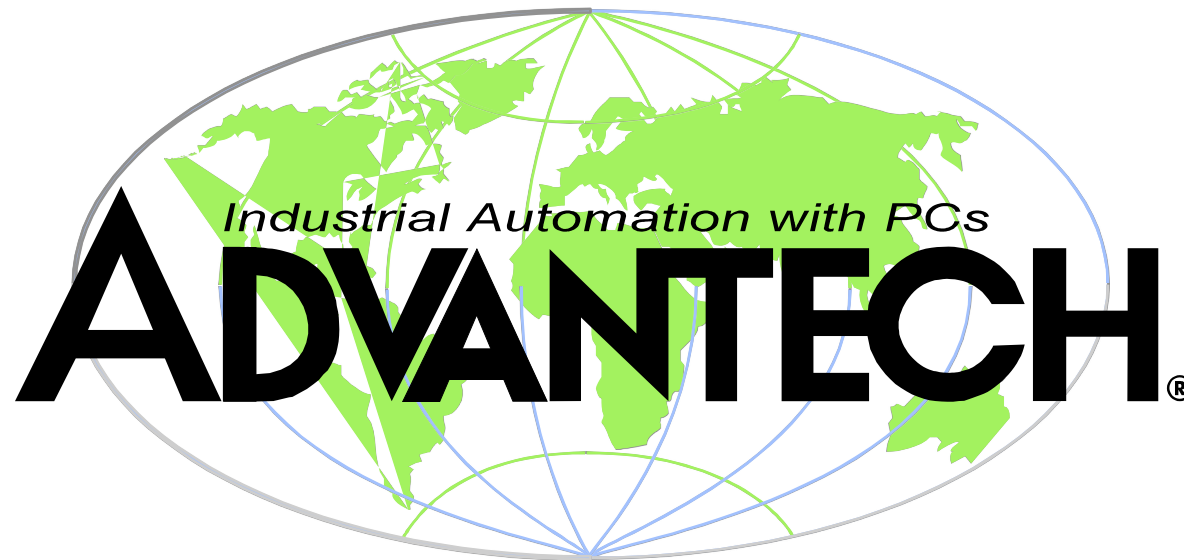


Welcome!



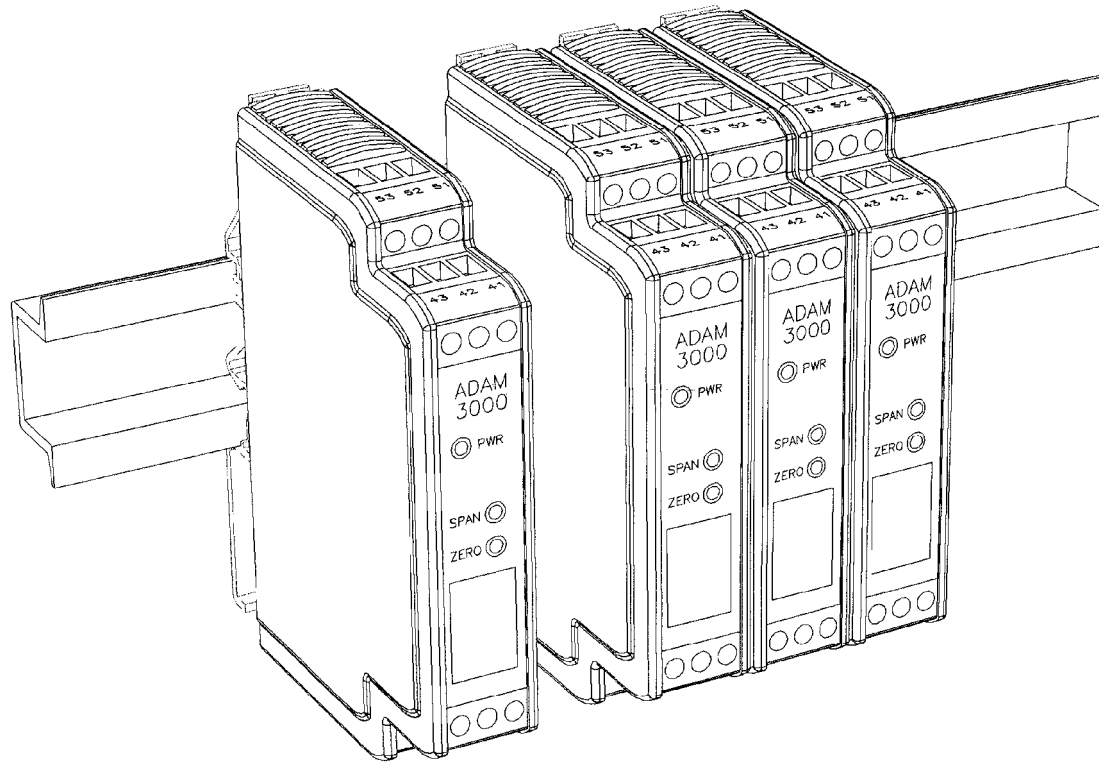
***Isolated Signal Conditioning Modules
ADAM-3000 Series***

**ADAM
3000
Series**

ADAM-3000

Series

Isolated Signal Conditioning Modules



ADVANTECH.

Why ADAM-3000?

