Zebra Bluetooth® Bridges

Zebra Bluetooth IoT Bridges gather critical location data for actionable business insights

Edge-data and IoT technologies are transforming today's industrial networks. Zebra Bluetooth Low-Energy products are inexpensive relative to other active beacon solutions while providing all the capabilities of these technologies in an easy-to-manage solution. Zebra Bluetooth IoT bridges and transceivers leverage Bluetooth low-energy and Wi-Fi™ technologies and work in tandem with Zebra Bluetooth Beacons to provide near real-time location data to help companies maximize business efficiencies.

The Zebra MB5000 Fixed-Location IoT Bridge

Easy to deploy and manage
Zebra MB5000 Fixed-Location IoT Bridges are easy to configure, install and manage, and can be deployed on pre-existing Wi-Fi networks. They capture Bluetooth low-energy beacon signals then filter and backhaul over Wi-Fi.

Fully configurable
Fully configurable to meet custom requirements, Zebra Bluetooth IoT bridges and transceivers deliver critical data to identify asset location, improve workflows and optimize productivity and profitability.

Secure and convenient
Protected with the best-of-breed security protocols, Zebra IoT bridges are easy to manage securely using 2.5GHz and 5GHz Wi-Fi with WPA/WPA2 personal and enterprise encryption. This allows configuration changes and network updates to be pushed remotely and en masse from a server without needing on-site support.

The Zebra SB5200 Fixed-Location IoT Bridge

Zebra's SB5200 is an enhanced, higher performance IoT bridge in the same physical package as the MB5000. This device more efficiently receives and processes BLE beacons. It has expanded memory and operates over an expanded temperature range. The SB5200 will process more BLE beacons faster and is ideal for capturing BLE beacons in evironments where there are large numbers of beacons.

Zebra Bluetooth Bridges deliver the data your enterprise can use to give your operations a performance edge over the competition.

For more information, visit www.zebra.com/bluetooth

The Zebra MB6000 Mobile IoT Bridge

Mobile and wearable to extend asset visibility
Zebra MB6000 Mobile IoT Bridges work with fixed-location bridges to form a comprehensive location-data solution configurable to your unique requirements. They are secure, run automatically and extend your asset visibility.

The Zebra SB2000 Enhanced Indoor Beacon

The enhanced indoor beacon is a BLE bridge that can periodically listen for nearby BLE beacons and then broadcast BLE packets containing its own ID and the IDs for any nearby beacons. The enhanced indoor beacon is infrastructure installed in specific locations throughout a facility. The device self-locates nearby assets and enables improved location performance via data crowdsourcing using a minimum of fixed infrastructure which can be complimented with BLE-enabled mobile computers, printers or other bridges. The enhanced indoor beacon is compatible with the Bluetooth® low energy standard.

Specifications

MPACT-SB5200-01-WR

Physical Characteristics

Dimensions	5.2" (132.3 mm) x 3.67" (93.3 mm) x 1.19" (30.2mm) including 3M® VHB tape

Performance Characteristics

Wireless Compatibility	Wi-Fi 2.4GHz 802.11 b/g/n Wi-Fi 5GHz 802.11 a/n Bluetooth Low Energy (5.1)
Beacon Processing	Typically 2-3 times more than the MB5000
Wi-Fi Security Compatibility	WPA/WPA2 Personal (PSK: TKIP/AES) WPA/WPA2 Enterprise (TKIP & AES: PEAP-MSCHAPv2)
Antenna Type(s)	Wi-Fi omni-directional Bluetooth directional patch
Compatible Beacon Modes	iBeacon™, MPACT, Battery Save and SecureCast
Location Capability	Proximity or full x,y location with Zebra's Location Engine
Location Engine/ Solution	Zebra Location Engine/Zebra Motion Works Solutions or similar solutions
Availability	Available only as part of Zebra solutions and approved Zebra partner solutions

User Environment

Operating Temperature	5°F to 131°F/-15°C to 55°C
Power	5V dc USB cable and power adapter connected to a standard A/C wall outlet (use only Zebra-qualified USB cable and adapters, sold separately)

Regulatory

Classification	EMI/EMC (FCC), safety (UL), Contact Zebra for country certification details

MPACT-MB5000-01-WR

Physical Characteristics

Dimensions	5.2" (132.3 mm) x 3.67" (93.3 mm) x 1.19" (30.2mm) including 3M VHB tape

Performance Characteristics

Wireless Compatibility	Wi-Fi 2.4GHz 802.11 b/g/n Wi-Fi 5GHz 802.11 a/n Bluetooth Low Energy (4.0 and 4.1)
Wi-Fi Security Compatibility	WPA/WPA2 Personal (PSK: TKIP/AES) WPA/WPA2 Enterprise (TKIP & AES: PEAP-MSCHAPv2)
Antenna Type(s)	Wi-Fi omni-directional Bluetooth directional patch
Compatible Beacon Modes	iBeacon, MPACT, Battery Save and SecureCast
Location Capability	Proximity or full x,y location with Zebra's Location Engine
Location Engine/ Solution	Zebra Location Engine/Zebra Motion Works Solutions or similar solutions
Availability	Available only as part of Zebra solutions and approved Zebra partner solutions

