Zebra UWB Wand Module

Zebra Ultra-wideband (UWB) Tag Manager

The Zebra UWB Wand Module enables end users to easily set-up, configure and manage thousands of Zebra UWB Tags. UWB Tags are small, battery powered Ultra-wideband (UWB) wireless devices that periodically transmit their unique ID, typically utilized in asset management applications. UWB Tags are configured using low-frequency (LF) wireless transmissions. The UWB Wand Module transmits LF commands to the UWB Tags to turn tags on/off, and to set their reporting rate. In turn, the UWB Wand Module receives command acknowledgement from the UWB Tags via their UWB channel. The UWB Wand Module is powered via a USB connector and is controlled via the included UWB Wand application software. A typical UWB Wand Module system consists of a computer with the UWB Wand software, the Zebra UWB Wand Module with included USB cable and an optional barcode scanner.

Zebra UWB Wand Features

- Easy tag list generation/association via barcode or LF wireless ping
- Capable of configuring up to 100 tags at once
- Configurable UWB Tag on and off
- Compliant with International UWB Standard, IEEE 802.15.4.f, as well as ISO-2430-61 Draft International standard
- 12 configurable UWB Tag blink rates from 0.01 to 200 Hz
- Controllable UWB read range from one foot to over 500 ft line-of-sight
- Capable of inventorying and providing reports on thousands of UWB Tags

Zebra UWB Tag Configuration

The Zebra UWB Wand application can generate a tag configuration list via manual file input, a barcode scan of each tag or tag package list and by finding tags within LF transmit range (typically 2 feet in front of the module). The UWB Wand Module can configure any UWB Tag within its LF range, up to 100 tags at once.

The UWB Wand allows you to turn tags on or off and allows you to select the tag's blink rate. UWB Tags can be programmed in 12 step iterations, from 0.01Hz (one blink every 75 seconds) to 200 Hz (one blink every 0.005 seconds). The UWB Wand is sold with a Windows application which supports command retry and confirmation messaging to ensure that the targeted UWB Tags are configured properly.

Zebra UWB Tag Inventory Management

The UWB Wand system can also function as a UWB tag reader. In inventory mode, the UWB Wand has a line-of-sight range of over 500 feet from UWB Wand to the targeted UWB Tag. The UWB read range can be attenuated from this 500 foot read range down to one foot, providing the ability to pinpoint the distance to UWB Tags. The UWB Wand inventory application displays a UWB Tag's unique ID, time last seen, battery level,and average blink rate for thousands of concurrent tags. The inventory application table is configurable,sortable, and may be exported into a number of file formats.

PRODUCT SPECIFICATIONS

Model	WND-3100-A-00AA
PERFORMANCE	
Frequency Range	6.35 to 6.75 GHz
Antenna Gain	9.5 dBi
ENVIRONMENTAL/PHYSICAL	
Operating Temperature	-40°C to 70°C (-40°F to 158°F)
Environmental	IP54
Length	13.4 cm (5.26 in)
Width	8.23 cm (3.24 in)
Height	3.99 cm (1.57 in)
Weight	163 gm (5.76 oz)
Power	5V @ 0.25A

WIRED COMMUNICATIONS INTERFACE	
Computer	USB 2.0 (USB to Male Micro-B)
REGULATORY APPROVALS	
North America	FCC part 15 subpart B, ICES-003, RS-220, RSS-GEN
European Union	CE