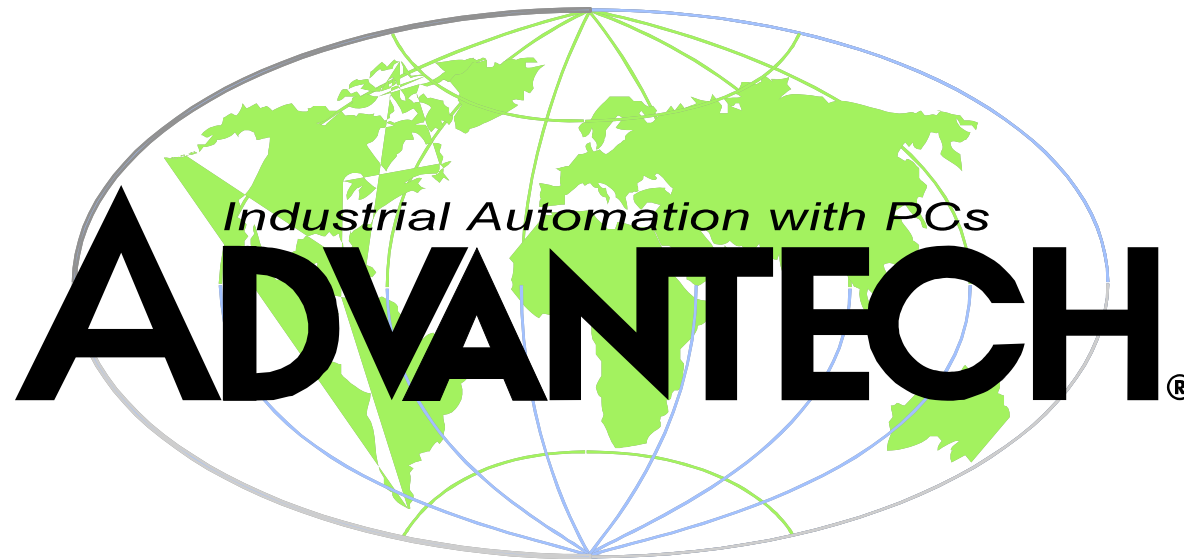


Welcome!

