

# Zebra WhereLAN III



WhereLAN III is the locating and messaging hub of Zebra's Real-Time Locating Systems (RTLS) offering based on the ISO/IEC 24730-2 standard. This state-of-the-art sensor receives low power signals emitted by Zebra's Active RFID Tags, known as WhereTags, up to a distance of 1,750m. Employing advanced signal processing techniques, WhereLAN III determines the time-of-arrival of a WhereTag signal to sub-nanosecond resolution, resulting in up to one meter location accuracy. This means you can gain visibility of your tagged assets and tightly couple their real-time location into your business operations. WhereLAN III can also be used to process event messages from WhereCall button tags. These tags are used in Industrial Manufacturing to convey parts replenishment requests or task completion events. Due to the Six-Sigma reliability of the WhereTag signal, you can rest assured that the WhereCall event will be detected. WhereLAN III delivers the WhereTag and WhereCall data to Zebra's Visibility Server Software (VSS) stack, which computes the location of tagged assets and delivers actionable and timely visibility information. VSS also provides tools for integrating RTLS data with customer and third party applications. VSS and a network of WhereLAN IIIs provide accurate and timely asset visibility across your enterprise.

WhereLAN III features an IP55 cast-aluminum enclosure, which allows the product to be deployed in indoor and outdoor environments, such as warehouses, heavy-industrial manufacturing plants, vehicle and trailer yards, and Maritime shipyards. The product features novel signal processing techniques that provide full locate without the need

for dedicated time synchronization wiring. WhereLAN III can automatically configure and dynamically adjust to changing Radio Frequency environments while maintaining wireless time synchronization. Its configuration does not require complex RF spectrum surveys nor periodic calibration. These advanced features simplify the design, installation, and maintenance of the infrastructure, allowing you to focus on running your business instead of running an RTLS network.

WhereLAN III supports IEEE 802.3af Power-over-Ethernet (PoE). It may be ordered with integral Wi-Fi client capability supporting the transport of the received WhereTag and standard management data across any industry standard 802.11 b/g Wi-Fi network. The product consumes just 12 Watts, enabling a small and economical solar-powered option for remote deployments.

When robust and accurate asset visibility is vital to your business, WhereLAN III is your product of choice and Zebra your global partner.

## The Benefits of WhereLAN III

- ISO/IEC 24730-2 Sensor with 1m Location Accuracy
- Wireless Time Synchronization suitable for Heavy-Industrial Environments
- Low Power Consumption
- Supports 802.3af Power-over-Ethernet
- Supports Optional WiFi 802.11b/g WLAN Backhaul Connectivity
- All-Weather Enclosure designed for Indoor/Outdoor Operation

**PRODUCT DATASHEET**

LOCATION SOLUTIONS WHERELAN III LOCATION SENSOR

# PRODUCT SPECIFICATIONS

PHYSICAL	
Size	261mm x 305mm x 43mm (10.3in x 12.0in x 1.7in)
Weight	3.2kg (7.0lbs)
ENVIRONMENTAL	
Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Environmental Sealing	IP55 (Protected against Dust and Water Jets)
POWER	
Power Consumption	48VDC, 12W
Power Supply	<ul style="list-style-type: none"> <li>PS-045-00: 90-264VAC Input, 48VDC Output, 25W</li> <li>EP-026-00: 802.3af/at PoE Midspan Injector, 90-264VAC Input, Up to 100m Ethernet Cable</li> <li>Provided by 802.3af PoE Network Switch, Up to 100m Ethernet Cable</li> </ul>
PERFORMANCE	
ISO 24730-2 Location Sensor	<ul style="list-style-type: none"> <li>Frequency Range: 2.4GHz to 2.483GHz</li> <li>WhereTag Signal Detection Rate: Up to 300 detections per second</li> <li>WhereTag Signal Time of Arrival Capture: Within 1ns</li> <li>Location Accuracy: 0.9m R50, 1.6m R95</li> </ul>
NETWORK COMMUNICATIONS	
Ethernet	10/100BaseT, RJ-45, 802.3af PoE-compliant
Wi-Fi	IEEE 802.11b/g, 2.4GHZ to 2.483GHz, 20dBm EIRP
REGULATORY APPROVALS	
Asia Pacific	<ul style="list-style-type: none"> <li>China CMIIT</li> <li>Korea KCC</li> </ul>
Europe	<ul style="list-style-type: none"> <li>ETSI EN 300 328</li> <li>ETSI EN 301 489/17</li> <li>IEC 60529, Edition 2.1, 2001-02</li> <li>IEC 60950-1 and IEC 60950-22</li> </ul>
North America	<ul style="list-style-type: none"> <li>FCC Part 15 Class B, Part 15.247</li> <li>Industry Canada ICES-003, RSS-210, RSS-GEN</li> <li>MIL-STD-464, 5.8.3, HERO</li> </ul>
South America	<ul style="list-style-type: none"> <li>Argentina CNC</li> <li>Brasil ANATEL</li> </ul>
Worldwide	<ul style="list-style-type: none"> <li>ISO/IEC 24730-2 Compliant</li> </ul>

# PART NUMBERS

Part Number	Description
LOS-5000-00AA	WhereLAN III Location Sensor
LOS-5000-00AB	WhereLAN III with 802.11b/g WiFi
LOS-5000-00CA	WhereLAN III, BAA/TAA-Compliant
LOS-5000-01AA	WhereLAN III Location Sensor, Secure

**PRODUCT ACCESSORIES**

- ISO/IEC 24730-2 Omnidirectional Antenna
- WiFi 802.11b/g Antenna
- WhereLAN III Mounting Kits
- WhereLAN III Lightning Protection Kit
- WhereLAN III Power Supplies & PoE Injectors



AMERICAS Headquarters +1408 473 8500 | EMEA Headquarters +44 1628 556000 | APAC Headquarters +86 1860 1661177

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