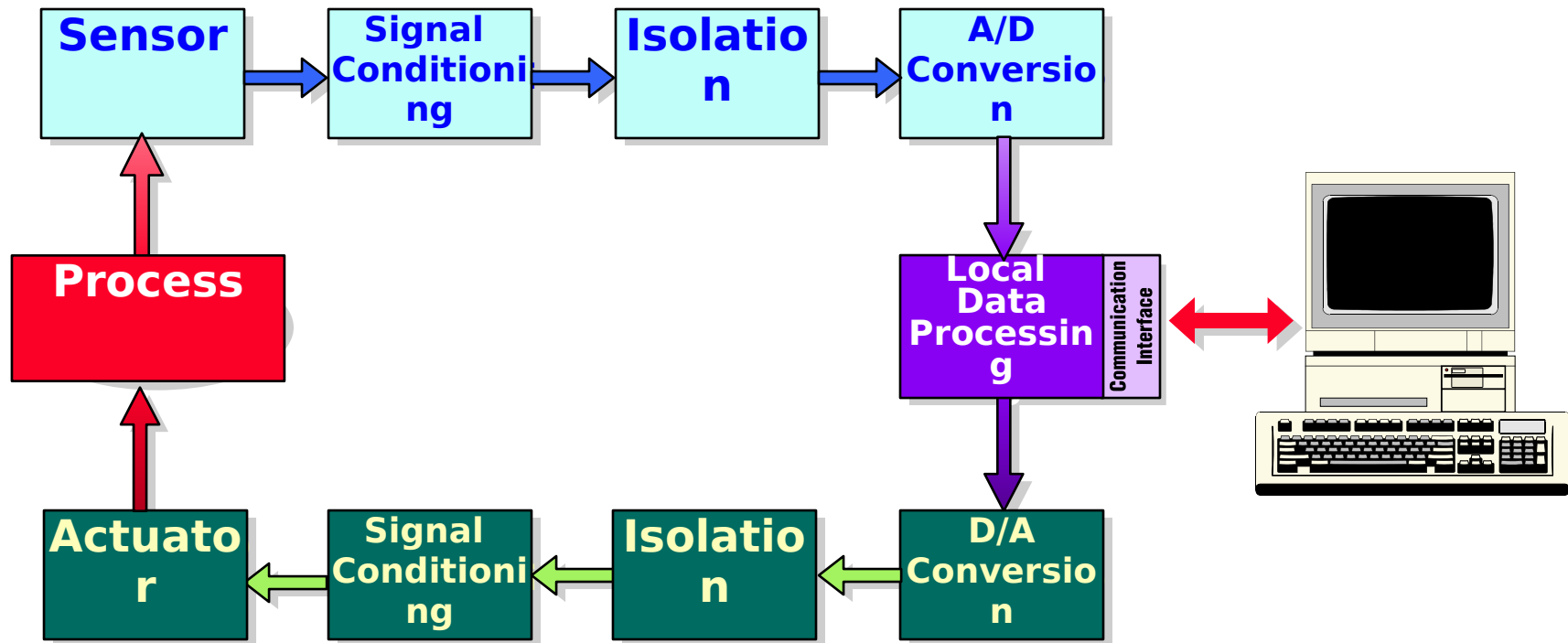
New optical isolator replaces
transformer

- + Flexible functionality reduces stock
- + Reliable design shorten lead time
- + Low power consumption saves you money
- + Lowest Price in the world

= **Price/Performance Leader**



Data Acquisition/Control Process Loop



**ADAM
3000
Series**

ADAM-3000 Series

Isolated Signal Conditioning Modules


ADAM-3012


 Isolated DC-input Signal Conditioning Module

ADAM-3021

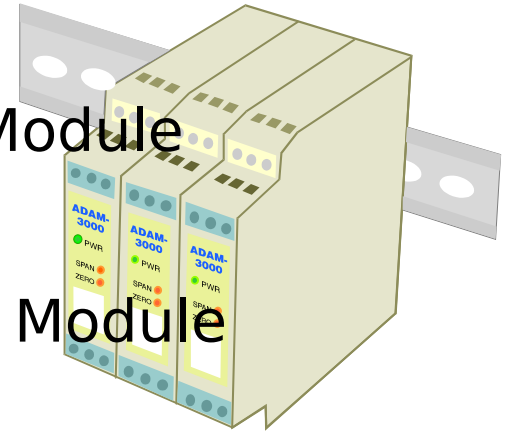
 Isolated DC-output Signal Conditioning Module

ADAM-3011

 J Type Thermocouple Input Signal Conditioning Module

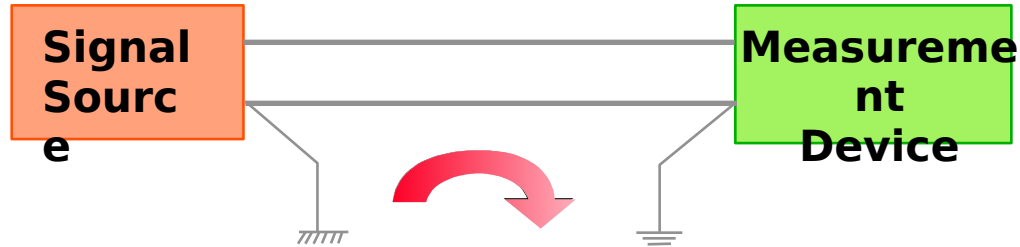
 K Type Thermocouple Input Signal Conditioning Module

 T Type Thermocouple input Signal Conditioning

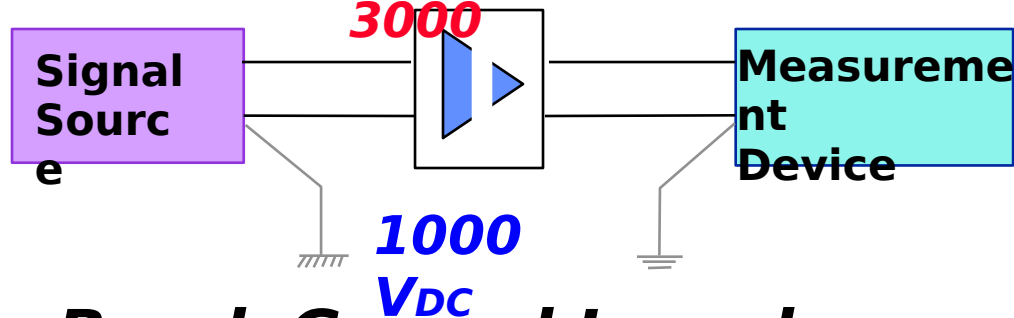


ADVANTECH.

