EXLINK 6102
ETHERNET NETWORKING MODULE
HARDWARE REFERENCE

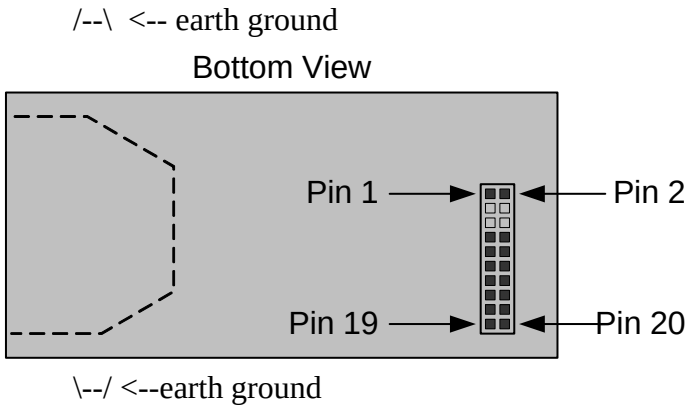
OVERVIEW

The ExLink 6102 Module is an easy-to-use, royalty free platform for integrating EtherNet/IP, Modbus TCP and Profinet IO into an Industrial Automation device. With the 6102 Module vendors of Industrial Automation devices can deliver working Ethernet solutions in a fraction of the time required to learn, design, test and integrate the complex Ethernet protocols used in factory floor connectivity solutions.

This document is a hardware reference that provides the specific information needed to integrate the module.

POWER AND INTERFACE CONNECTOR PIN ASSIGNMENTS

There are 16 pins on the ExLink 6102 module (4 pins are not inserted). Of these only the 3.3VDC power, ground, TTL Rx and Tx are required for operation.



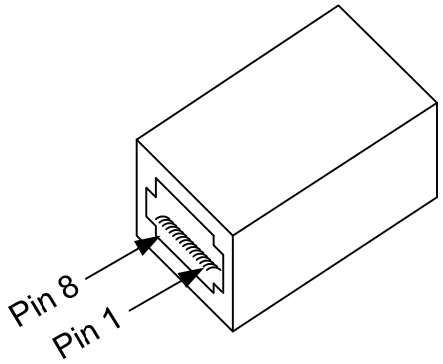
Pin	Signal	Description
1	VETH-	Power Over Ethernet (PoE) Signals from a PoE Power source. Signals are passed through the ExLink Module to the PoE-compatible power supply in the target device.
2	VETH+	
3	NO PIN	
4	NO PIN	
5	NO PIN	

6	NO PIN	
7	RxD	3.3VDC TTL Receive (230K Baud Max)
8	TxD	3.3VDC TTL Transmit (230K Baud Max)
9	RTS/GPIO 4	Interrupt Output to Customer Hardware (optional)
10	DTR/GPIO 5	Application Specific status LED
11	CTS/GPIO 2	Application Specific status LED
12	DSR/GPIO 3	Application Specific status LED
13	DCD/GPIO 1	Application Specific status LED
14	/RESET	Logic-level module reset input (Optional)
15	+3.3VDC	ExLink Power Signal from Host Device Hardware.
16	GND	ExLink Power Common from Host Device Hardware.
17	NO CONNECT	RESERVED – DO NOT CONNECT
18	NO CONNECT	
19	NO CONNECT	
20	/INIT	Active Low Input that enables the module Boot Loader on a Power Cycle. Boot Loader is used for module recovery.
tabs	Earth ground	Recommended connection to earth ground for electrical noise protection.

20pf Capacitors are recommended to circuit ground all inputs and outputs for ESD immunity. The 20pf Capacitors can be omitted in applications using PoE source power.

POWER AND DEVICE INTERFACE CONNECTOR

The Power and Device Interface connector is an 8 wire RJ-45 jack that meets the ISO 8877 requirements for 10/100 Base T operation. An RJ-45 jack cable supplies an Ethernet signal and, optionally, power to the ExLink 6102 module.



ETHERNET INTERFACE PIN ASSIGNMENTS							
Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
TxD+- (Transmit Data plus)	TxD- (Transmit Data minus)	RxD+ (Receive Data Plus)	Power from Switch +	Power from Switch +	RxD- (Receive Data minus)	Power from Switch -	Power from Switch -

LED LOCATIONS

LED DESCRIPTIONS		
LED	COLOR	DESCRIPTION
Network Link (Left Upper)	YELLOW	Network Link is operation: On (continuously) indicates that an Ethernet connection exists.
Network Activity (Right Upper)	GREEN	Network Activity: On when network traffic detected; off when no traffic detected
		Diagnostic: Flashed three times in even duration during power up or reset, indicating successful startup