



Bravo Zulu Sensor Solutions MSH-RPTR User's Manual

Rev 1.00

- READ BEFORE OPERATING -

This product manual must be read by all operators of the MSH-RPTR. The operation and maintenance of this product must be performed in accordance to the manufacturers guidelines. Failure to do so may cause damage to the MSH-RPTR and may increase the risk of injury or death to the operator. This product is not intended for use in any other way than stated in the user's manual.

This apparatus is suitable for use in Class I, Division 2, group D, T4, or unclassified locations.



WARNING: EXPLOSION HAZARD. BATTERIES MUST ONLY BE CHANGED OR CHARGED IN AN AREA KNOWN TO BE NON HAZARDOUS.



WARNING: EXPLOSION HAZARD. DO NOT MOVE OR REPLACE COMPONENTS OR CONNECTORS WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS.



WARNING: SUBSTITUTION OF THE COMPONENTS MAY IMPAIR SUITABILITY FOR DIVISION II



WARNING: USE ULTRALIFE RECHARGABLE LITHIUM-ION CELL 3.6 V MODEL: UBBL19-FL, UBBL23-FL OR BZ Sensor Solutions APPROVED EQUIVALENT.

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1 General Information

The BZ Sensor Solutions MSH-RPTR device is designed to extend the signal and coverage area of the Mesh Network. The design of this device enhanced the functionality of the network.

1.1 Specifications

1.1.1 Dimensions

- Height: 2.25 in.
- Width: 8.0 in.
- Depth: 3.25 in.

1.1.2 Weight

- 18 oz.

1.1.3 Operational Time

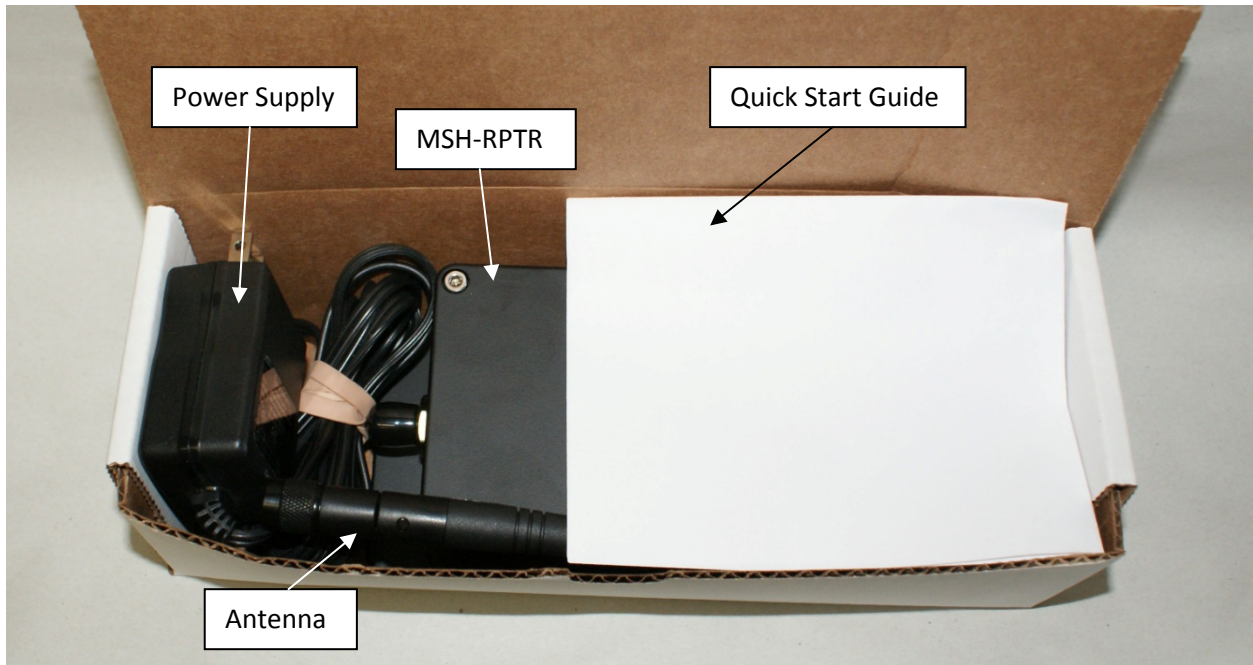
- 12 - 24 hrs.

1.1.4 Operational Environment

- Altitude: 2000m
- Temperature: -25 – 40°C
- Humidity: 80% RH max.
- POLLUTION DEGREE 2

