BIS M-620-068-A01-00-S
High Frequency Passive Radio Frequency, Identification Processor

INSTALLATION GUIDE

This document provides instructions and information designed to assist users in the hardware setup of the BIS M-620-068-A01-00-S RFID Processor. For configuration details see the BIS M-62, processor manual.

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TECHNICAL DATA

ELECTRICAL FEATURES

- Power Supply: 18.2 to 28.8 VDC
- DC Input Current: 500 mA
- Communication Interface: RS232, 9600 (default) to 115200
- Baud Rate: 9600 (default) to 115200

RADIO FEATURES

- Frequency: 13.56 MHz
- Air Protocols: ISO 14443A, ISO 15693
- Conducted Output Power: 1 W

ENVIRONMENTAL FEATURES

- Operating Temperature: -20°C to +50°C (-4°F to +122°F)
- Storage Temperature: -20°C to +70°C (-4°F to +158°F)
- Humidity max.: 95% non-condensing
- Protection Class: EN 60529 IP65

PHYSICAL FEATURES

- Dimensions: 137 x 112 x 48 mm (5.40 x 4.41 x 1.88 in)
- Weight: 440 g (15.6 oz)
- Enclosure: Powder Coated Aluminum

USER INTERFACE

- LED Indicators: READY, RF, COM

DIGITAL I/O (-ST29 MODELS)

- M12 8-pin Male Connector (Data and Power Supply)

DIMENSIONS

- Minimum Mounting Distance Between Antennas:
  - BIS M-371: 60 cm (23.6 in)
  - BIS M-372: 75 cm (29.5 in)
  - BIS M-373: 90 cm (35.4 in)
  - BIS M-370: 50 cm (19.7 in)

GENERAL VIEW

LED INDICATORS

<table>
<thead>
<tr>
<th>Color</th>
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<tr>
<td>green</td>
<td>READY</td>
</tr>
<tr>
<td>amber</td>
<td>RF</td>
</tr>
<tr>
<td>amber</td>
<td>COM</td>
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The READY LED is ON after the power up sequence has completed.

The RF LED illuminates when RF power is being transmitted by the antenna.

The COM (communications) LED flashes ON and OFF when data is being transmitted between the antenna and a tag.

When in Continuous Read mode, the COM LED will remain ON and will turn OFF briefly while data is being read from or written to a tag.

CONNECTIVITY

M12 8-pin Male Connector (Data and Power Supply)

BIS M-620-068-A01-00 with antenna

Typical Layout

See the BIS M-62, processor manual for a complete list of accessories including alternative cables and connectors.

INSTALLATION GUIDELINES

- RF performance and read/write range can be negatively impacted by the proximity of metallic objects and liquids. Avoid mounting the Balluff antenna within 15 cm (6 inches) of any metallic object or wet surface.
- Do not route cables near other unshielded cables or near wiring carrying high voltage or high current. Cross cables at perpendicular intersections and avoid routing cables near motors and solenoids.
- Avoid mounting the Processor near sources of EMI (electromagnetic interference) or near devices that generate high ESD (electrostatic discharge) levels. Always use adequate ESD prevention measures to dissipate potentially high voltages.
- If electrical interference is encountered (as indicated by a significant reduction in read/write performance), relocate the Processor to an area free from potential sources of interference.

INSTALLATION

The BIS M-620-068-A01-00-S Processor is designed for point-to-point RFID applications, where the distance from host to Processor is less than 15 meters (50 feet). The Processor connects directly to a serial communications port on a host computer via an RS232-compatible serial interface cable.

1. Select a suitable location for the BIS M Processor/ Antenna.
2. Mount the BIS M Antenna to the BIS M Processor, either directly orRemotely, as described in the BIS M-37, Installation Guide included with the antenna.
3. Mount the Processor and antenna to your mounting fixture using M5 (or #10) diameter screws (not included) and secure them with appropriate washers and nuts. Tighten screws to 1.7 Nm or 15 lb per inch ± 10%.
4. Connect the BCC0ETJ M12 8-pin female connector to the M12 8-pin male interface connector on the BIS M-620-068-A01-00-S. Connect the BCC0ETJ 9-pin female D-sub connector to an RS232 COM port on the host computer. Tighten the cable’s two locking thumbscrews.
5. Connect the power supply to the VDC (red) and GND (black) wires on the BCC0ETJ cable.
6. Apply power to the Processor after all cable connections have been made. The LEDs on the unit will flash. The READY LED is ON whenever power is applied to the Balluff.
7. On the host computer, set the COM port parameters to: 9600 baud, 8 data bits, 1 stop bit, no parity and no handshaking.

To verify operations, download the Balluff Dashboard™ Configuration Tool from www.balluff.com. The Balluff Dashboard™ Configuration Tool allows users to configure and control their BIS M-620-068-A01-00-S, Processors and send RFID commands for testing purposes.

COMPLIANCE

Only Balluff BIS M-370 family antennas are certified for use with the BIS M-620-068-A01-00-S Processors. This product is intended to be installed by Qualified Personnel only. This product must not be used in explosive environments. See the BIS M-62 processor Manual for the Declaration of Conformity.
**Power Supply**

This device is intended to be supplied by a UL Listed or CSA Certified Power Unit with «Class 2» or LPS power source.