Three-Way Signal Isolation



Ground Loop Problem



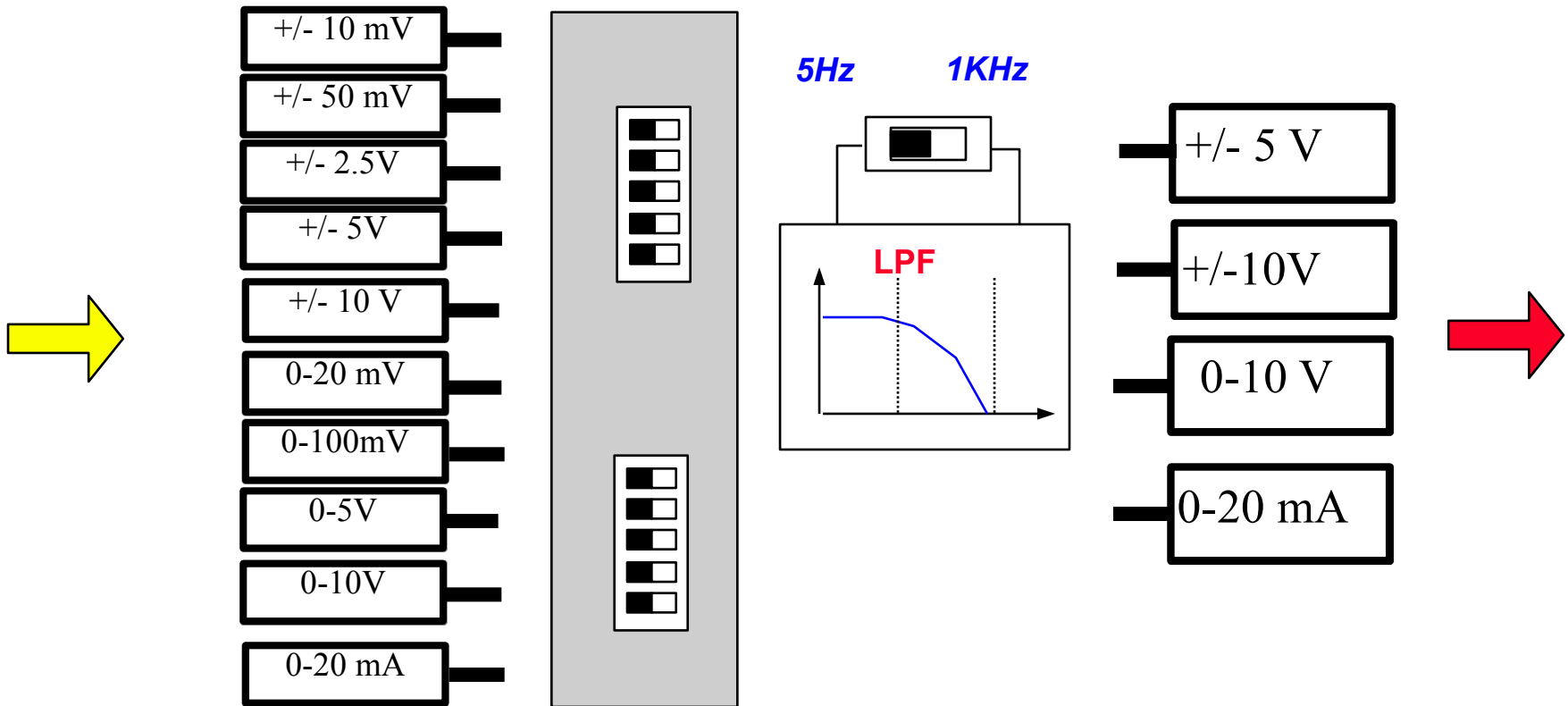
Break Ground Loop by Signal Isolation



ADAM
3000
Series

Field Configurable I/O

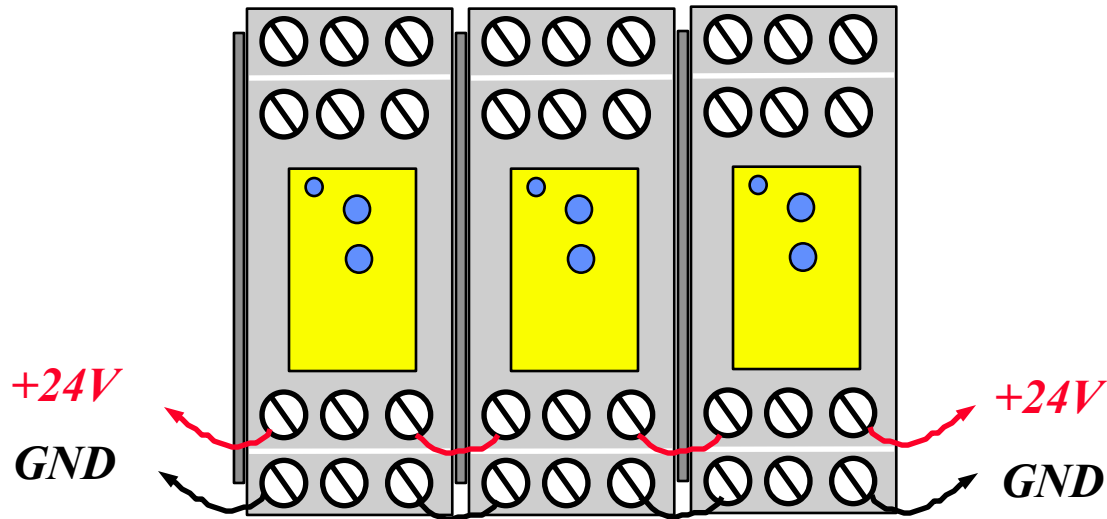
Range



ADVANTECH.