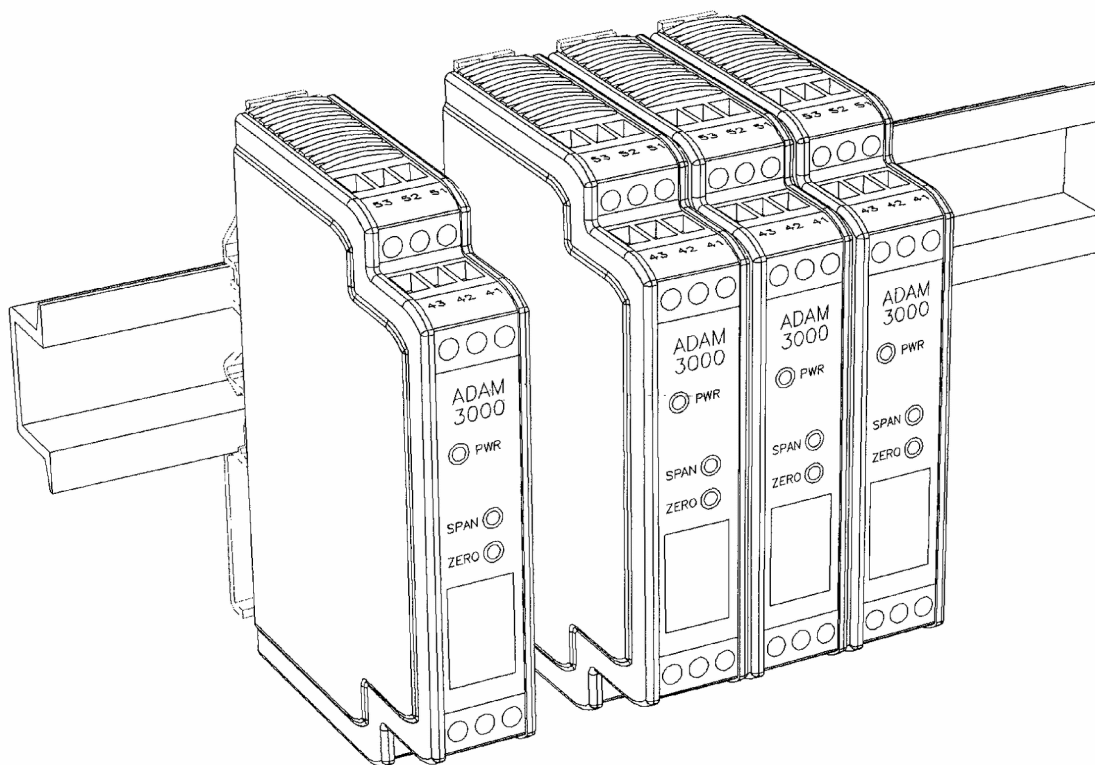


***Isolated Signal Conditioning Modules
ADAM-3000 Series***

**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

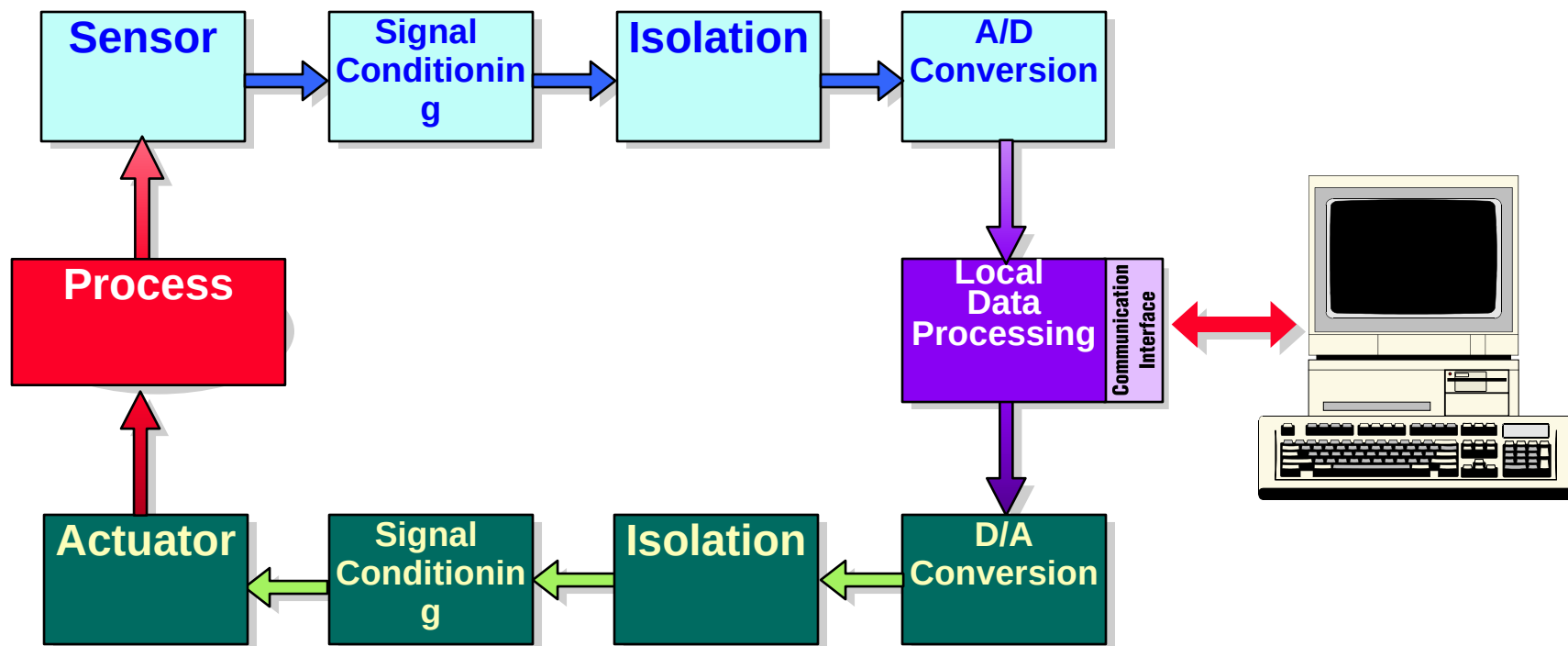
+ Low power consumption saves you
money

+ 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

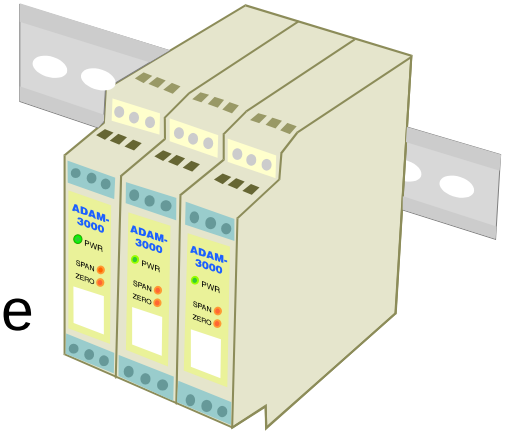
Isolated DC-output Signal Conditioning Module

ADAM-3011

J Type Thermocouple Input Signal Conditioning Module

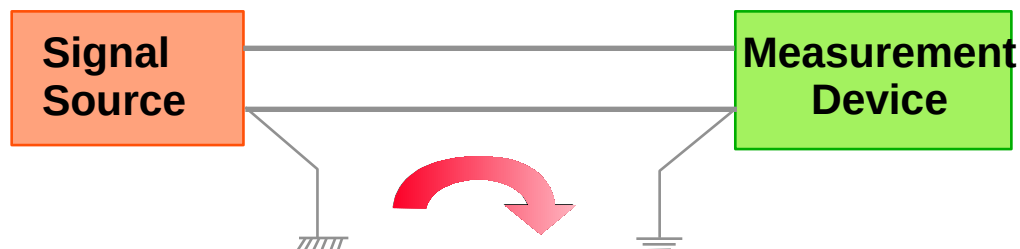
K Type Thermocouple Input Signal Conditioning Module

