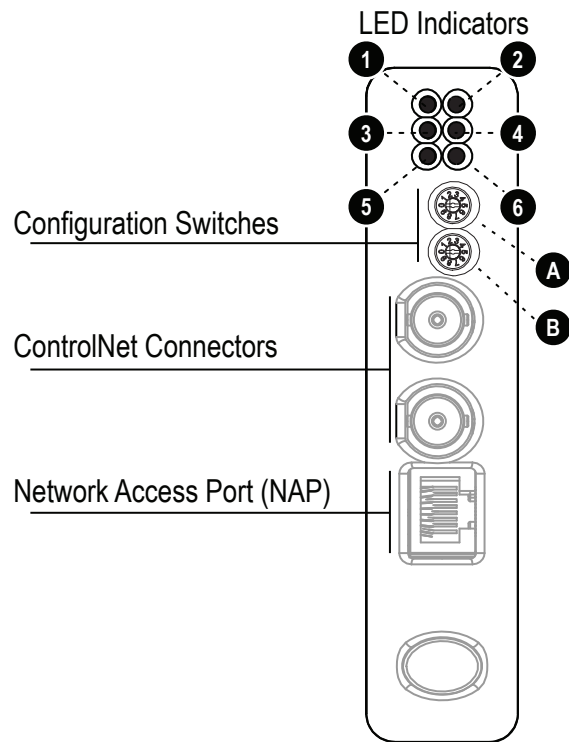


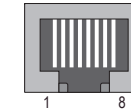
Module Front



LED Indicators

LED no	Indication	Meaning
1 (Channel A)	A and B; Off	Device not initialized
2 (Channel B)	A and B; Red	Device must be restarted or repaired
	A and B; Alternating red/green	Bus controller self test
	A and B; Flashing red	Incorrect node configuration; e.g. duplicate Mac ID
	A or B; Off	Channel disabled, depends on network configuration
	A or B; Green	Normal operation
	A or B; Flashing green	Temporary error or node not configured
	A or B; Flashing red	Media fault or no other nodes available
	A or B; Flashing red / green	Incorrect network configuration
3 (Module Status)	Flashing green	Waiting for initialization
	Green	Initialized
	Flashing red	Minor fault, recoverable
	Red	Major fault, unrecoverable
4 (Module Owned)	Green	A connection has been opened
	Off	No connection opened
5 (Subnet Status)	Flashing green	Running, but one or more transaction errors
	Green	Running
	Red	Transaction error/timeout or subnet stopped
6 (Device Status)	Off	Power off
	Alternating red/green	Invalid or missing configuration
	Green	Initializing
	Flashing green	Running
	Red	Bootloader mode
	Flashing red	Note the flash sequence pattern and contact the HMS support department

Network Access Port (NAP)

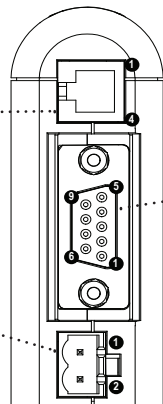


Pin no	Description
1, 8	GND_REF
2, 7	NC
3	TX_H
4	TX_L
5	RX_L
6	RX_H
Housing	Protective Earth (PE)

Bottom View

PC Connector:

- 1. GND
- 2. GND
- 3. RS232 Rx
- 4. RS232 Tx



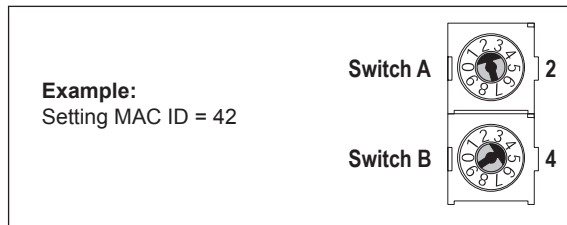
- Power:
- 1. +24 V DC
  - 2. GND

Subnetwork Connector

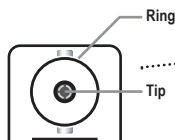
Pin no.	Description
1	+5V OUT
2	RS232 Rx
3	RS232 Tx
4	NC
5	Signal GND
6	RS422 Rx+
7	RS422 Rx-
8	RS485+ / RS422 Tx+
9	RS485- / RS422 Tx-

