# **XCHANGE™ Utility Module Heavy Duty Electrical Modules - Communications**

Electrical Modules pass electrical signals during an automatic tool changing operation.

- Advantages:

   Multiple Protocols: Profinet, Ethernet/IP, DeviceNet, Profibus, etc.

   Aluminum construction to prevent EMI

   Integrated PCB for Quality Assurance and Consistency

   Galvanic insulation between US (Signal Power) and UA (Actuator Power)

- Live Power Manager (LPM)
- Flexible connections via cables with connectors and Wall Connectors (Included)

- Tool Identification via 4 Bit (Optional 8 Bit) Low Maintenance and Low MTTR IP Rating: IP65 (When Coupled)



# **SPECIFICATIONS**

Model **	Description	User Connection	Rated Current	Rated Voltage V (AC/DC)	Couple/Uncouple Sensor Interface	Tool Identification Included	Weight*** kg (lb)
E-R-EIP-M12-4.25/4.05-P-015-xxx	Robot Adaptor - Ethernet/IP and/or Profinet	7/8 4 PIN M12 4 PIN D-CODED	10 4	600 48/60	Yes	Yes	1.55 (3.41)
E-T-EIP-M12-4.25/4.05-015-xxx	Tool Adaptor - Ethernet/IP and/or Profinet	7/8 4 SOC M12 4 PIN D-CODED	10 4	600 48/60	N/A	Yes	1.70 (3.74)
E-R-PN-M12-5.25/4.05-P-015-xxx	Robot Adaptor - Ethernet/IP and/or Profinet	7/8 5 PIN M12 4 PIN D-CODED	4 4	300 48/60	Yes	Yes	1.55 (3.41)
E-T-PN-M12-5.25/4.05-015-xxx	Tool Adaptor - Ethernet/IP and/or Profinet	7/8 5 SOC M12 4 PIN D-CODED	4 4	300 48/60	N/A	Yes	1.70 (3.74)
E-R-PN-PP-5.25/4.05-P-015-xxx	Robot Adaptor - Profinet - Push/Pull Connections	Push/Pull 5 PIN Push/Pull RJ45 10 PIN	16 1	400 72	Yes	Yes	1.55 (3.41)
E-T-PN-PP-5.25/4.05-015-xxx	Tool Adaptor - Profinet - Push/Pull Connections	Push/Pull 5 PIN Push/Pull RJ45 10 PIN	16 1	400 72	N/A	Yes	1.70 (3.74)
E-R-PN-M12-L5.25/4.05-P-015-xxx	Robot Adaptor - Profinet - M12 Connections	M12 5 PIN L-CODED M12 4 PIN D-CODED	16 4	63 48/60	Yes	Yes	1.55 (3.41)
E-T-PN-M12-L5.25/4.05-015-xxx	Tool Adaptor - Profinet - M12 Connections	M12 5 SOC L-CODED M12 4 SOC D-CODED	16 4	63 48/60	N/A	Yes	1.70 (3.74)
E-R-DN-7/8-8.25/1.05-P-015-xxx	Robot Adaptor - DeviceNet	7/8 4 PIN 7/8 5 PIN	4 4	250 300	Yes	Yes	1.55 (3.41)
E-T-DN-7/8-8.25/1.05-015-xxx	Tool Adaptor - DeviceNet	7/8 4 SOC 7/8 5 SOC	4 4	250 300	N/A	Yes	1.70 (3.74)

<sup>\*</sup> Module weight may vary depending on specific configuration.

Operating Temperature: 5 - 60 °C (40 - 140 °F) Noise Emissions (Sound Pressure):  $\leq$  70 dB(A) in any direction

## **FEATURES**

- ① Couple/Uncouple Interface, compatible with all Applied Robotics Tool Changers
- 2 Tool Changer Status Signals (Dependent on Configuration)
- 3 LED Visualization Couple/Uncouple, Tool Present, Tool Stand Present, Tool Identification
- 4 IP2x (Finger Protection) on Robot Side Power Contacts
- 5 Functional Earth (FE) Connection and Passthru with M8 Lug Interface
- 6 Additional I/O or Weld Gun Feedback via Optional Connection Push/Pull, M23, Mil-Spec (MS), Souriau, etc.
- 7 4-Bit Tool ID Rotary Selector (15 Tools)

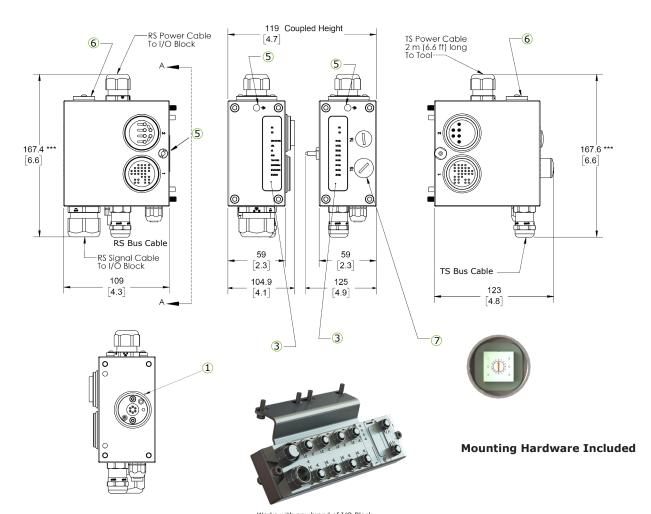


# **PRODUCT INFORMATION**

### **ROBOT ADAPTOR MODULE**

### **TOOL ADAPTOR MODULE**





Works with any brand of I/O Block, containing specified connection.

- \* Dimensions are in millimeters (inches).

  \*\* All dimensions are descriptive and subject to variation for technical upgrading. We reserve the right to make variations without prior notification.

  \*\*\* Dimensions to the end of the Strain Relief. Cable is not included in measurement.



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