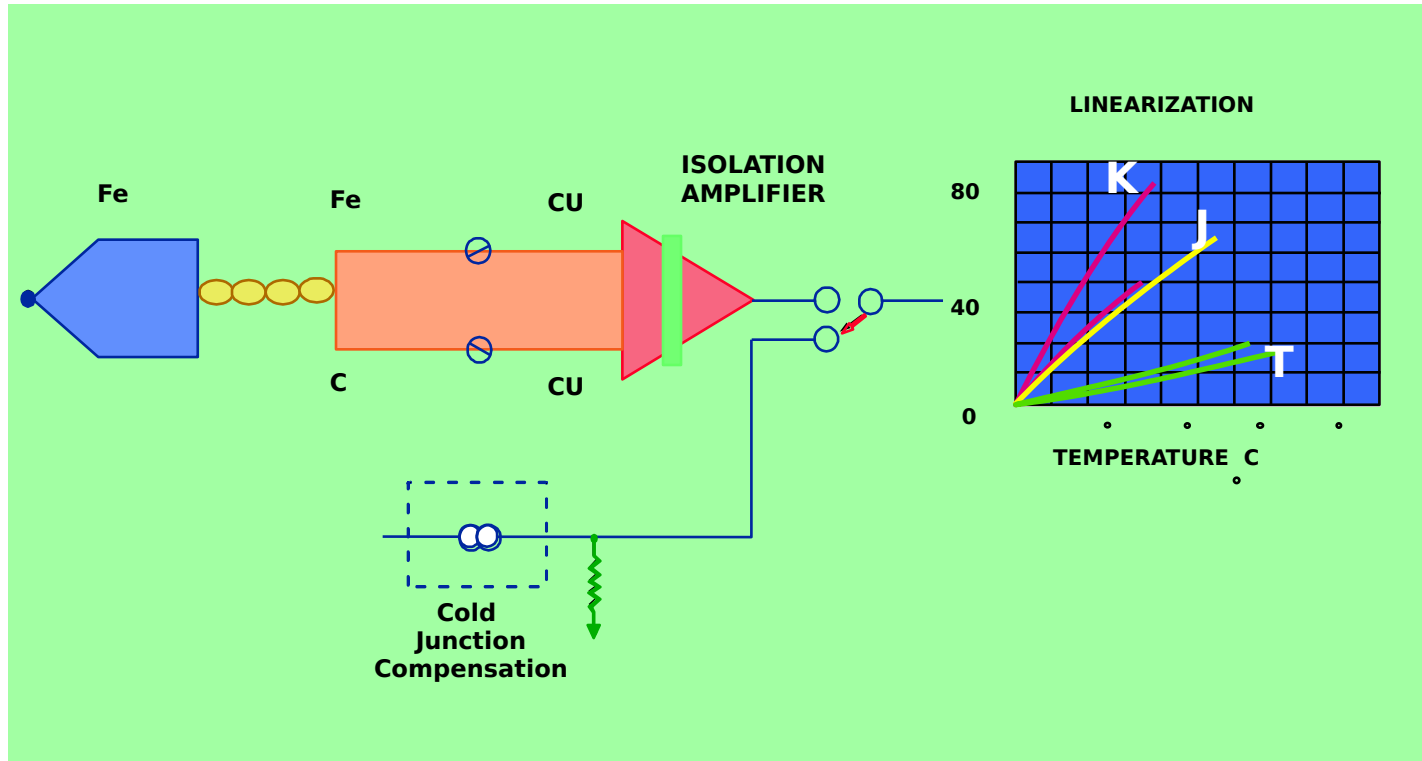
**ADAM
3000
Series**

Easy Power Wiring



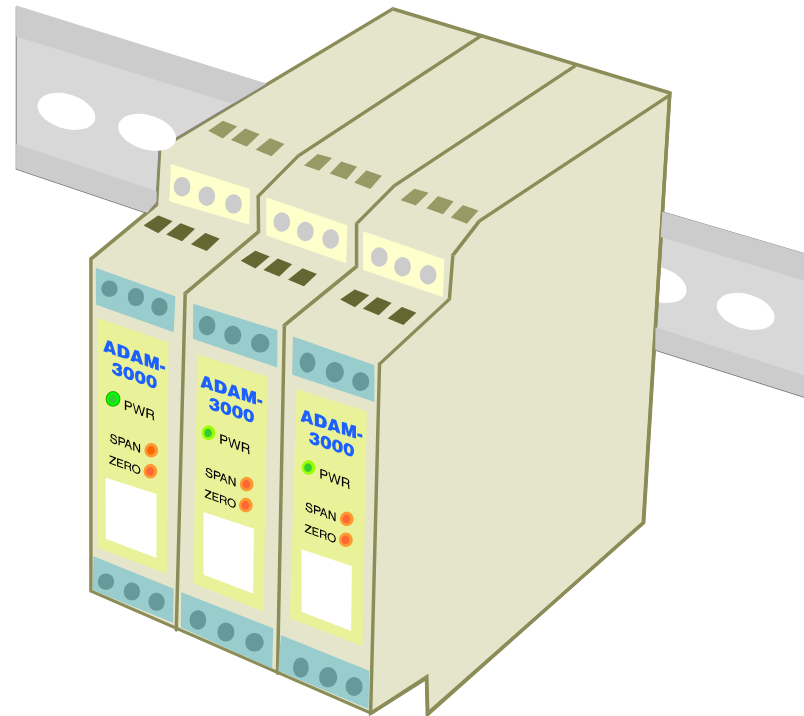
ADVANTECH.

Thermocouple Measurement



**ADAM
3000
Series**

Flexible DIN-Rail Mounting




ADVANTECH.

Applications

 Signal Isolator for Factory Automations

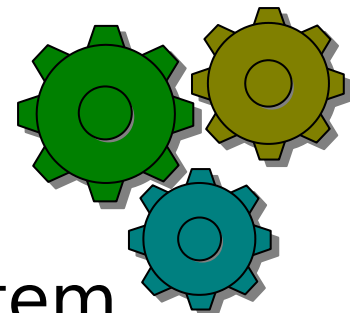
 Signal Transmitter for Factory Automations

