# RACAL INSTRUMENTS™ 1260-162A/B



- Transfer Switch Configuration
- 2-Slot Plug-In
- DC to 18 GHz Frequency Range
- MTTR Under Five Minutes
- High-Quality Narda Switches
- Self-Cleaning Switches for High Repeatability and Accurate System Calibration
- Ideal for Switching Cellular, PCS, and Military Communications Signals

# High-Performance Microwave Transfer Switch Plug-In

Racal Instruments 1260-162A/B is a 2-slot microwave switch plug-in for use in either the 1260-100 VXI Carrier or the 1256 GPIB/RS-232 Switching Mainframe. It is optimized for high-performance, high-density, microwave switching applications. The 1260-162A/B uses high-quality sealed Narda switches for the ultimate in signal integrity.

The 1260-162A/B provides highly reliable and repeatable operation over a specified lifetime of >1,000,000 operations. Narda's specialized microwave switch design includes a self-cleaning wiper, which cleans the contacts every time the switch closes, ensuring specification accuracy over the lifetime of the switch.

The 1260-162A/B is ideal for signal switching, circuit insertion, and construction of simple matrices in modern communications systems, including Cellular, PCS, and Satcom applications. It is also suitable for ATE systems designed to test military telecommunications, surveillance, and related equipment.

User connections are made directly to the switch SMA connectors at the front panel of the plug-in, eliminating cumulative losses and induced noise. A specially designed, deep-slotted socket (1/4" drive) is available to connect/disconnect the SMA interface connectors guickly and easily.

Should switch replacement become required, they are easily removed and replaced in under five minutes. This maximizes system uptime and readily facilitates field upgrades.

The 1260-162A/B is available in two standard configurations: one or two switches. Other configurations are possible; contact the factory for availability

When used with the 1260-100 Adapt-a-Switch® carrier, the 1260-162A/B requires an Option 01T to communicate with the switch plug-in. 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.

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.



# 1260-162A/B PRODUCT SPECIFICATIONS

# MICROWAVE PERFORMANCE

# **Frequency Range**

DC to 18 GHz

#### **Impedance**

50

VSWR (MAX)

#### **Maximum Power**

100 MHz: 490 W 1 GHz: 180 W 10 GHz: 60 W 18 GHz: 50 W

	Frequency Range (GHz)	DC-3	3-8	8-12.4	12.4-18
	Insertion Loss (MAX dB)	0.2	0.3	0.4	0.5
	Isolation (MIN dB)	80	70	60	60

1 4 1

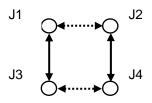
1.5:1

# **Switching Sequence**

Break Before Make

# **Operating Mode**

1260-162A/B



Position 1: J1-J4, J2-J3 Position 2: J1-J2, J3-J4

# **VXIbus INTERFACE DATA**

#### Cooling (1260-100 Adapt-a-Switch Carrier)

Airflow: 3.0 liters/sec
Backpressure: 0.5 mm H2O

# **Power Requirements**

+5 VDC

1260-162A: 1.77 A max 1260-162B: 3.53 A max

## **ENVIRONMENTAL DATA**

## **Temperature**

Operating: -200 C to 450 C Storage: -400 C to 750 C

#### **Relative Humidity**

90% max non-condensing at <300 C

#### **Altitude**

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

#### Shock

30 g, 11 ms, 1/2 sine wave

#### Vibration

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

# **Bench Handling**

4-inch drop at 45o

#### **EMC**

#### **Emissions**

EN61326, Class A, Table 3

#### **Immunity**

EN61326, Class A, Table 1

#### Safety

CE, EN61010-1

#### RELIABILITY

# **Switching Time**

20 ms max (includes settling time)

# **Rated Switch Operations**

Electrical: 1,000,000 operations at

full-rated load

## **MTBF**

860,000 hrs.

(MIL-HBK-217E, excluding switches)

#### MTTR

<5 min.

# **MECHANICAL**

#### Weight

1260-162A: 5.4 oz. (150 g) 1260-162B: 7.0 oz. (200 g)

#### **Dimensions**

4.5" H x 1.5" W x 9.5" D (Dual-Slot Plug-In)

# Front Panel I/O Interface Connector

SMA male (not supplied)

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 1260-162A, One Microwave Transfer Switch, 18 GHz Racal Instruments 1260-162B Two Microwave Transfer Switches, 18 GHz Spare Microwave Transfer Switch Deep-Slotted Socket, 5 /16"

# **PART NUMBER**

407767-001 407767-002 310296 456890

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.

