



High-Density Multiplexer Plug-in 1260-X133

Racal Instruments 1260-X133 is a high-density multiplexer switch card for use in a 1260-100X VXI Carrier.

- ◆ **Twenty (1x4) and Twelve (1x2) Multiplexers**
- ◆ **Software Configurable as Five 2x8 Matrices**
- ◆ **Ideal for High-Density, Single-Ended Switching Applications in ATE, Audio, Video or Telecom**

This plug-in provides maximum flexibility to construct a wide range of scanner/multiplexer and matrix configurations under software control while maintaining excellent bandwidth and signal integrity. All relays are bi-directional, enabling use as either a scanner or multiplexer. Possible configurations include:

- ◆ **Twenty (1x4) and Twelve (1x2)**
- ◆ **Twenty Three (1x4) and Six (1x2)**
- ◆ **Five (2x8) and Twelve (1x2)**

On-board configuration relays allow four (1x4) multiplexers to be configured in to a 2x8 matrix. This saves using multiple cards to perform matrix and multiplexer. With its combination of density, versatility, and excellent signal integrity, the 1260-X133 is ideal for constructing large switching systems. The 1260-X133 is an excellent choice for continuity, audio, video, telecom, datacom, and ATE systems testing.

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-X133 PRODUCT SPECIFICATIONS

INPUT PERFORMANCE

Maximum Switching Voltage
300 VDC/AC (Pollution Class 1)

Maximum Switching Current
2 ADC, 2 AAC

Maximum Switching Power
60 W, 62.5 VA

DC PERFORMANCE

Path Resistance
@ 1 mA: < 700 mΩ
@ 1 A: < 1 Ω

Insulation Resistance
>10⁹ Ω

AC PERFORMANCE (into 50 Ω)

Bandwidth (-3 dB)

1 x 4 config	30 MHz
2 x 8 config	30 MHz
1 x 2 config	60 MHz

Insertion Loss (1x4)
1 MHz: < 0.2 dB
10 MHz: < 0.5 dB

Isolation (1x4)
1MHz: > 60 dB
10MHz: > 45

Crosstalk (1x4)
1MHz: < -60 dB
10MHz: < -50 dB

Capacitance
Channel to Chassis: < 200 pF
Open Channel: < 5 pF

INTERFACE DATA

Cooling Requirements
See 1260-100X cooling data

Maximum Overall Power Dissipation
60 W

Current Draw
+5 VDC at 500 mA
+5 VDC at 30 mA per energized relay

ENVIRONMENTAL DATA

Temperature
Operating: 0° C to 55°
Non-operating: -40° C to 75° C

Relative Humidity
85% ±5%, 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 inch P-P, 5-55 Hz

Bench Handling
4-inch drop at 45°

EMC

Emissions**
EN55011A with limits in accordance with
EN50081-1

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

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

SAFETY**

EN61010-1
Impulse Withstand 1000 V

RELIABILITY

Switching Time
< 15 ms

Rated Switch Operations
Mechanical: 100,000,000
Electrical: 500,000 @30VDC/1A
500,000 @125VDC/0.24A

MTBF

With relays 130,226 hrs (25° C)
With relays 117,034 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 Connector
160 pin DIN Connector

** Certification Pending

ORDERING INFORMATION

<u>MODEL/DESCRIPTION</u>	<u>PART NUMBER</u>
Racal Instruments 1260-X133 Adapt-a-Switch® High-Density Multiplexer Plug-in Module	408009
160-pin Mating Connector, 160-pin Connector w/pins	407664
160-pin Cable Assembly, 6 ft., 24 AWG	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.



EADS North America Defense Test and Services
1.800.722.2528/1.949.859.8999 sales@eads-nadefense.com