T Type Thermocouple input Signal Conditioning Module

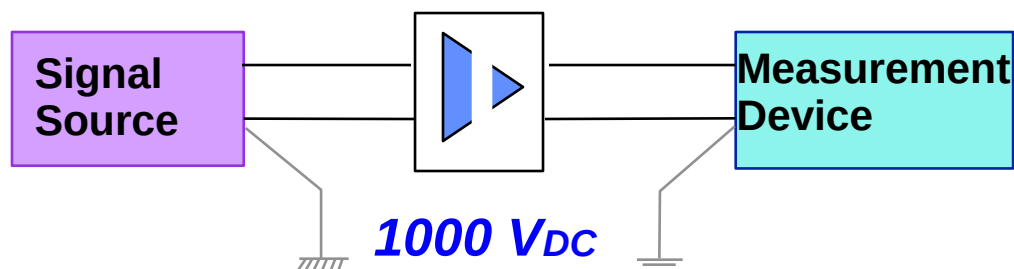


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Three-Way Signal Isolation



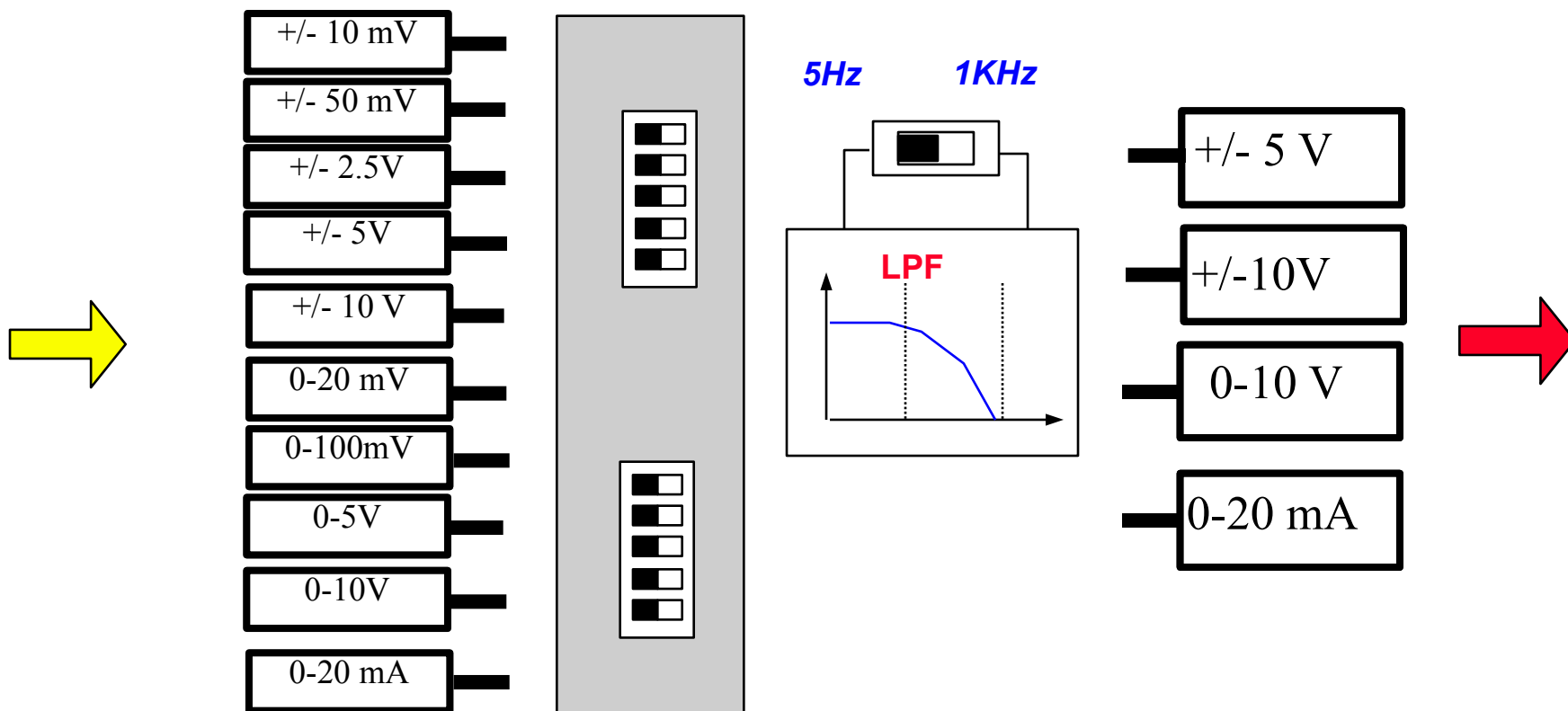
Ground Loop Problem
ADAM-3000



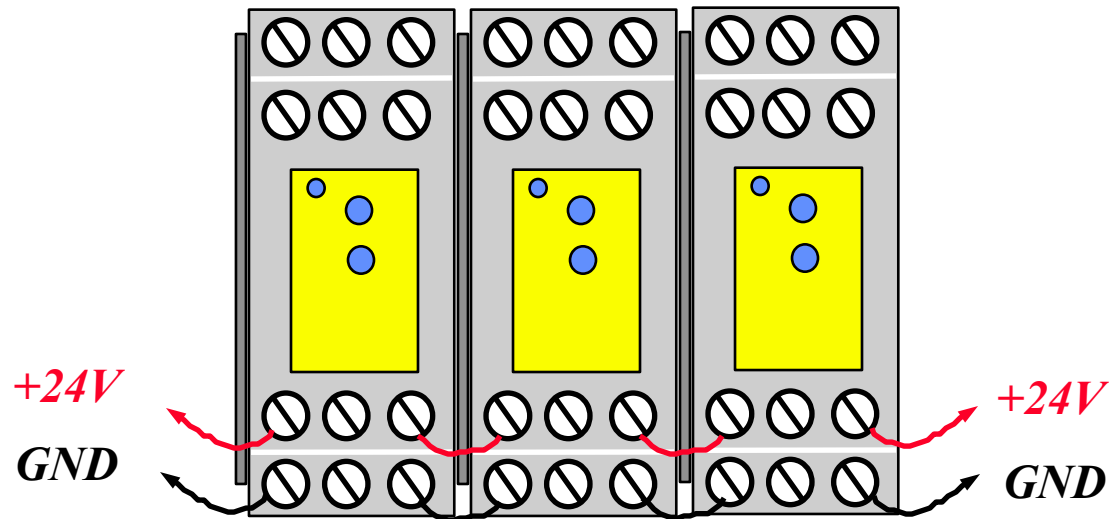
