

## 6 Port Ethernet Switch

P/N: AX140700

### Features:

- 12V, 24Vdc input power (nominal)
- Optional accessory input switch connection
- 6 ports – Ethernet (10/100 Mbps) for multiple Ethernet devices on a machine
- 2 power outputs (Vps) to power external devices
- LED indicators
- Surge, Reverse polarity, input overvoltage, input undervoltage, and output overcurrent protection
- IP66
- Suitable for high vibration and shock environments
- CE mark
- cURus to UL60950
- EN60950-1
- Suitable for applications -3048 m below sea level to +4572 m above sea level



### Applications:

- Off-highway equipment, mining equipment

**Description:** The Ethernet Switch operates as an unmanaged switch that is capable of handling communication of 6 different Ethernet capable devices. The device can be utilized to reduce machine cabling. Each port can communicate up to 100mbps and has LED indicators showing the status of the ports. This module can be powered through either the power input connector, or through port 1. It can also power two external devices through ports 2 and 3, connecting them to the input power. Each of these two ports has over current protection that triggers at 1A.

**Ordering Part Numbers:** 6 port Ethernet Switch: AX140700

**Technical Specifications:** *Specifications are indicative and subject to change.*

**Input Specifications**

Power Supply Input - Nominal	12V, 24Vdc nominal (8...36VDC power supply range)
Protections	Surge and reverse polarity protection are provided. Input overvoltage, input undervoltage and output overcurrent protection are provided.
Accessory Switch Input	<p>Provided 0-36Vdc Switch enabled &gt; 2.0 Vdc Switch disabled &lt; 0.8 Vdc</p> <p>The input accessory switch can shut down the device and Port and 3 power sourcing. If power is applied through port 1, the input accessory switch is ignored.</p> <p>NOTE: The Accessory Switch Input should be connected to Power + to enable Power IN from the DT04-3P connector (Port 7).</p>
Power LED	<p>RED ON = Power ON</p>

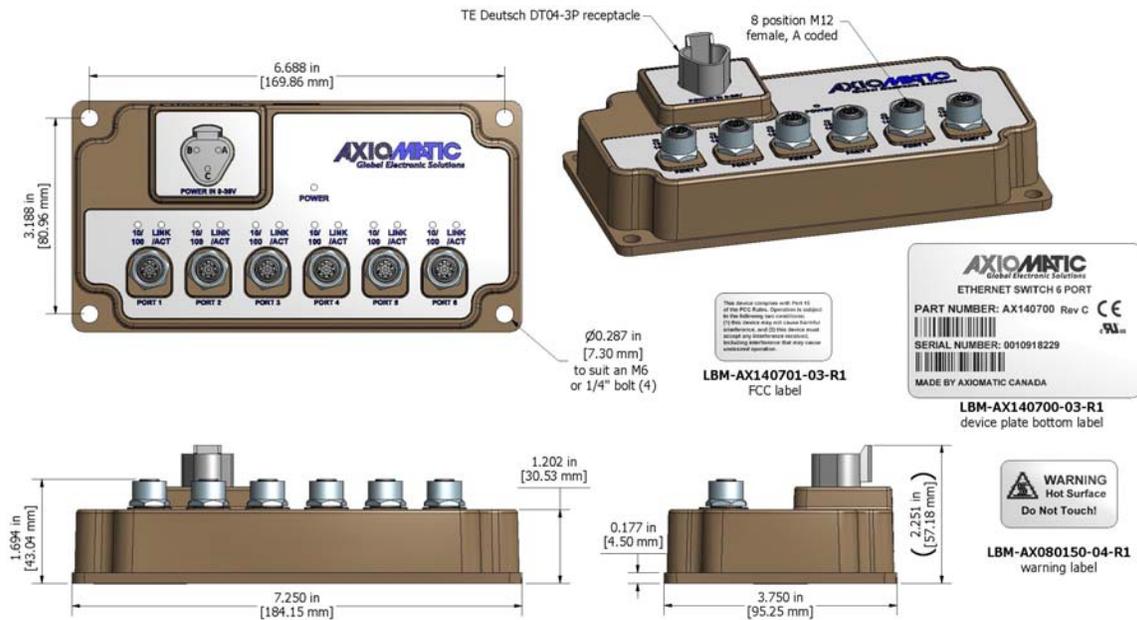
**Output Specifications**

Power	<p>Power output is available from Ports 2 and 3. 9...36Vdc (Vps) 1A current maximum</p>
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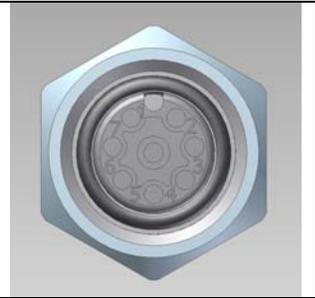
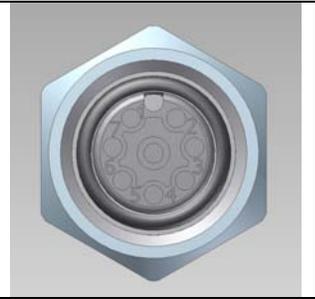
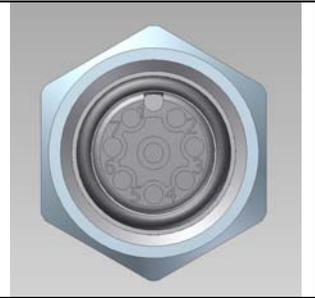
**Communications**

