

# High-Density, 5 A SPDT Plug-In Switch Card 

## High-Density, 24 SPDT (Form C) Channels

- Each Channel Switches up to 5 A at 30 VDC or 250 VAC

Easily Configured Individual Relays

Ideal for General Purpose Switching and Control of External Devices

Plug-In Design for Rapid Expansion and Replacement

Racal Instruments 1260-116 is a 24-channel, Form C, Single-Pole DoubleThrow (SPDT) switch card for use in either a Racal Instruments 1260-100 VXI Carrier or Racal Instruments 1256 GPIB/RS-232 Switching Mainframe.

Custom relay switch networks may be configured with some of the relays while all remaining channels continue independent operations. This plugin can switch up to 5 A making it useful to control external devices such as motors or loads. It can be used for applications requiring high-current switching of AC and DC power supplies as well as a current source.

If the 1260-116 is used with the 1260-100 Adapt-a-Switch ${ }^{\text {TM }}$ platform, an Option 01T is required to communicate with the switch cards, and to provide message-based operation for ease of use and register-based operation for maximum speeds. If the switch card is used with the 1256 mainframe, no additional controller is required.

The 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.

## INPUT

Maximum Switchable Voltage 30 VDC or 250 VAC
Maximum Switchable Current 5 ADC or AAC
Maximum Switchable Power 150 W, 1250 VA output

## DC PERFORMANCE

## Path Resistance

< $200 \mathrm{~m} \Omega$
Isolation

$$
>10^{9} \Omega
$$

AC PERFORMANCE (INTO $50 \Omega$ )
Bandwidth ( -3 dB )
50 MHz
Insertion Loss
$300 \mathrm{kHz}:<.7 \mathrm{~dB}$
$1 \mathrm{MHz}:<.5 \mathrm{~dB}$
$10 \mathrm{MHz}:<.8 \mathrm{~dB}$

## Isolation

$300 \mathrm{kHz}:>50 \mathrm{~dB}$
$1 \mathrm{MHz}:>40 \mathrm{~dB}$
$10 \mathrm{MHz}>20 \mathrm{~dB}$

## Crosstalk

300 kHz : <-50 dB
$1 \mathrm{MHz}:<-40 \mathrm{~dB}$
$10 \mathrm{MHz}:<-20 \mathrm{~dB}$
Capacitance
Channel-Chassis: < 5 pF
Open-Channel: < 30 pF

## ENVIRONMENTAL DATA

## Temperature

Operating: $-20^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$
Storage: $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$

## Relative Humidity

$85 \% \pm 5 \%$ non-condensing at $<30^{\circ} \mathrm{C}$

## 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 Hz

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

## EMC

Emissions
EN61326, Class A, Table 3
Immunity
EN61326, Class A, Table 1
Safety
CE, EN61010-1

RELIABILITY
Rated Switch Operations
Mechanical: 5,000,000 operations
Electrical: 500,000 operation at full
rated load (resistive)
MTBF
MIL-217FN2
979,058 hrs.
MTTR < 5 min.
Switching Time
$<10 \mathrm{~ms}$ (includes settling time)

## MECHANICAL

Weight
13 oz. ( 0.45 kg )
Dimensions
$4.5^{\prime \prime} \mathrm{H} \times 0.75^{\prime \prime} \mathrm{W} \times 9.5^{\prime \prime} \mathrm{D}$

## ORDERING INFORMATION

## MODEL/DESCRIPTION

Racal Instruments 1260-116, 24-Channel, Form C SPDT Power Switch
Spare 78-Pin Mating Connector
Spare Crimp Contact Pins (78 required)
Insertion / Removal Tool

## PART NUMBER

407748
602461-078
602461-900
991041

Note: The 1260-116 uses a 78-pin interface connector, which is supplied with the card.