 Temperature Measurement for PLC & DCS

 Signal Amplifier for Measurement System

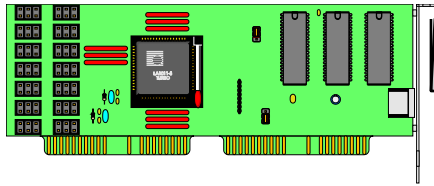
 Noise Filter for Measurement System

 Industrial ON/OFF Control

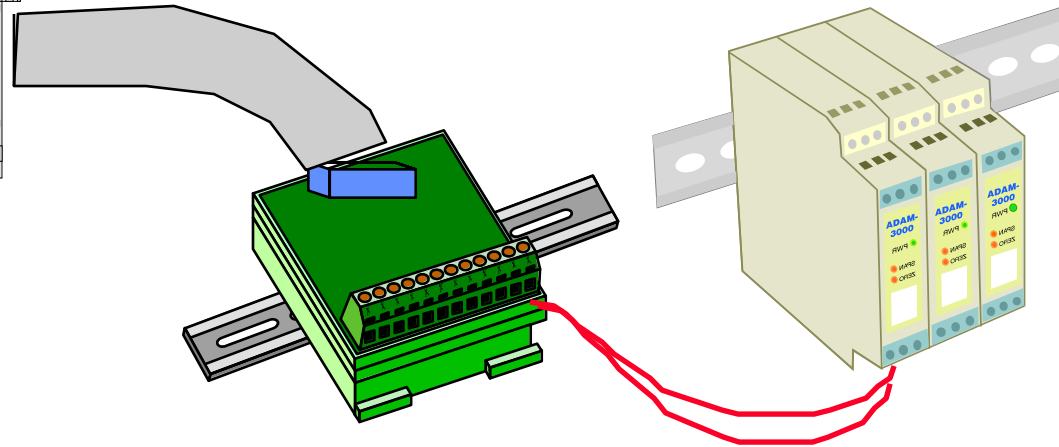


**ADAM
3000
Series**

Easily Connect to Industrial I/O Card



***Data Acquisition &
Control Card***



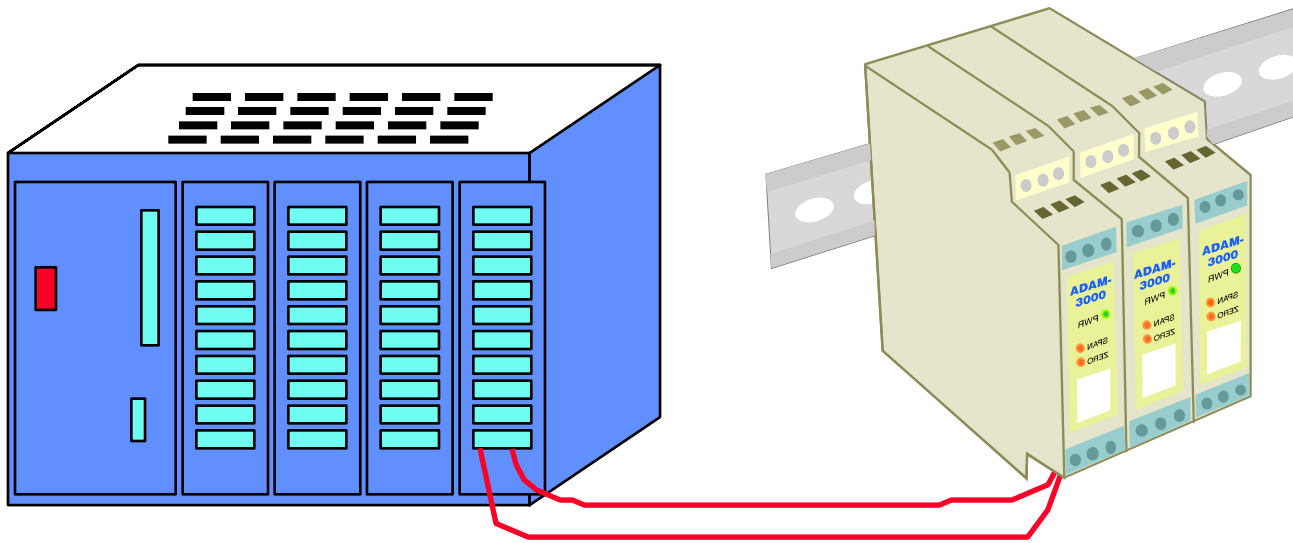
***DIN-Rail Wiring
Adaptor***



ADVANTECH.

**ADAM
3000
Series**

Directly Connect to PLC

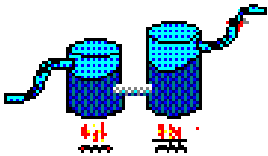


ADVANTECH.

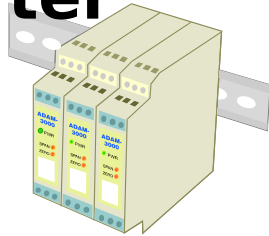
**ADAM
3000
Series**

Analog Data Transmitter

**Process
Signal**



**Transmit
ter**



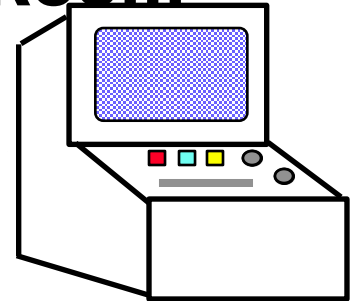
**0-20
mA**

**4-20
mA**



**EMI
Noise
Immuni
ty**

**Control
Room**



ADVANTECH.

**ADAM
3000
Series**







Marketing Survey

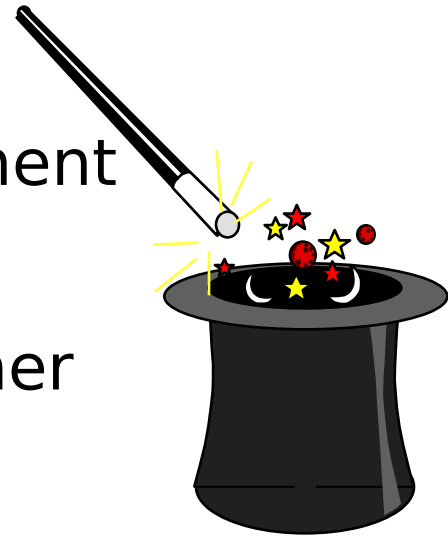
	Analog Device 3889	Analog Device 3881	ACTION G408	OMEGA ARN-PR	ADAM-3012
Stability	55ppm/°C	55ppm/°C	250ppm/°C	N/A	17.7ppm/°C
Power	0.85 W	1.4 W	1.5 W	2.4 W	0.8 W
Range	Fixed	Fixed	Configurable	Configurable	Configurable
Response	4Hz	3Hz	5Hz	3Hz	5Hz/ 1KHz
Mount	Backplane	Backplane	DIN Rail	DIN Rail	DIN Rail
Price	\$150	\$110	\$197	\$295	\$130