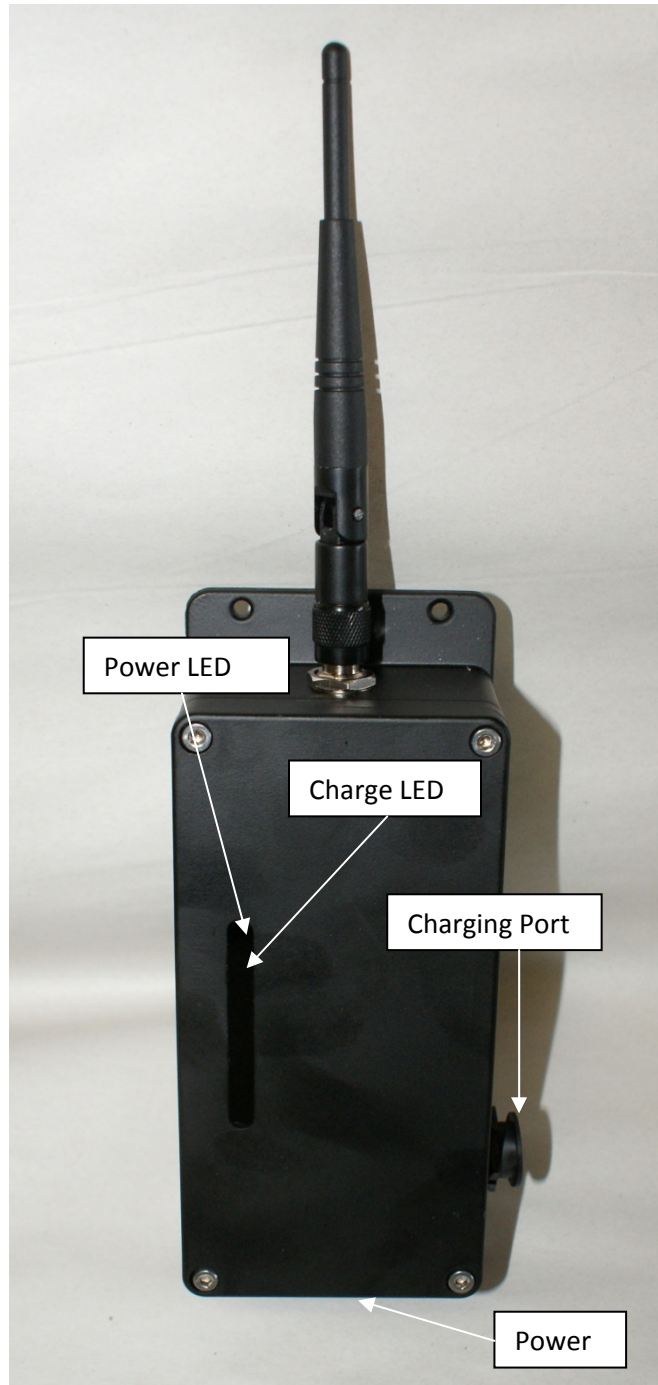
1.1.5 Package Content:

- MSH-RPTR
- Battery Charger
- Antennae
- Quick Start Guide



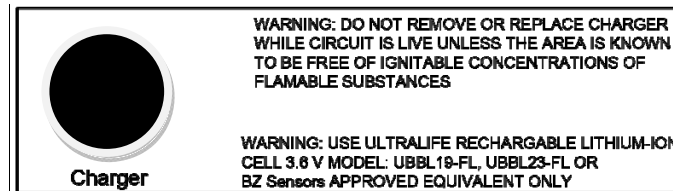
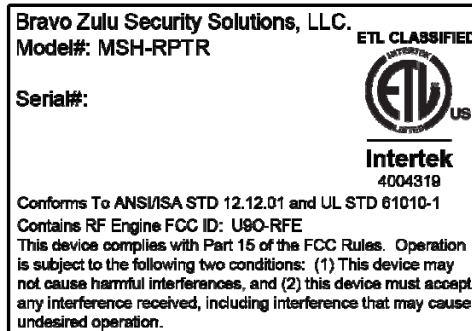
2 MSH-RPTR Operation

The MSH-RPTR is a compact device that extends and enhances the Mesh Network. It works in conjunction with all the BZ Sensor Solutions devices.



2.1 Physical Description

The MSH-RPTR is designed to comply with standards for ANSI/ISA-12.12.01-2007 and ANSI/UL 61010-1-2008, 2nd.



2.2 Visual Indicators

The MSH-RPTR contains two visual indicators. A green power LED and a RED charging status LED. The green LED will illuminate when the power to the device is on. The RED LED will illuminate when MSH-RPTR is charging. The RED LED will turn off once the charging cycle is complete.

2.3 Rechargeable Battery

The LD8 uses a rechargeable Lithium Ion Polymer battery. ONLY USE ULTRALIFE RECHARGABLE LITHIUM-ION CELL 3.6 V MODEL: UBBL19-FL, UBBL23-FL OR BZ Sensors APPROVED EQUIVALENT.



WARNING: EXPLOSION HAZARD. BATTERIES MUST ONLY BE CHANGED OR CHARGED IN AN AREA KNOWN TO BE NON HAZARDOUS.



WARNING: EXPLOSION HAZARD. DO NOT REMOVE OR REPLACE COMPONENTS OR CONNECTORS WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITIBLE CONCENTRATIONS.



WARNING: SUBSTITUTION OF THE COMPONENTS MAY IMPAIR SUITABILITY FOR DIVISION 2.

2.4 BZSS Mesh Backbone

The BZSS mesh backbone uses the 2.4 Ghz RF signal and follows the ZigBee protocol for mesh networks. To use the LD8 on the BZSS mesh backbone a BZSS Control Card is required. BZSS also offers a mesh repeater to extend the range of the RF signal.

3 Preventative Maintenance and Inspection Information

Maintenance of the MSH-RPTR is very minimal. Visually inspect the device for any apparent damage, replace the components as necessary.

3.1 Mechanical Inspection

3.1.1 Guidelines

- Inspect the housing for any wear, exposure, or damage. Replace damaged parts.
- Inspect mounting system for damage. Replace damaged parts.

3.2 Electrical Inspection

3.2.1 Guidelines

- Battery run cycle is dependent on network traffic, if there is a noticeable decline in battery performance, replace the battery with an approved replacement.

4 Support

4.1 Contact Us

Bravo Zulu Security Solutions, LLC.
1035 Putman Drive, Huntsville, AL 35816
Tel: (256) 489-0209
Fax: (256) 489-2149
www.bravo-zulu.us

5 Appendix

5.1 Compliancy

- Nonincendive Electrical Equipment for use in Class I Division II, Division II and Class II, Divisions I and II Hazardous (Classified) Locations. (ANSI/ISA-12.12.01-2007)
- Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements. (ANSI/UL 61010-1-2008, 2nd)