

## Twelve Form A and Twelve Form B Independent Dry-Reed Relays

- Up to One Million Operations at Full-Rated Load
- Switches up to 1000 VDCIVAC (pk-pk)
- I Carry- or Hot-Switch 2 Amps and up to 60W
- Ideal for HighVoltage/Current /Density Switching Systems

Standard Adapt-a-Switch ${ }^{\circledR}$ Plug-In Designed for Ease of Replacement

## High-Power Reed Form A/B Plug-In

Racal Instruments 1260-111/A is a high-voltage/current-dry reed relay that is rated for $1,000,000$ operations at a 60 W load. This card is optimized for high-voltage/current switching applications, and can be mixed and matched with other cards in the 1260-1XX family to create applicationspecific configurations..

The 1260-111/A, like all 1260-1XX series cards, can be used in either the 1260-100 Adapt-a-Switch® Carrier for VXIbus or the 1256 Switching Chassis for GPIB/RS232 applications. Up to 72 form A/B relay channels will fit in a 1260-100 Carrier, while up to 96 will fit in a single 1256.

When used with the 1260-100 Adapt-a-Switch® carrier, the 1260-111 requires an Option 01T to communicate with the switch cards. This option additionally provides message-based operation for ease-of-use and register-based operation for maximum speeds. When used with the 1256 mainframe, no additional controller is required.

Racal Instruments Adapt-a-Switch $®$ line includes drivers for LabWindows/CVI and LabView for VXI applications. It also includes VXIplug\&play compliant support for WIN95/98/NT/2000 platforms

## 1260-111 PRODUCT SPECIFICATIONS

INPUT
Maximum Switching Voltage 1000 VDC/VAC (pk-pk)
Maximum Switching Current 2 ADC or 2 AAC
Maximum Switching Power 60 W
Minimum Breakdown Voltage 1.5 V

DC PERFORMANCE
Initial Path Resistance $\leq 500 \mathrm{~m} \Omega$
Thermal EMF $\leq 40 \mu \mathrm{~V}$
Insulation Resistance $\geq 10^{9} \Omega$

AC PERFORMANCE
Bandwidth
$\geq 60 \mathrm{MHz}$
Insertion Loss
$\leq 0.1 \mathrm{~dB}$ to 1 MHz
.5 dB to 10 MHz
Isolation
$\geq 40 \mathrm{~dB}$ to 1 MHz
$\geq 20 \mathrm{~dB}$ to 10 MHz
Crosstalk
$\leq-60 \mathrm{~dB}$ to 1 MHz
$\leq-30 \mathrm{~dB}$ to 10 MHz

## Capacitance

$\leq 50 \mathrm{pF}$ Signal to Chassis
$\leq 15 \mathrm{pF}$ Open Channel

INTERFACE DATA
Cooling
See 1260-100 or 1256 Cooling data
Power Requirements
+5 VDC at .75 A Max

ENVIRONMENTAL DATA
Temperature
Operating: $0^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Storage: $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$ :
Relative Humidity
$85 \% \pm 5 \%$ non-condensing, $\leq 35^{\circ} \mathrm{C}$
Altitude
Operating: 10,000 ft.
Non-Operating: 15,000 ft.
Shock
$30 \mathrm{~g}, 11 \mathrm{~ms}, 1 / 2$ sine wave
Vibration
0.013 in.: (pk-pk), $5-55 \mathrm{~Hz}$

Bench Handling
4-inch drop at $45^{\circ}$

EMC
Emissions/Immunity
EN61326:1997+A1:1998

SAFETY
EN61010-1:1993+A2:1995

## RELIABILITY

## Switching Time

$\leq 2 \mathrm{~ms}$ (includes settling time)
Rated Switch Operations
Electrical: 1,000,000 typical at 60W resistive
Mechanical: 100,000,000 typical
MTBF
$\geq 300,000$ hours (MIL-STD-217E)
MTTR
$\leq 5$ min

MECHANICAL
Weight
12 oz ( 0.34 kg .)
Dimensions
4.5" H x 0.75" W x 9.5" D

Front Panel I/O Interface Connector
1-48 pin DIN


12 - Form A Relays
12 - Form B Relays
1 Form A and 1 Form B Shown
Jumper shown for model 1260-111A
only

## ORDERING INFORMATION

## MODEL/DESCRIPTION

Racal Instruments 1260-111A, Adapt-a-Switch Module, 12 Form A/B High-Power Reed Relay Racal Instruments 1260-111, Adapt-a-Switch Module, 12 Form A, 12 Form B High-Power Reed Relay 48-pin Connector Kit w/pins
Spare Pins

| PART NUMBER |
| :--- |
| 407821 |
| $407821-001$ |
| $407664-001$ |
| $602258-900$ |

C The CE Mark indicates that the product has completed and passed rigorous testing in the area of RF Emissions, Immunity to Electromagnetic Disturbances and complies with European electrical safety standards.

The EADS North America Defense Test and Services policy is one of continuous development, consequently the equipment may vary in detail from the description and specification in this publication.