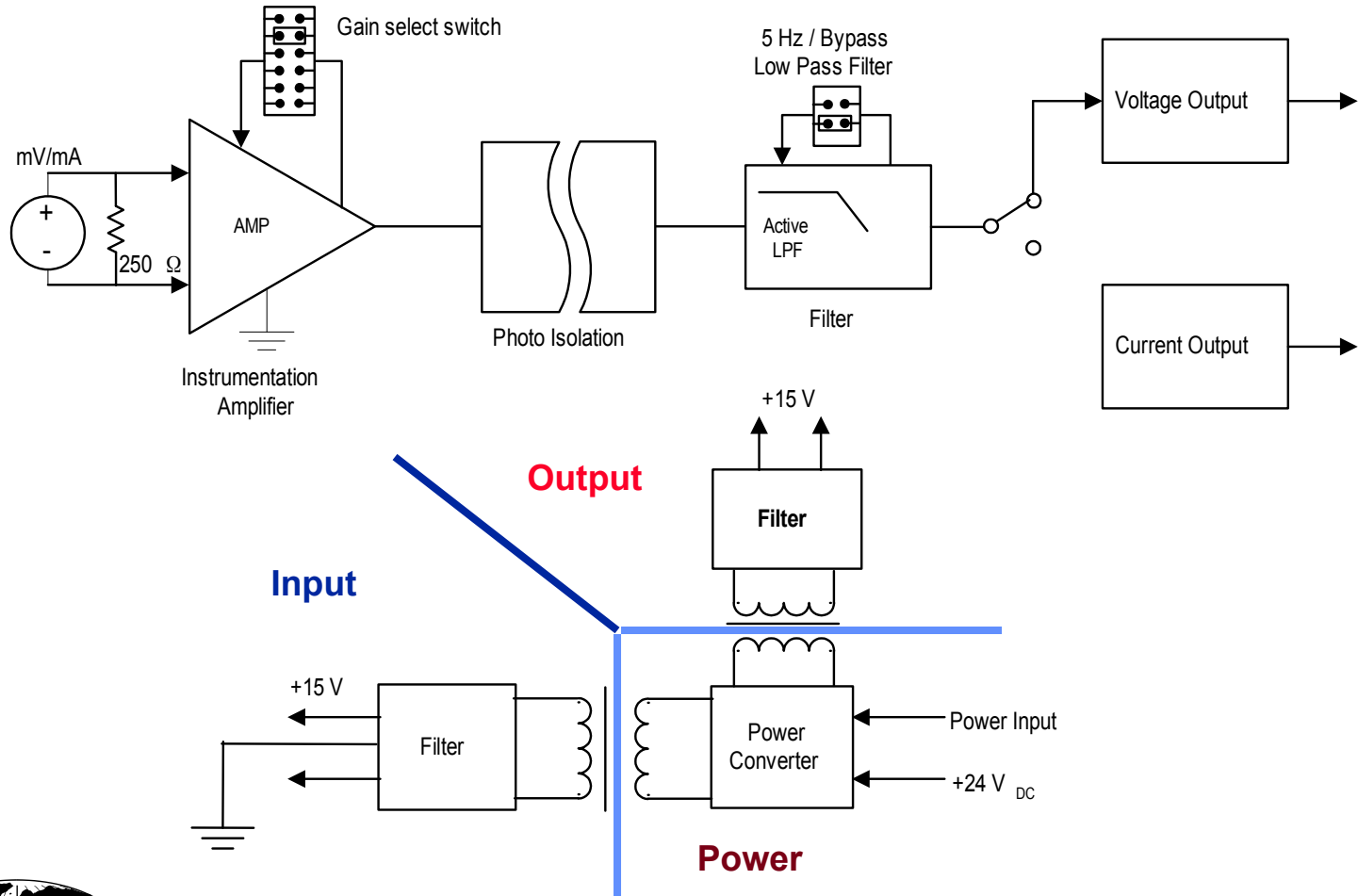
ADVANTECH.

Feature & Benefit

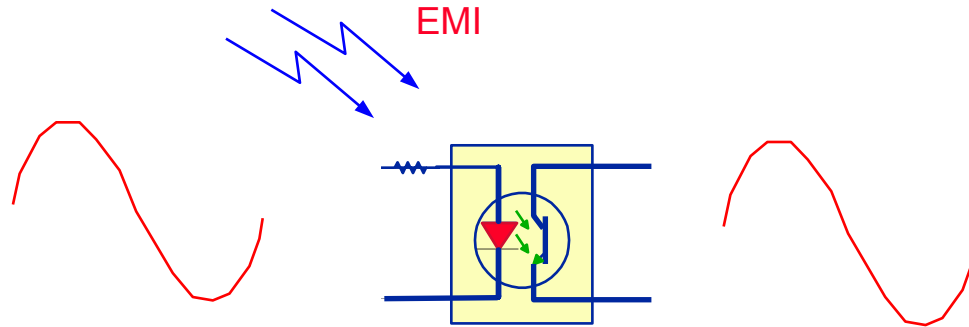
-  1000 V_{DC}, Three-Way Isolation
-  Field Configurable I/O Range
-  Easy Power Wiring
-  Linearized Thermocouple Measurement
-  Flexible DIN-Rail Mounting
-  Most Cost-Effective Signal Conditioner



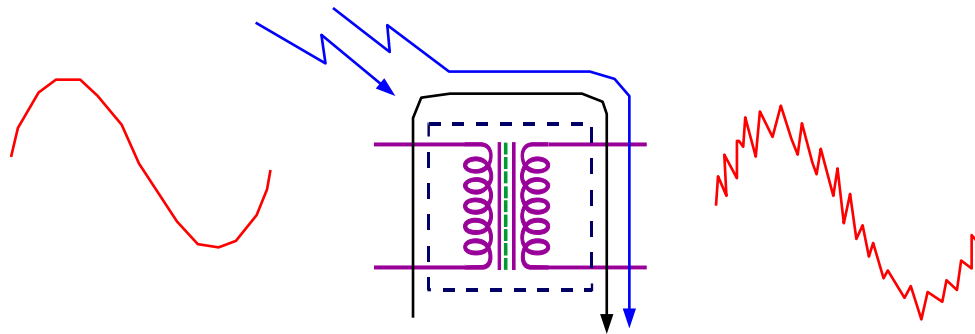
Block Diagram of ADAM-3012



Better EMI immunity



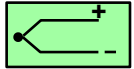
Optical Isolation provides better EMI immunity