Break Ground Loop by Signal Isolation



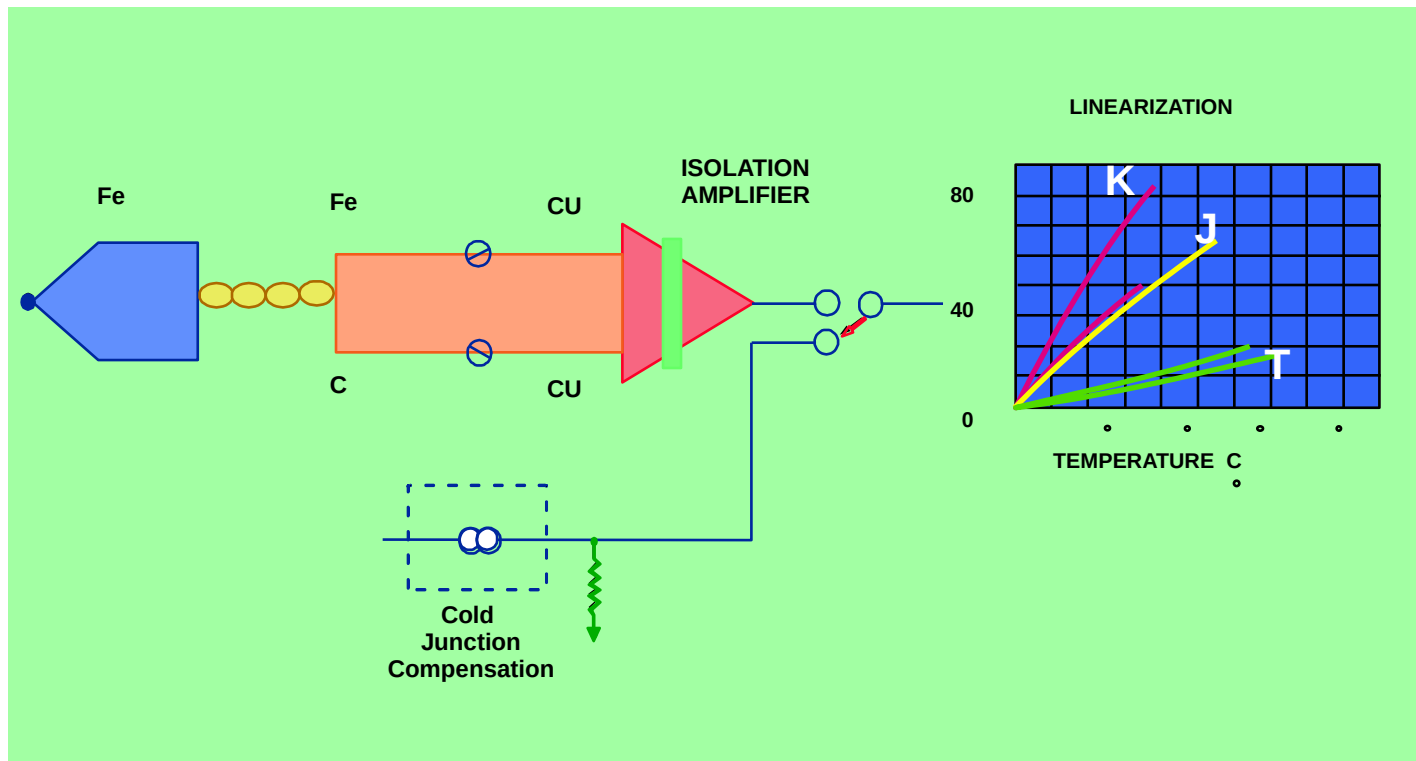
Field Configurable I/O Range



Easy Power Wiring

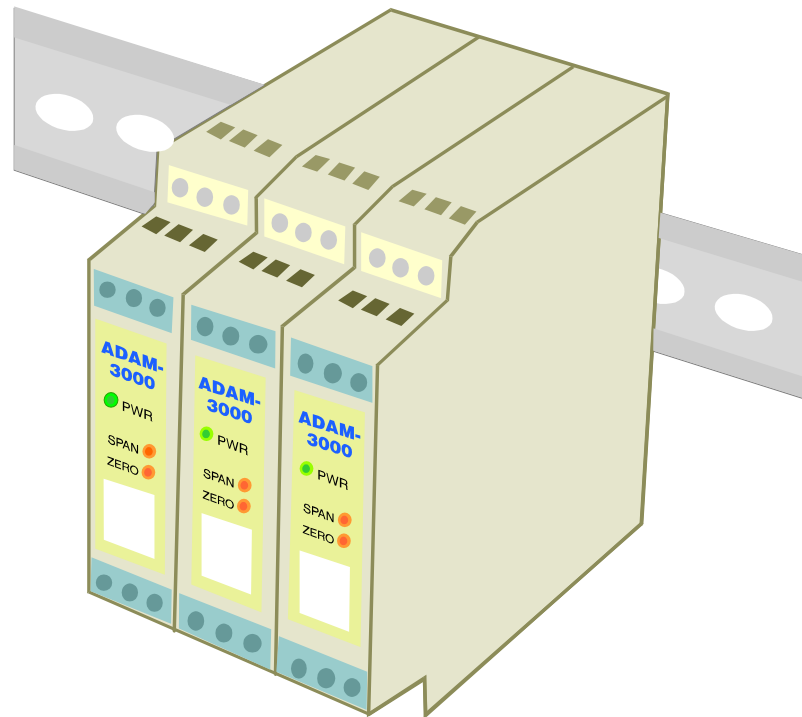


Thermocouple Measurement



**ADAM
3000
Series**

Flexible DIN-Rail Mounting



ADVANTECH.

