

High Density DPDT Switch Plug-in

- ◆ **Ideal for Switching Digital Communication Signals**
- ◆ **Ideal for Switching Differential Analog Communication Signals**
- ◆ **120 MHz Bandwidth**
- ◆ **Ideal for General-Purpose High-Performance Signal Routing**
- ◆ **High Density**
- ◆ **Standard Adapt-a-Switch® Plug-in Design for Ease of Replacement**

Racal Instruments 1260-112 is a high-density, double-pole, double-throw (DPDT) switch plug-in designed for use in the VXI Adapt-a-Switch® carrier (Racal Instruments 1260-100 or 1260-101) and Racal Instruments 1256 GPIB/Ethernet Switching System. It quickly and easily plugs into the front of an Adapt-a-Switch® Carrier or the 1256 Switching System.

This DPDT switch plug-in is designed to switch high-speed differential signals. Its architecture is ideal for switching bi-directional buses and for configuring flexible, interchangeable solutions to varying test requirements.

The 1260-112 provides 20 DPDT relays that can be actuated individually or in groups using the "Include" feature. This feature permits multi-line buses such as RS-232 to be routed with a single command. This simplifies use of the switching system, reducing overall test development time and cost.

The Option-01T interface (for VXI) controls the 1260-112 using either register-based or message-based commands. The 1256 (for GPIB/Ethernet) supports message-based operations. Refer to the Option-01T/1256 literature for more information about product specifications and features such as include, exclude, scan lists, user-defined path names and reset states.

The Adapt-a-Switch® series includes VXI *plug&play* support of Win/98/NT/2000/XP frameworks, including drivers for LabWindows/CVI and LabVIEW.

1260-112 PRODUCT SPECIFICATIONS

INPUT

Maximum Switching Voltage
300 VDC or 300 VAC

Maximum Switching Current
2 ADC or 2 AAC

Maximum Switching Power
60 W, 1225 VA

DC PERFORMANCE

Path Resistance
<500 m Ω

Insulation Resistance
10⁹ Ω

Thermal EMF
<10 μ V

AC PERFORMANCE (into 50 Ω)

Bandwidth (-3 dB)
120 MHz

Insertion Loss
10 MHz: <0.05 dB
10 MHz: <2.0 dB

Isolation
300 kHz: <70 dB
1 MHz: <65 dB
10 MHz: <50 dB

Crosstalk
300 kHz: <-75 dB
1 MHz: <-70 dB
1 MHz: <-45 dB

Capacitance
Channel-to-Chassis: <100 pF
Channel-to-Channel: <50 pF

INTERFACE DATA

Cooling
See 1260-100 cooling data

Power Requirements
+5 VDC at 150 mA plus 28 mA per energized relay (560 mA max.)

ENVIRONMENTAL DATA

(MIL-T-28800E, Type III, Class 5)

Temperature
Operating: 0° C to 55° C
Storage: -40° C to 75° C

Relative Humidity
85% \pm 5% non-condensing, \leq 35° C

Altitude
Operating: 10,000 ft.
Non-Operating: 15,000 ft.

Shock
30 g, 11 ms, 1/2 sine wave

Vibration
0.013 in.: (p-p), 5-55 Hz

Bench Handling
4-inch drop at 45°

EMC

Emissions
EN55-11A with limits in accordance with EN50081-1

Safety
EN61010-1

RELIABILITY

Rated Switch Operations
Mechanical: 1 x 10⁸
Electrical: 1 x 10⁶ @ 50 V, 0.1 A
1 x 10⁶ @ 10 V, 10 mA

MTBF
>100,000 hrs.

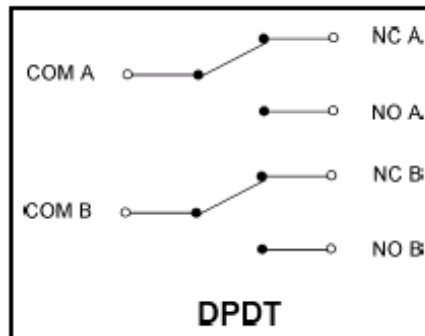
MTRR
<5 minutes

Switching Time
<3 ms (includes settling time)

MECHANICAL

Weight
9 oz. (0.26 kg)

Dimensions
4.5" H x 0.75" W x 9.5" D



CE 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.

ORDERING INFORMATION

MODEL/DESCRIPTION

Racal Instruments 1260-112, Adapt-a-Switch® plug-in, 20 channels of DPDT
160-pin Connector Kit w/Strain Relief
160-pin Cable Assembly, 6 ft., 24 AWG

PART NUMBER

407696
407664
407408-001

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.



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