Configuration Switches A B

Set the ControlNet MAC ID by using the configuration switches (A and B) as follows:  
 MAC ID = (switch B \* 10) + (switch A \* 1)



ControlNet Connectors



Pin	Description
Tip	ControlNet signal line
Ring	Shield

Accessories Checklist

The following items are required for installation:

- Anybus Communicator Resource CD (Includes configuration software, manuals, EDS file and application notes)
- RS-232 configuration cable
- Sub-network connector
- ControlNet network cable and connector (not included)

Installation and Startup Summary

1. Mount the Communicator on the DIN-rail.
2. Connect the Communicator to the ControlNet network.
3. Connect the Communicator to the sub-network.
4. Power up the Communicator (+24V DC).
5. Connect the configuration cable between the Communicator and the PC containing the Anybus Configuration Manager software (ACM).
6. Configure the Communicator using ACM.
7. Include the Anybus Communicator EDS file in the ControlNet configuration tool.
8. Configure and start the ControlNet network.

Further information and documents about this product can be found at the product pages on [www.anybus.com](http://www.anybus.com).

**UL Certification**



IND: CONT. EQ.  
FOR HAZ LOC.  
CL I, DIV 2  
GP A,B,C,D  
TEMP  
CODE  
E203225

**Warnings**

- **WARNING - EXPLOSION HAZARD - SUBSTITUTION OF ANY COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.**
- **WARNING - EXPLOSION HAZARD - WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES.**
- **WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.**

**Attention!**

- **ATTENTION – RISQUE D’EXPLOSION – LE REMPLACEMENT DE TOUT COMPOSANTS INVALIDE LA CERTIFICATION CLASS I, DIVISION 2.**
- **ATTENTION – RISQUE D’EXPLOSION – EN ZONE EXPLOSIVE, VEUILLEZ COUPER L’ALIMENTATION ÉLECTRIQUE AVANT LE REMPLACEMENT OU LE RACCORDEMENT DES MODULES.**
- **ATTENTION – RISQUE D’EXPLOSION – NE PAS DÉCONNECTER L’ÉQUIPEMENT TANT QUE L’ALIMENTATION EST TOUJOURS PRÉSENTE OU QUE LE PRODUIT EST TOUJOURS EN ZONE EXPLOSIVE ACTIVE.**

**Additional installation and operating instructions**

Max Ambient Temperature: 55°C (for Hazloc environments)

Field wiring terminal markings (wire type (Cu only, 14-30 AWG)).

Use 60/75 or 75°C copper (Cu) wire only.

Terminal tightening torque must be between 5-7 lb-in (0.5 - 0.8 Nm).

Use in overvoltage category 1 pollution degree 2 environment.

Installed in an enclosure considered representative of the intended use.

Secondary circuit intended to be supplied from an isolating source and protected by overcurrent protective devices installed in the field sized per the following:

Control-circuit Wire Size		Maximum Protective Device Rating
AWG	(mm <sup>2</sup> )	Amperes
22	(0.32)	3
20	(0.52)	5
18	(0.82)	7
16	(1.3)	10
14	(2.1)	20
12	(3.3)	25

**ODVA Compliance**



ControlNet CONFORMANCE TESTED™ is a certification mark of ODVA.

**EMC Compliance (CE)**



This product is in accordance with the EMC directive 89/336/EEC, with amendments 92/31/EEC and 93/68/EEC through conformance with the following standards:

- **EN 50082-2 (1993)**  
EN 55011 (1990) Class A
- **EN 61000-6-2 (1999)**  
EN 61000-4-3 (1996) 10 V/m  
EN 61000-4-6 (1996) 10 V/m (all ports)  
EN 61000-4-2 (1995) ±8 kV Air Discharge  
±4 kV Contact discharge  
EN 61000-4-4 (1995) ±2 kV Power port  
±1 kV Other ports  
EN 61000-4-5 (1995) ±0.5 kV Power ports (DM/CM)  
±1 kV Signal ports

Further information and documents about this product can be found at the product pages on [www.anybus.com](http://www.anybus.com).