

# DIN rail EtherCAT

## power injector

Din rail PoE passive injector/splitter mode A/B. Suitable for all Bota Systems' EtherCAT sensors of **Gen Zero**.

Suitable for the following products

EtherCAT Sensors Gen Zero



### Configurations

Ordering number ACC-POE-AB

Din rail PoE passive injector/splitter mode A/B.

## Technical specification





FIGURE 1

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## EtherCAT Gen Zero Installation

For all EtherCAT sensors of generation Zero the sensor cable must be plugged to the lower RJ45 connector of Figure 2. The EtherCAT master (computer, robot controller or PLC) must be connected on the top left RJ45 adapter with an ethernet cable. The sensor's power supply can be provided in two ways, Mode A or B. Mode A injects the power to the data lines and Mode B injects power to the spare ethernet pairs. The two screw terminal pair can be used to supply power with either mode (see Figure 2). All EtherCAT sensor of Gen 0 are supporting both modes. Is recommended to use Mode B unless a custom wiring with only 4 wires is required to connect to the sensor, for example using a slip ring or a tool changer.

Ethernet Mode	Sensor cable	Sensor Cable	Signals	Signals
Connection A P	wires	connector	Mode A	Mode B
<pre>connection A B +-+- i +-+ i +</pre>	Orange, white	1	Tx+/PWR	Tx+
	Orange	2	Tx-/PWR	Tx-
	Green, white	3	Rx+/GND	Rx+
	Blue	4		PWR
	Blue, white	5		PWR
	Green	6	Rx-/GND	Rx-
	Brown, white	7		GND
	Brown	8		GND
	Shield	Shield	Based on JP3 configuration. See table below. <b>Default</b> : Connected to GND	
	Jumper JP3			
	Jumper on upper pins		Connects the shielding of the RJ45	
Connection	default: OFF, open		ethernet connection to the power supply negative (-)	
FIGURE 2	Jumper on lower pins		Connects the shielding of the RJ45	
	default: ON, closed		sensor cable connection to the power supply negative (-)	

#### Technical data

Property	Value		
Application		Materials	
Degree of protection	No	Rail Brackets	PA
Mechanical mating cycles	≥ 100	PCB	FR4
Rail compatibility	- IEC/EN 60715 Top hat rail	Connectors Screws	Steel
	35×7.5 or 35×15		Copper
	- TS35		Nickel
	- G type EN 50035 G32		
Application	Ethernet 100 mbs	Electrical	
Ambient temperature (operation)	-25 °C - 80 °C	Contact resistance	5 mOhm
Certification		Insulation resistance	100 MOhm
RoHS	Yes	Rated voltage	9-48V dc
CE	Yes	Rated current	1A
Class of pollution	3		