Applications

Signal Isolator for Factory Automations

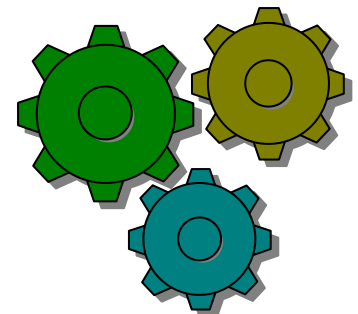
Signal Transmitter for Factory Automations

Temperature Measurement for PLC & DCS

Signal Amplifier for Measurement System

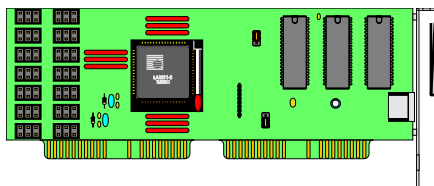
Noise Filter for Measurement System

Industrial ON/OFF Control

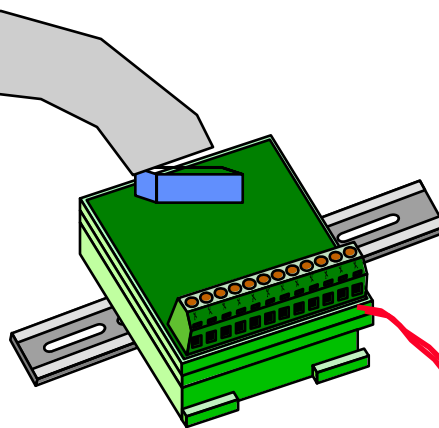


**ADAM
3000
Series**

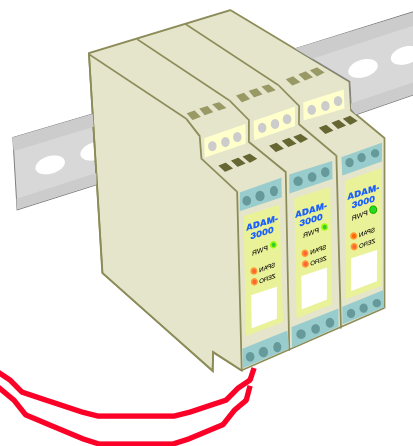
Easily Connect to Industrial I/O Card



***Data Acquisition & Control
Card***



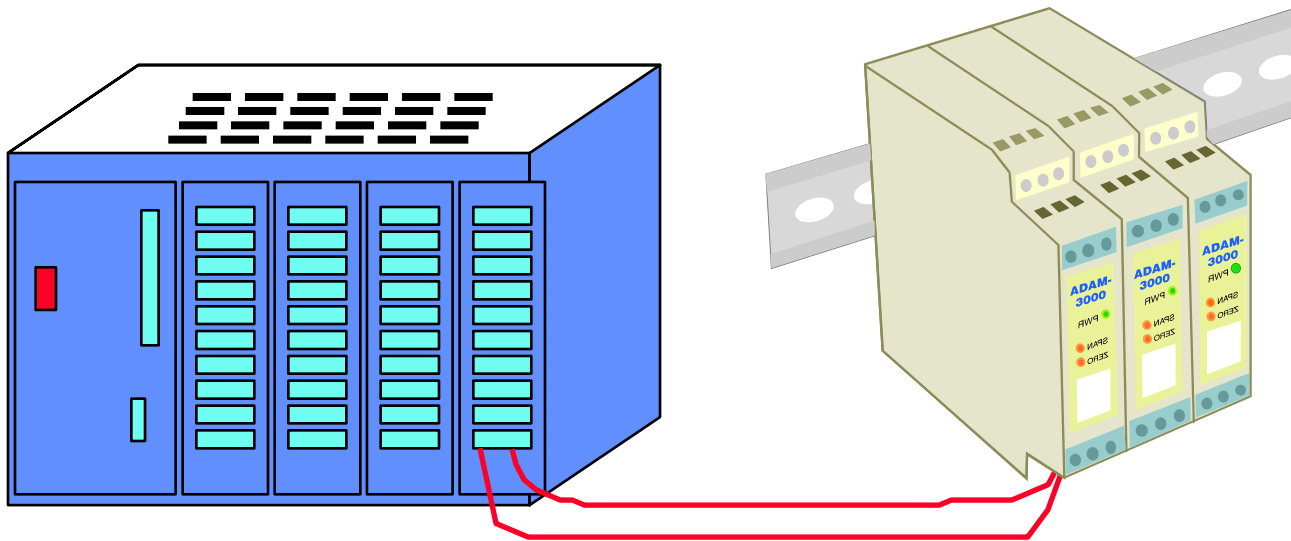
***DIN-Rail Wiring
Adaptor***



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**ADAM
3000
Series**

Directly Connect to PLC

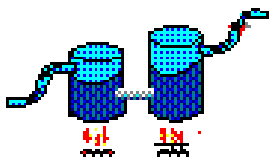


ADVANTECH.

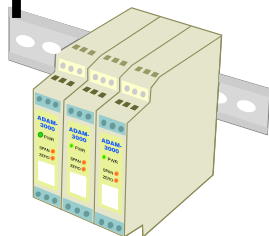
**ADAM
3000
Series**

Analog Data Transmitter

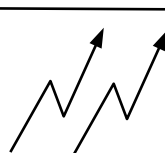
**Process
Signal**



Transmitter

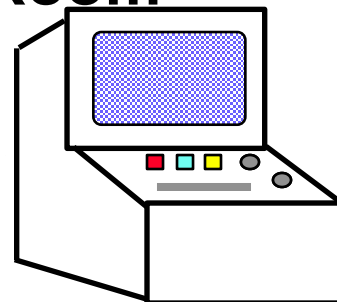


**0-20 mA
4-20 mA**



**EMI
Noise
Immunity**

**Control
Room**



ADVANTECH.

