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BIS U-620-068-1X1-00-SX

Ultra 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 U-620-068-1x1-00-Sx Processor. For configuration details see the BIS U-62_ Processor Manual.

PACKAGE CONTENTS	
Qty	Description
1	BIS U-620-068-1x1-00-Sx Processor
1	UHF Series Configuration Tag
1	This Installation Guide

TECHNICAL DATA

ELECTRICAL FEATURES		
Power Supply	12 to 30 VDC	
DC Input Current	600 to 270 mA	
Communication Interface Baud Rate	RS232 9600 (default) to 115200	
RADIO FEATURES	EU	US
Frequency (MHz) ETSI EN 302 208 FCC part 15.247	 865 to 868 -	 - 902 to 928
Number of Channels	4 fixed	50 hopping
Frequency Tolerance	± 10 ppm over entire temp range	
Air Interface	EPC C1G2	
Conducted Output Power	500 mW (27 dBm) max	
Antenna Connector	Reverse TNC	
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	
Vibration Resistance EN 60068-2-6	14 mm @ 2 to 10 Hz; 1.5 mm @ 13 to 55 Hz; 2 g @ 70 to 200 Hz; 2 hours on each axis	
Shock Resistance EN 60068-2-27	30 g; 11 ms; 3 shocks on each axis	
Protection Class EN 60529	IP65*	
PHYSICAL FEATURES		
Dimensions	164 x 112 x 48 mm (6.46 x 4.41 x 1.88 in)	
Weight	560 g (19.8 oz)	
Enclosure	Powder Coated Aluminum	
USER INTERFACE		
LED Indicators	READY, RF, COM	

* When all connectors and antenna are correctly installed.

The BIS U-620-068-1x1-00-Sx Processor and its antenna are intended for indoor use only.

GENERAL VIEW

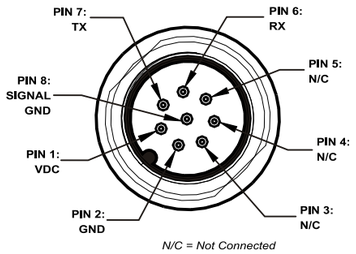


LED INDICATORS

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	**COM**	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.

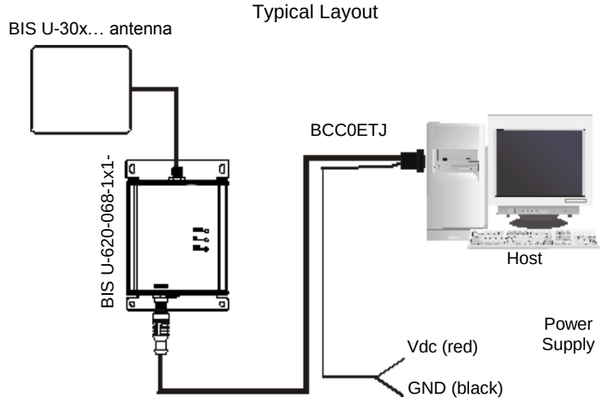
CONNECTIVITY

M12 8 pin Male Connector (Data and Power Supply)



N/C = Not Connected

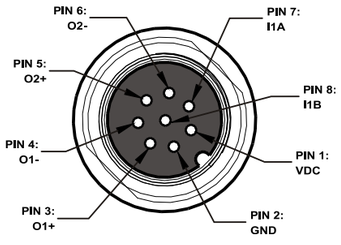
Typical Layout



See the BIS U-62_ Processor Manual for a complete list of accessories including alternative cables and connectors.

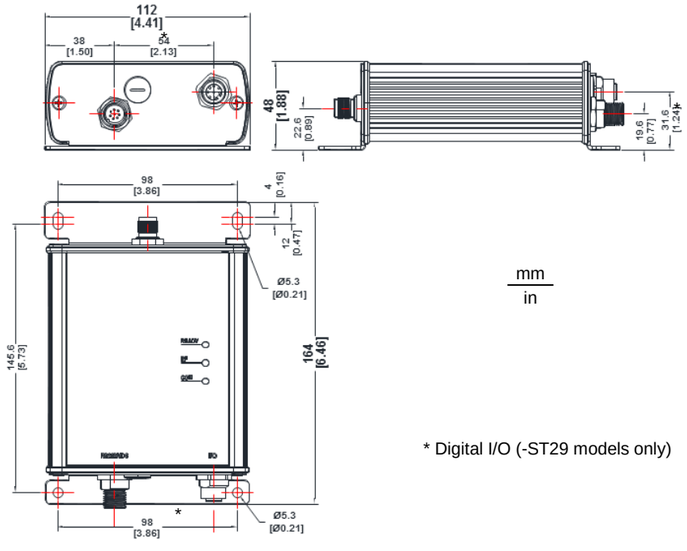
DIGITAL I/O (-12 MODELS)

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



This connector is available on models BIS U-620-068-1x1-00-S29.
See the BIS U-62_ Processor Manual for details

DIMENSIONS



* Digital I/O (-ST29 models only)

INSTALLATION GUIDELINES

- RF performance and read/write range can be negatively impacted by the proximity of metallic objects and liquids. Avoid mounting the BIS U-3x… 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 U-620-068-1x1-00-Sx RFID 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 U-62… Processor and BIS U-30… Antenna.
2. Mount the BIS U-30… Antenna (within the cable distance of the Processor) and attach the BIS U-30… Antenna cable as described in the installation guide included with the antenna.
3. Fasten the Processor to your mounting fixture using two ***M5 (#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%***. Connect the antenna cable to the UHF Processor.
4. Connect the BCC0ETJM12 8-pin female connector to the M12 8-pin male interface connector on the BIS U-620-068-1x1-00-Sx Processor. Connect the BCC0ETJ9-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 BCC0ETJcable.
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 after the power up sequence has completed.
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 U-620-068-1x1-00-Sx Processors and send RFID commands for testing purposes.

COMPLIANCE

Only BIS U-30… family antennas are certified for use with the BIS U-620-068-1x1-00-Sx Processors.

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

This product must not be used in explosive environments.

See the BIS U-620…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.

Nr. 890 426 E · Edition 1305; Subject to modification.