User Environment

Operating Temperature	32°F to 104°F/0°C to 40°C
Power	5V dc USB cable and power adapter connected to a standard A/C wall outlet (use only Zebra-qualified USB cable and adapters, sold separately)

Regulatory

Classification	EMI/EMC (FCC), safety (UL), Contact Zebra for country certification details

MPACT-MB6000-CHRGR

Physical Characteristics

Dimensions	7.78" (197.5 mm) x 5.41" (137.5 mm) x 1.68" (42.7 mm)

Performance Characteristics

What's Included	10-slot charger (charges 1-10 MB6000s at once), power brick and charger cable (from brick to charger) included. The A/C cable from the wall to the brick is required and sold separately.
Availability	Available only as part of Zebra solutions and approved Zebra partner solutions

User Environment

Power	Input: 120-240Vac 50/60Hz 2.4A Output: 12Vdc 4.16A (50W)
A/C Cable	Grounded A/C cable sold separately based on regulatory domain

MPACT-MB6000-01-WR

Physical Characteristics

Dimensions	2.52" (64 mm) x 1.73" (44 mm) x 0.91" (23.2 mm)

Performance Characteristics

Wireless Compatibility	Wi-Fi 2.4GHz 802.11 b/g/n Wi-Fi 5GHz 802.11 a/n Bluetooth Low Energy (4.0 and 4.1)
Wi-Fi Security	WPA/WPA2 Personal (PSK: TKIP/AES) WPA/WPA2 Enterprise (TKIP & AES: PEAP-MSCHAPv2)
Compatible Beacon Modes	iBeacon, MPACT, Battery Save and SecureCast
Antenna Type(s)	Wi-Fi omni-directional Bluetooth directional patch
I/O (input/output)	Input: Two buttons for on/off and control Output: Two multi-color LEDs
Availability	Available only as part of Zebra solutions and approved Zebra partner solutions

User Environment

Operating Temperature	32°F to 104° F/0°C to 40°C
Battery	Lithium ion
Battery Life Estimate	12 hours on a full charge
Battery Charging	Requires the MB6000-CHRGR dock and A/C cable (sold separately, available from Zebra)

Regulatory

Classification	EMI/EMC (FCC), safety (UL), Contact Zebra for country certification details

Warranty

Subject to the terms of Zebra's hardware warranty statement, the MB5000, MB6000, and MB6000 Charger are warranted against defects in workmanship and materials for a period of 12 months from the date of shipment.
For the complete Zebra hardware product warranty statement, go to:
www.zebra.com/warranty

Markets and Applications

Manufacturing

- Inventory management
- Asset and tool management
- Automated receipt and invoicing
- Locate raw-in-process and work-in-process

Transportation and Logistics

- Parcel tracking
- Workflow management
- Resource optimization
- Load-in and load-out management
- Equipment and asset management

Retail

- Customer engagement
- Mobile marketing campaigning
- Inventory/equipment management
- Workforce optimization
- Maintenance management

Healthcare

- Asset visibility and tracking
- Physical inventory control
- Cleaning and disposal tracking
- Rental management
- Compliance control
- Equipment maintenance

MPACT-SB2000-01-WR

Physical Characteristics

Dimensions	3.12" (79.2mm) x 1.76" (44.7mm) x 0.96" (24.4mm)
Weight	86 g

Performance Characteristics

Wireless	Bluetooth 4.1 (Bluetooth Low Energy)
Beacon Interval	Configurable in 100ms intervals
Battery	Two replaceable, standard AA batteries
Transmit Power	5dBm to -23dBm (EIRP) Configurable in 1dB steps
Estimated Operational Life	The approximate life is 2 yrs with the following settings: Receive period = once every 10 minutes Transmit/blink period = once every 2 seconds Actual battery life observed will depend on the actual configuration and transmit/receive periods used. The receive period is relatively large/slow to preserve battery life. This device is not intended for real-time asset visibility solutions
Bluetooth Frequency	2.4 GHz
Bluetooth Security	128 bit AES

User Environment

Operating Temp.	32°F to 104°F / 0°C to 40°C
On / Off switch	Yes
LED	Yes, with blink patterns representing various modes of operation
Antenna Type	Directional antenna with 120°
Modes	iBeacon, MPACT, Battery Save and SecureCast
Environ. Resistance	Indoor environment
Installation Options	Sticky Tape, Secure Mounting brackets, Tie Wrap
Product Compatibility	For use only with the MB5000 Bridge running firmware 2.7.6.0-038D or later and Zebra BLE beacons
Captured Beacon Quantity	Up to 15 nearby beacons

Warranty

Subject to the terms of Zebra's hardware warranty statement, the SB2000 is warranted against defects in workmanship and materials for a period of 90 days from the date of shipment. For the complete Zebra hardware product warranty statement, go to: www.zebra.com/warranty

The specifications herein are subject to change and actual performance will in some cases depend on product configuration, environment and actual usage

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