Marketing Survey

	Analog Device 639	Analog Device 731	ACTION G408	OMEGA DRN-PR	ADAM-3012
Stability	55ppm/C	55ppm/C	250ppm/C	N/A	17.7ppm/C
Power	0.85W	1.4W	1.5W	2.4W	0.8W
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



Feature & Benefit

1000 V_{DC}, Three-Way Isolation

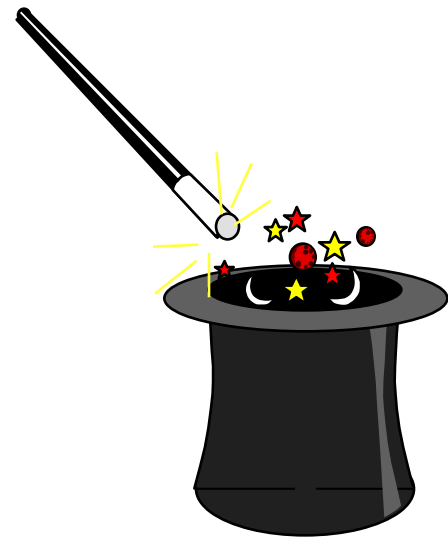
Field Configurable I/O Range

Easy Power Wiring

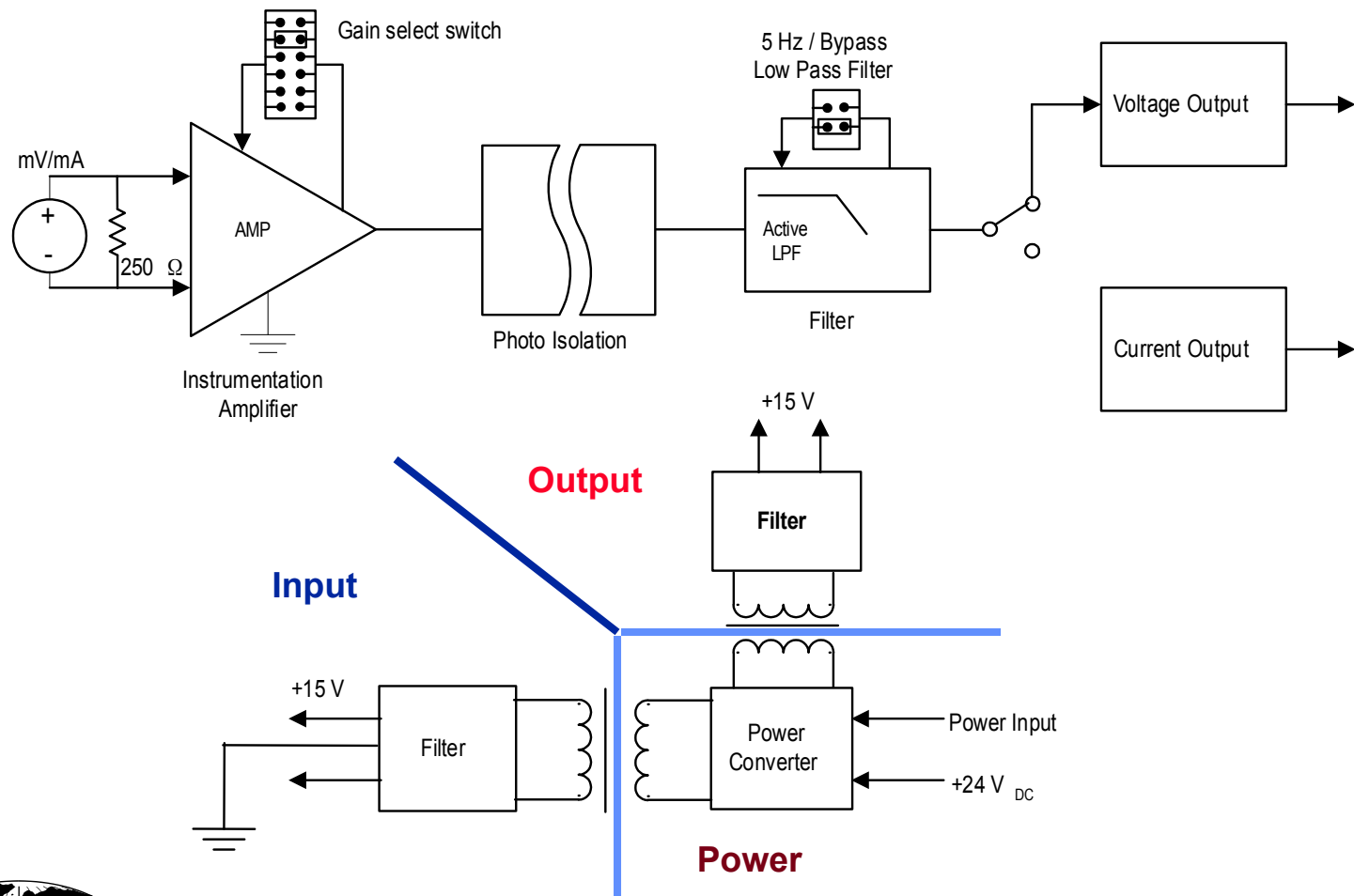
Linearized Thermocouple Measurement

Flexible DIN-Rail Mounting

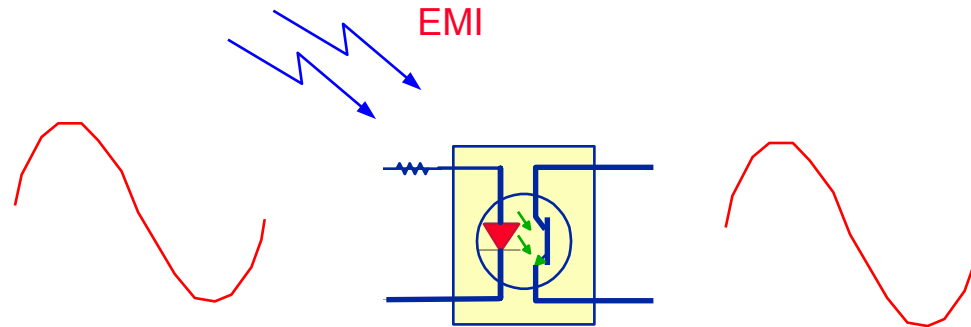
Most Cost-Effective Signal Conditioner



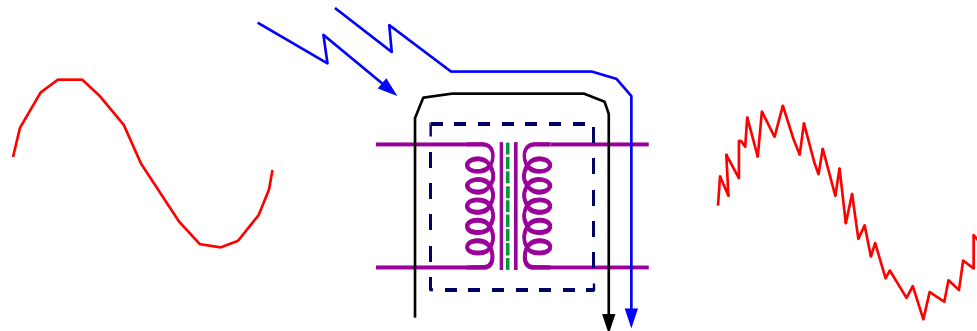
Block Diagram of ADAM-3012



Better EMI immunity



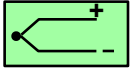
Optical Isolation provides better EMI immunity



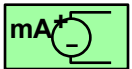
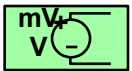
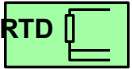
Transformer Isolator sensitive to EMI



DIN Rail Digital I/O modules



Measure



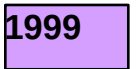
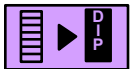
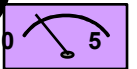
Power relay outputs module (relay ñ 4)

SSR carrier module (socket ñ 4)

Wiring terminal adapter (DB37/ 20 pins)

24 VDC 48W power supply (90-264VAC in)

Control



Power relay output module

Relay Type : SPDT (Form C)

Four on board power relays

Contact rating:

