.

Worldwide

The WherePort III HD Tag Exciter exceeds MIL-STD-810 D, Method 516, for functional test of ground equipment under 100lbs to a transit drop of 72 inches. This level is intended to demonstrate the life of the unit through harsh environments and handling. The WherePort III HD Tag Exciter will endure 600 shocks of 40G for all three axes.