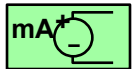
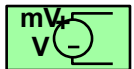
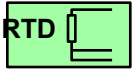
Transformer Isolator sensitive to EMI



DIN Rail Digital I/O modules



Measur
e



**Power relay outputs module
(relay ;Ñ 4)**



SSR carrier module (socket ;Ñ 4)

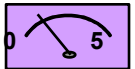


**Wiring terminal adapter (DB37/
20 pins)**



**24 VDC 48W power supply (90-
240VAC in)**

Contro
l

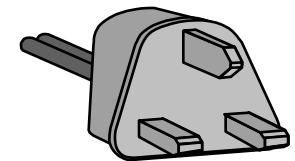


1999



Power relay output module

- Relay Type : SPDT (Form C)**
- Four on board power relays**
- Contact rating:**
 - AC:250V@5A**
 - DC: 30V@5A**
- Varistor to surge voltage of inductive load**
- LED channel status indicator**
- Control Logic: 24 VDC**



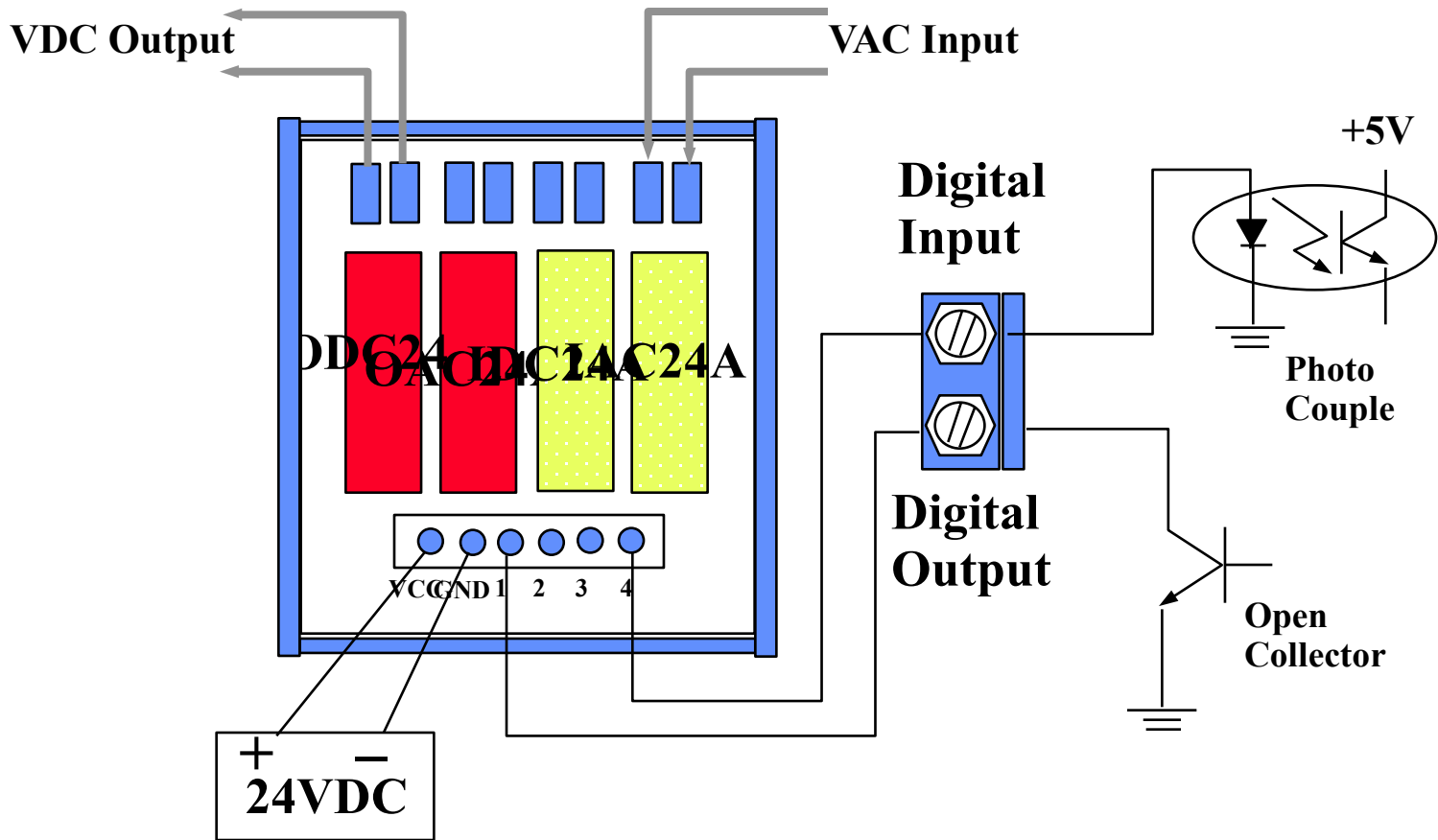
SSR Carrier module

- Four-Channel Carrier Backplane**
- Ready for any combination of AC/DC I/O modules (IDC24, OAC24A etc)**
- LED Channel status indicator**
- On-board fuse protection**
- Control logic: 24VDC**



