



20 Channel, 10 Amp Power Switch Plug-In 1260-X121

- ◆ **20 Channels of SPST Switches**
- ◆ **Software configurable as 10 DPST or 10 1x2**
- ◆ **Switching for Power Supplies and Current Sources**
- ◆ **Switches up to 10A, AC or DC**

Racal Instruments 1260-X121 is a 20 channel SPST switching card for use in the 1260-100X VXIbus carrier. The module is configurable as 20 channels of SPST, 10 channels of DPST, or 10 channels of (1x2).

Each channel of the 1260-X121 switches up to 10 Amps, making it the ideal solution for applications requiring high-current switching of AC and DC power supplies, as well as current sources.

Our advanced "Exclude" feature ensures maximum safety when switching power. This Exclude command prevents simultaneous switch closures that could cause a short or other hazardous connection.

When used with the 1260-100X Adapt-a-Switch® platform, an Option 01T is required to communicate with any set of switch cards. The Option 01T provides message-based operation for ease-of-use and register-based operation for maximum speeds.

An IVI-COM driver is available for this module.

1260-X121 PRODUCT SPECIFICATIONS

INPUT PERFORMANCE

Maximum Switching Voltage

440 VAC, 230 VDC

Maximum Switching Current

10 AAC, 10ADC

Maximum Switching Power

2500VA, 300W

DC PERFORMANCE

Path Resistance

< 100 m Ω (Initial)

< 130 m Ω (EOL)

Insulation Resistance

> 10⁹ Ω

AC PERFORMANCE (INTO 50 Ω)

Bandwidth (-3 dB)

300 KHz

Insertion Loss

300 KHz < 2dB

Isolation

DC to 100 KHz: > 60 dB

100 to 300 KHz: > 50 dB

Crosstalk

DC to 100 KHz: < -60 dB

100 to 300 KHz: < -50 dB

INTERFACE DATA

Cooling Requirements

Airflow: 4.27liters/sec

Backpressure: 0.39 mmH₂O

Maximum Overall Power Dissipation

60 W

Current Draw

+5 VDC at 0.30 A

+5 VDC at 40mA per energized relay

ENVIRONMENTAL DATA

Temperature

Operating: 0° C to 50° C

Non-operating: -40° C to 75° C

Relative Humidity

85% non-condensing at < 30° C

Altitude

Operating: 10,000 ft.*

Non-Operating: 15,000 ft.

Shock

30 g, 11 ms, ½ sine wave

Vibration

0.013 in. (pk-pk), 5-55 Hz

Bench Handling

4-inch drop at 45°

* Operation at 15,000 feet requires derating of maximum overall power dissipation to 49 W.

EMC

Emissions

EN55011A with limits in accordance with EN50081-1

Immunity

IEC901-2,3,4 with limits in accordance with EN50082-1

SAFETY**

EN61010-1

Impulse Withstand 1000 V

RELIABILITY

Switching Time

< 15 ms (includes settling time)

Rated Switch Operations

Mechanical: 10,000,000

Electrical: 500,000 @250VAC/1.9A

500,000 @30VDC/1.9A

MTBF

With relays 783,549 hrs (25° C)

With relays 718,344 hrs (30° C)

(50% rated load, 0.1 cycle / hour)

MECHANICAL

Weight

16 oz. (0.45 kg)

Dimensions

4.4" H X 0.75" W X 12.6" D

Front Panel I/O Interface Connector

2, 20-pin connectors

** Certification Pending

ORDERING INFORMATION

MODEL/DESCRIPTION

Racal Instruments 1260-X121, 20-Channel, SPST Power Switch Card plug-in

Spare 20-Pin Mating Connector Kit

Extra Solder Contacts 14 AWG)

PART NUMBER

408008

407660

602349-900

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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