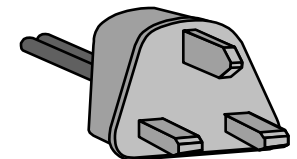
AC:250V@5A

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)**

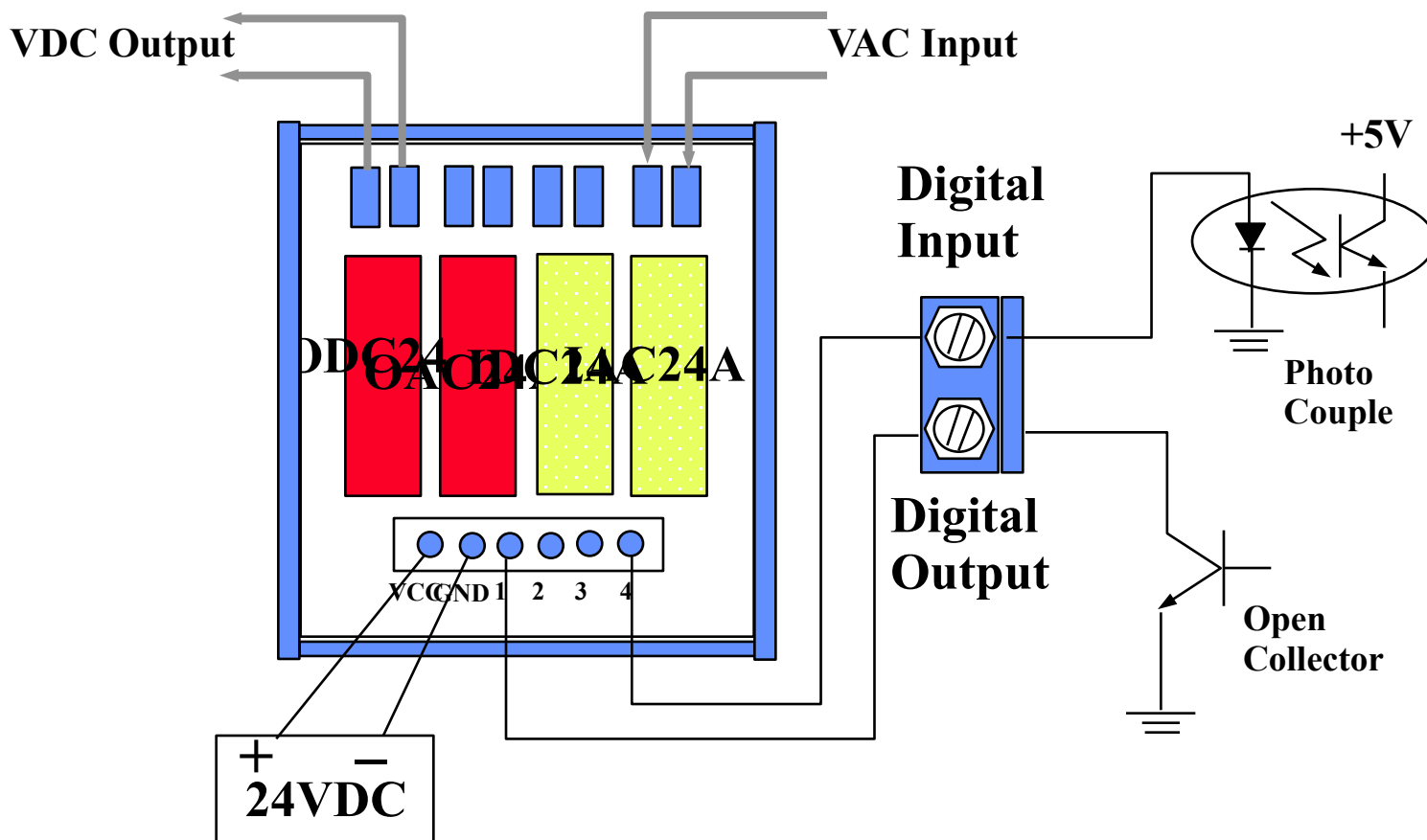
LED Channel status indicator

On-board fuse protection

Control logic: 24VDC



Easy wiring to SSR module



**ADAM
3000
Series**

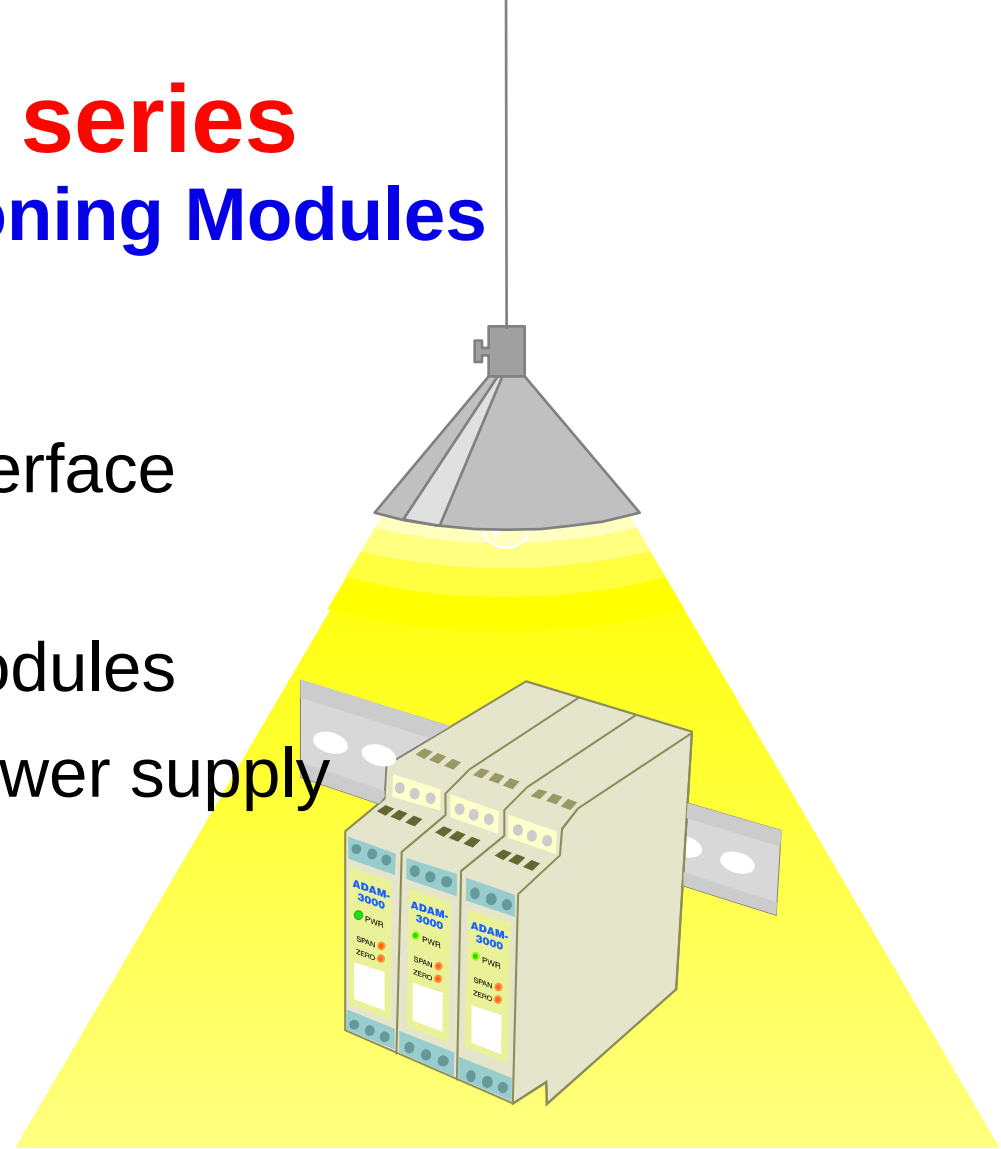
ADAM-3000 series

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, ± 0.5 V, ± 2.5 V, ± 5 V

0-20 mV, 0-100mV, 0-1V, 0-5V, 0-10V

Current: ± 20 mA, 0-20 mA

Switch configurable output range

