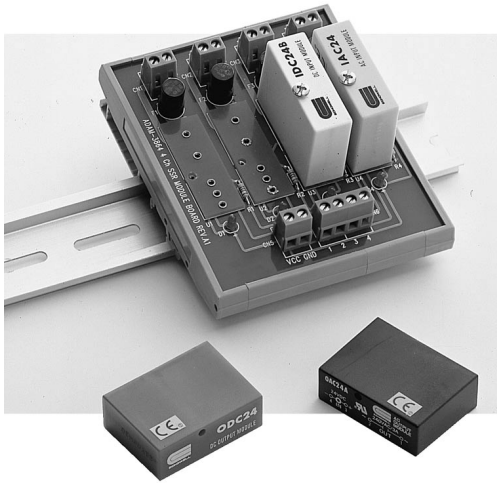


# ADAM-3864

## 4-channel Solid State Digital I/O Module Carrier Backplane



### Features

- 4-channel carrier backplane for any combination of AC or DC I/O modules
- 2,500 V<sub>RMS</sub> optical isolation
- LED channel status indicator for easy monitoring
- Onboard fuse protection
- DIN-rail mounting

### Introduction

The ADAM-3864 is a solid state digital I/O module carrier backplane that accommodates any combination of up to four high-performance, low-cost, photocoupler-isolated solid state, digital I/O modules. This backplane can accept either 24 V<sub>DC</sub> or 5 V<sub>DC</sub> I/O modules, depending on the type of power supply.

### Specifications

#### Input Modules

##### Field Side:

- **Turn on/off time** IAC24 series: 20 msec. max.  
IAC24A series: 20 msec. max.  
IDC24B series: 100 msec. max.
- **Input on/off voltage range** IAC24 series: 90 ~ 140 V/45 V<sub>RMS</sub>  
IAC24A series: 180 ~ 280 V/80 V<sub>RMS</sub>  
IDC24B series: 3 ~ 32 V/1 V<sub>DC</sub>
- **Input resistance** IAC24 series: 14 K Ω  
IAC24A series: 44 K Ω  
IDC24B series: 1.5 K Ω

##### Logic Side:

- **Supply voltage** 24 V<sub>DC</sub>
- **Supply current** 12 mA max.
- **Output current** 100 mA max.
- **Output voltage drop** 0.4 V max.
- **Breakdown voltage** 30 V<sub>DC</sub>

#### Output Modules

##### Field Side:

- **Turn on/ Turn off time** OAC series: 1/2 AC cycle max.  
ODC series: 100 msec./750 msec. max.
- **Current rating** 3 A max. (@ 25° C)
- **Contact voltage drop** 1.6 V max.

##### Logic Side:

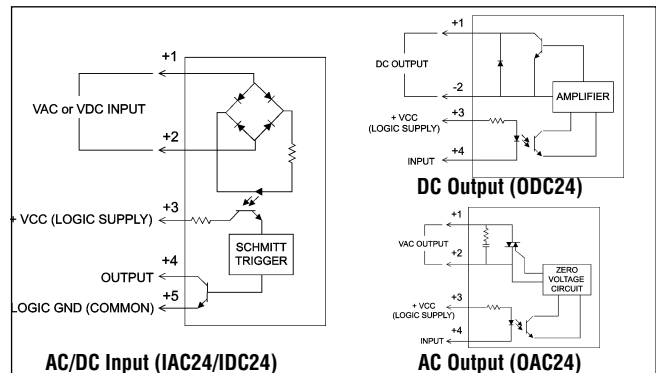
- **Supply voltage** 24 V
- **Supply current** 12 mA max.
- **Input resistance** 220 Ω
- **Dimensions** 118.4 mm (L) x 90 mm (W) x 59 mm (H) (4.66" x 3.54" x 2.32")

Module type		Field side		Logic side
Output module		Output voltage rating	Output current rating	Output logic and SSR status
AC output	OAC24A	24 ~ 280 V <sub>AC</sub>	3.0 A <sub>AC</sub>	0 V (On)
DC output	ODC24	5 ~ 60 V <sub>DC</sub>	3.0 A <sub>DC</sub>	24 V (Off)
Input module		Input on voltage	Input off voltage	Input logic and On/Off status
AC input	IAC24	90 ~ 140 V <sub>AC</sub>	< 45 V <sub>AC</sub>	0 V (On)
	IAC24A	180 ~ 280 V <sub>AC</sub>	< 80 V <sub>AC</sub>	
DC input	IDC24B	3 ~ 32 V <sub>DC</sub>	< 1 V <sub>DC</sub>	24 V (Off)

### Ordering Information

- **ADAM-3864** 4-channel Solid State Digital I/O Module Carrier Backplane
- **OAC24A** AC Output Module (24-280 V<sub>AC</sub>, 3 A)
- **ODC24** DC Output Module (5-60 V<sub>DC</sub>, 3 A)
- **IAC24** AC Input Module (90-140 V<sub>AC</sub>)
- **IAC24A** AC Input Module (180-280 V<sub>AC</sub>)
- **IDC24B** DC Input Module (3-32 V<sub>DC</sub>)

### Block Diagrams



- 1 IPPC & AWS
- 2 TPC
- 3 FPM
- 4 ATM
- 5 DA&C
- 6 cPCI
- 7 ADAM-3000
- 8 eConnectivity
- 9 ICOM
- 10 Software
- 11 UNO-2000/3000
- 12 VBOX
- 13 ADAM-4000
- 14 ADAM-5000
- 15 ADAM-6000
- 16 ADAM-8000