# BALLUFF

## BIS M-626-069-A01-06-ST3

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-626-069-A01-06-ST3\_RFID Processor. For configuration details see the BIS M-62\_ Series Reference Manual.

PACKAGE CONTENTS		
Qty	Description	
1	BIS M-626-069-A01-06-ST3_ RFID Processor	
1	BIS M Series Configuration Tag	
1	This Installation Guide	
2	M5 x 20 mm Antenna Mounting Screws	
2	M5 Antenna Mounting Washers	
1	Hex Wrench for Antenna Mounting	

#### **TECHNICAL DATA**

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ELECTRICAL FEATURES					
Power Supply	19.2 to 28.8 VDC				
DC Input Current	500 mA				
Communication Interface	Industrial Ethernet, TCP/IP, MODBUS TCP				
Data Rate	10/100 Mbps				
RADIO FEATURES					
Frequency	13.56 MHz				
Air Protocols	ISO 14443A, ISO 15693				
Conducted Output Power	1 W				
ENVIRONMENTAL FEATUR	ENVIRONMENTAL FEATURES				
Operating Temperature	-20° to +50 °C (-4° to +122 °F)				
Storage Temperature	-20° to +70 °C (-4° to +158 °F)				
Humidity max.	90% 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 (15.5 oz)				
Enclosure	Powder Coated Aluminum				
USER INTERFACE					
LED Indicators	READY, RF, COM, DEFAULT IP, CUSTOM IP				

<sup>\*</sup> When all connectors and antenna are correctly installed.

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Minimum Mounting Distance Between Adjacent Antennas.

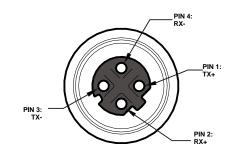
BIS M	-371	-372	-373	-370
-371	60 cm	75 cm	90 cm	50 cm
-372	75 cm	90 cm	1.2 m	65 cm
-373	90 cm	1.2 m	2 m	90 cm
-370	50 cm	65 cm	90 cm	50 cm

#### **GENERAL VIEW**

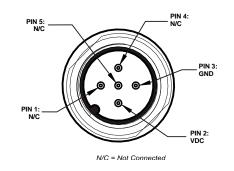


#### CONNECTIVITY

M12 4-pin D-Coded Female Connector (for Ethernet)

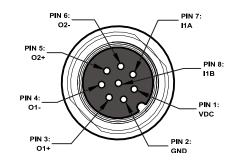


M12 5-pin Male Connector (for Power Supply)



#### DIGITAL I/O (-12 MODELS)

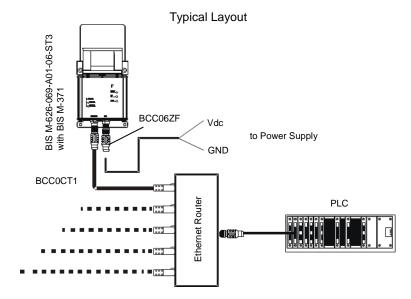
M12 8-pin Female Connector (Digital I/O)



This connector is available on BIS M-626-069-A01-06-ST3\_ models. See the BIS M-62\_ Series Reference Manual for details.

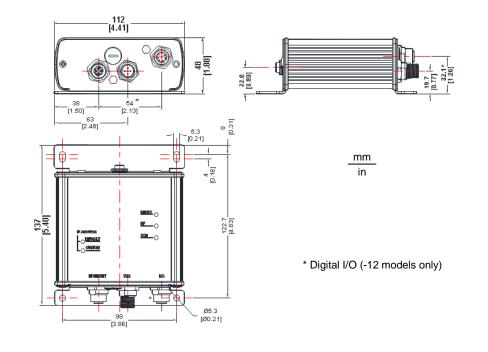
#### LED INDICATORS

green	READY	The READY LED is ON after the power up sequence has completed.
amber	RF	The RF LED illuminates when RF power is being transmitted by the antenna.
amber	сом	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 only while data is being read from or written to a tag.
amber	DEFAULT	Default IP Address enabled. (192.168.253.110)
amber	сиѕтом	User assigned IP Address enabled.



See the BIS M-62\_ Series Reference Manual for a complete list of accessories including alternative cables and connectors.

#### DIMENSIONS



#### INSTALLATION GUIDELINES

- RF performance and read/write range can be negatively impacted by the proximity of metallic objects and liquids. Avoid mounting the BIS M-37\_ 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 (electro-magnetic interference) or near devices that generate high ESD (electro-static 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-626-069-A01-06-ST3\_ RFID Processor is designed for Industrial Ethernet RFID applications, where the Processor is connected in an Industrial Ethernet TCP/IP network via compatible cables through a hub or directly to an Industrial Ethernet host.

- Select a suitable location for the BIS M-626-069-A01-Processor/Antenna.
- Mount the Antenna to the BIS M Processor, either Directly or Remotely, as described in the BIS M-37\_ Installation Guide included with the antenna.
- 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 lbs per inch + 10%
- 4. Connect the BCC0CT1 M12 4-pin male connector to the M12 4-pin female interface connector on BIS M-626-069-A01-06-ST3\_. Connect the BCC0CT1 RJ45 male connector to the LAN hub/switch. If connecting directly to the host computer you will need to use an additional crossover cable.
- 5. Build a power supply cable using the BCC06ZF M12 5-pin female connector. Use minimum 24 AWG wires for connection to the power supply lines according to the Vdc connector pinout. Connect the BCC06ZF M12 5-pin female connector to the M12 5-pin male connector on the Processor. Connect the other end of the cable (wires or user-supplied connectors) to the power supply.
- 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 BIS M-626. Then one of the Industrial Ethernet Address LEDs will remain on either Default or Custom.

To verify operations, download the Dashboard™ Configuration Tool from <a href="www.balluff.com">www.balluff.com</a>. The Dashboard™ Configuration Tool allows users to configure and control their BIS M-626-069-A01-06-ST3\_Processors and send RFID commands for testing purposes.

For connection details see the BIS M-62\_ Processor Manual and the Dashboard™ Configuration Tool Manual.

### COMPLIANCE

Only BIS M-37\_ antennas are certified for use with the BIS M-62\_Processors.

This product is intended to be installed by Qualified Personnel only.

This product must not be used in explosive environments.

### 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.