Voltage: ± 5 V, 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

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



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

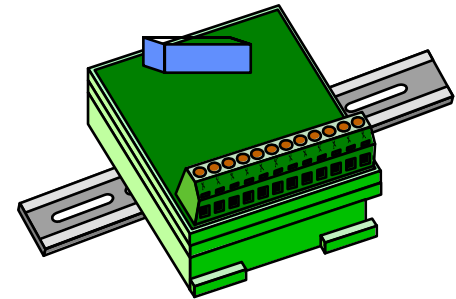
Wiring Terminal Adapter

ADAM-3920

DIN Rail Wiring Terminal for 20 pin flat cable

ADAM-3937

DIN Rail Wiring Terminal for DB37 cable



ADVANTECH.

**ADAM
3000
Series**

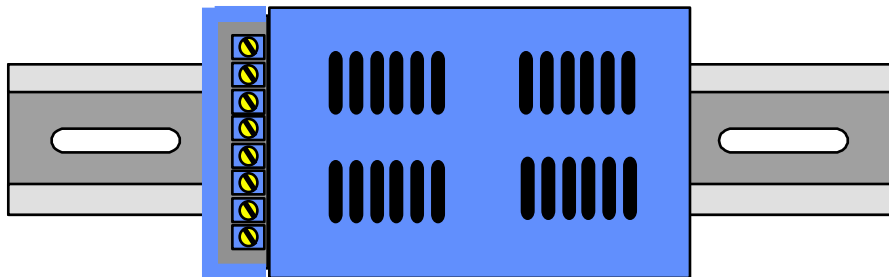
PWR-245

DIN Rail 24VDC (48W) Switching Power Supply

Input Voltage: 90-264 VAC

Output Voltage: 24VDC +/- 10%

Output Current: 2.1A



ADVANTECH.