**ADAM
3000
Series**




Easy wiring to SSR module

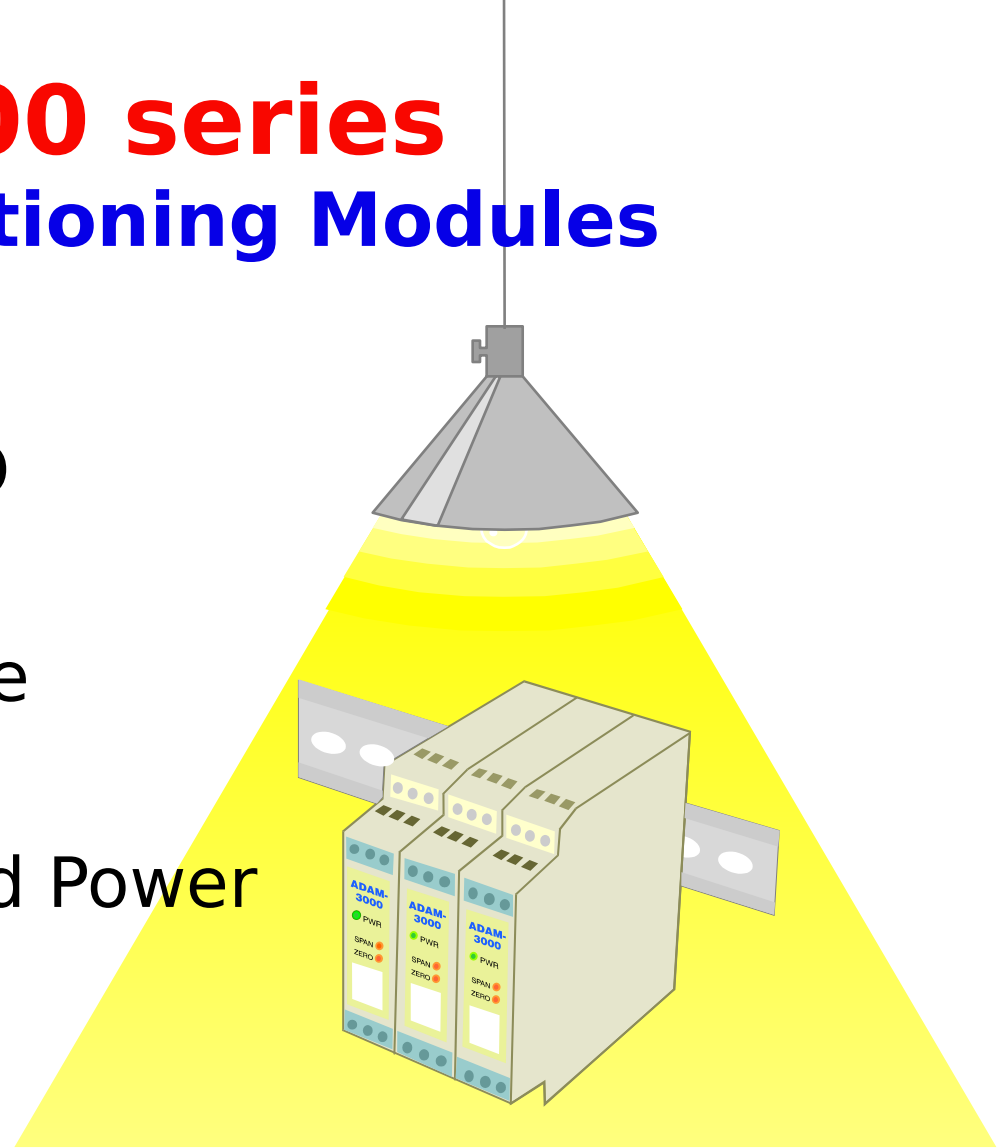


ADVANTECH.

**ADAM
3000
Series**

ADAM-3000 series **Signal Conditioning Modules**

-  Isolated Analog I/O interface modules
-  Digital I/O interface modules
-  Wiring Adapter and Power supply




ADVANTECH.

ADAM-3012

Isolated DC-input Signal Conditioning Module


 1000 VDC Three-way Isolation

 Switch configurable input range


 Voltage: +/- 10 mV, +/-50 mV, +/-0.5V, +/-2.5V, +/-5V
0-20 mV, 0-100mV, 0-1V, 0-5V, 0-10V

 Current: +/- 20 mA, 0-20 mA

 Switch configurable output range

 Voltage: +/- 5V, 0-10V

 Current: 0-20 mA

 Switch Configurable input
bandwidth: 5Hz/1KHz



ADAM-3021

Isolated DC-output Signal Conditioning Modules

 1000 V_{DC} Three-way isolation

 Voltage output mode

input: +/-5V, +/-10V

output: +/-10V

 Current output mode

input: 0-5V, 0-10V

output: 0-20 mA






1-5V, 2-10V

4-20 mA



ADAM-3011

Thermocouple Input module

-  1000 VDC three-way isolation
-  J, K, T type thermocouple input
-  Cold Junction Compensation
-  Thermocouple Linearization
-  Output range: 0-10V



ADAM-3854






Power relay output module

- NUL Relay Type : SPDT (Form C)**
- NUL Four on board power relays**
- NUL Contact rating:**
 - NUL AC:250V@5A**
 - NUL DC: 30V@5A**
- NUL Varistor to surge voltage of inductive load**
- NUL LED channel status indicator**
- NUL Control Logic: 24 VDC**



ADAM-3864

SSR Carrier module

-  **Four-Channel Carrier Backplane**
-  **Ready for any combination of AC/DC I/O modules (IDC24, OAC24A etc)**
-  **LED Channel status indicator**
-  **On-board fuse protection**
-  **Control logic: 24 VDC**



**ADAM
3000
Series**

ADAM-3920/3937

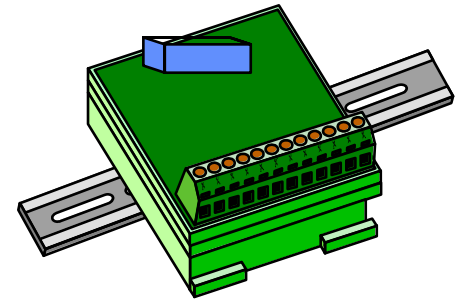
Wiring Terminal Adapter

 **ADAM-3920**

 DIN Rail Wiring Terminal for 20 pin flat cable

 **ADAM-3937**




 DIN Rail Wiring Terminal for DB37 cable



ADVANTECH.

PWR-245

DIN Rail 24VDC (48W) Switching Power Supply

-  Input Voltage: 90-264 VAC
-  Output Voltage: 24VDC +/- 10%
-  Output Current: 2.1A