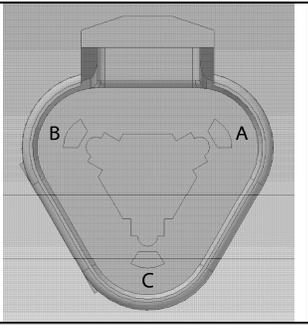
Ethernet	<p>6 ports (Ethernet 802.3, 802.3u, 802.3x) 10/100 Mbit Ethernet compliant Auto-MDIX LAN 10/100 Base-T Up to 100m transmission distance 10 or 100 Mbps transmission speed</p>
LEDs	<p>2 per port GREEN LINK/ACT: ON means connection (LINK) Flashing means activity (ACT) Transmission Speed: 100 Mbit/s = ON 10 Mbit/s = OFF</p>

**Dimensional Drawing**



## General Specifications

Quiescent Current Draw	47 mA @ 24Vdc																																																						
Operating Conditions	-40 to 65 °C (-40 to 149 °F)																																																						
Weight	1.25 lb. (0.56 kg)																																																						
Protection	IP66																																																						
Compliance	FCC Part 15 CE marking EMC Directive RoHS Directive EN60950-1 cURus to UL60950																																																						
Vibration	Random Vibration: TBA Grms peak Sinusoidal Component: 8.9 G peak																																																						
Shock	50 G half sine pulse, 6 x 6-20ms																																																						
Atmospheric	Tested from 571.6 hPA to 1437.5 hPA @ 30 °C and 40% Humidity (Simulates -3048 m below sea level to +4572 m above sea level)																																																						
Enclosure and Dimensions	See dimensional drawing. Cast aluminum, anodized																																																						
Installation	The device should be installed after a protective power supply to avoid damage from load dump voltage fluctuations.																																																						
Electrical Connections – Ports 1-6	<p>6 CONEC M12 8-pin connectors (A-coded), P/N: 43-01332 (Connectors 1-6)</p> <p>Port 1: Power In, Ethernet 1</p> <table border="1"> <thead> <tr> <th>PIN#</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>Power IN</td></tr> <tr><td>2</td><td>Power GND</td></tr> <tr><td>3</td><td>Power GND</td></tr> <tr><td>4</td><td>TX-</td></tr> <tr><td>5</td><td>RX+</td></tr> <tr><td>6</td><td>TX+</td></tr> <tr><td>7</td><td>Power IN</td></tr> <tr><td>8</td><td>RX-</td></tr> </tbody> </table>  <p>Port 2: Power Out, Ethernet 2</p> <p>Port 3: Power Out, Ethernet 3</p> <table border="1"> <thead> <tr> <th>PIN#</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>Power OUT</td></tr> <tr><td>2</td><td>Power GND</td></tr> <tr><td>3</td><td>Power GND</td></tr> <tr><td>4</td><td>TX-</td></tr> <tr><td>5</td><td>RX+</td></tr> <tr><td>6</td><td>TX+</td></tr> <tr><td>7</td><td>Power OUT</td></tr> <tr><td>8</td><td>RX-</td></tr> </tbody> </table>  <p>Port 4: Ethernet 4</p> <p>Port 5: Ethernet 5</p> <p>Port 6: Ethernet 6</p> <table border="1"> <thead> <tr> <th>PIN#</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>Not Used</td></tr> <tr><td>2</td><td>Not Used</td></tr> <tr><td>3</td><td>Not Used</td></tr> <tr><td>4</td><td>TX-</td></tr> <tr><td>5</td><td>RX+</td></tr> <tr><td>6</td><td>TX+</td></tr> <tr><td>7</td><td>Not Used</td></tr> <tr><td>8</td><td>RX-</td></tr> </tbody> </table> 	PIN#	Description	1	Power IN	2	Power GND	3	Power GND	4	TX-	5	RX+	6	TX+	7	Power IN	8	RX-	PIN#	Description	1	Power OUT	2	Power GND	3	Power GND	4	TX-	5	RX+	6	TX+	7	Power OUT	8	RX-	PIN#	Description	1	Not Used	2	Not Used	3	Not Used	4	TX-	5	RX+	6	TX+	7	Not Used	8	RX-
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Electrical Connection – Port 7	1 DT04-3P connector (Connector 7)	
	Port 7: Power In	
	PIN#	Description
	A	Power IN
	B	GND
	C	Accessory Switch IN (Connect to Power + to enable power input via the DT04-3P connector or Port 7.)
		

Form: TDAX140700-11/03/21