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BIS U-620-067-1X1-04-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-620-067-1X1-04-sx Processor. For configuration details see the BIS U-62_ Processor Manual.

PACKAGE CONTENTS	
Qty	Description
1	BIS U-620-067-1x1-04-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	Subnet16™ (RS485) 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 ℃ (-4°to +122 ℉)	
Storage Temperature	-20°to +70 ℃ (-4°to +158 ℉)	
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; NODE ID	

* When all connectors and antenna are correctly installed.

The BIS U-620-067-1x1-04-Sx Processor and its antenna are intended for indoor use only.

GENERAL VIEW

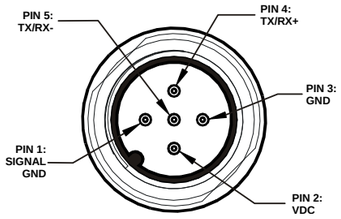


LED INDICATORS

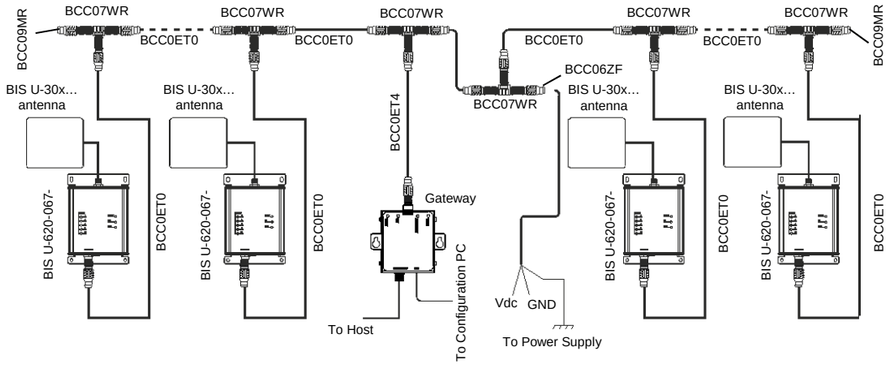
green	**READY**	The READY LED is ON after the power up sequence has completed.
amber	**RF**	The RF LED illuminates when RF power is being transmitted by the antenna.
amber	**COM**	The COM (communications) LED flashes ON and OFF when data is being transmitted between the antenna and a tag. When in Continuous 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.
amber	**NODE ID**	The five Node ID LEDs indicate (in binary, from top to bottom) the current Node ID value assigned to the Processor.

CONNECTIVITY

M12 5-pin Male Connector
(Data and Power Supply)



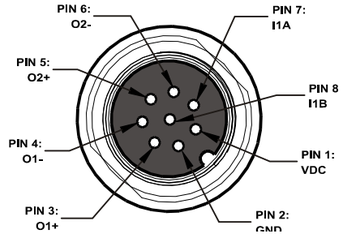
Typical Layout



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

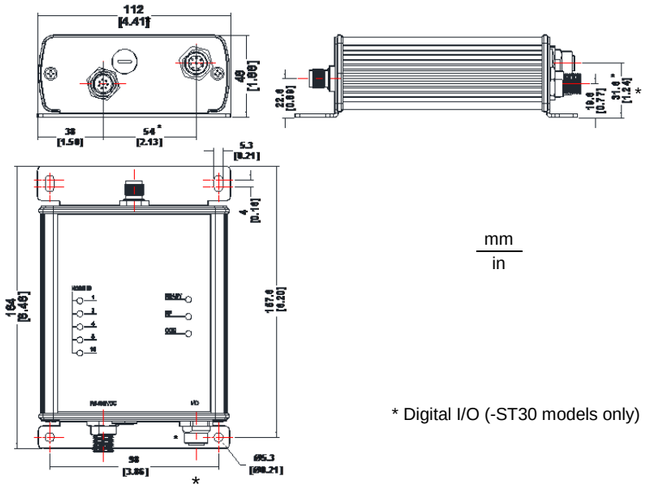
DIGITAL I/O (-12 MODELS)

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



This connector is available on models BIS U-620-067-1x1-04-ST30.
See the BIS U-62_ Processor Manual for details.

DIMENSIONS



mm
in

* Digital I/O (-ST30 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-620-067-1x1-04-Sx Processor is designed for Subnet16™ RFID applications, where the Processor is connected in an RS485 network via Subnet16™-compatible cables to the host through a Gateway or Hub.

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. Attach a Subnet16™ compatible cable (i.e. BCC0ET0) to the M12 5-pin male Subnet16™ connector on the Processor. Connect the other end of this cable to your Subnet16™ network.
5. To complete the Subnet16™ network installation, including power supply wiring, trunk wiring, network termination, Gateway/Hub wiring, and for a complete list of compatible accessory cables and Subnet16™ network layout examples, see the Subnet16™ Gateway or Subnet16™ Hub Manuals.

After installation, the Subnet16™ network can be configured through the Subnet16™ Gateway/Hub using the Balluff Dashboard™ Configuration Tool. See the Balluff Dashboard™ Configuration Tool Manual for details.

COMPLIANCE

Only BIS U-30… family antennas are certified for use with the BIS U-620-067-1x1-04-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-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.

Nr. 890 427 E · Edition 1304; Subject to modification.