

## 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 ( $1 / 4^{\prime \prime}$ drive) is available to connect/disconnect the SMA interface connectors quickly 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.

MICROWAVE PERFORMANCE
Frequency Range
DC to 18 GHz
Impedance
50
Maximum Power
$100 \mathrm{MHz}: 490 \mathrm{~W}$
1 GHz: 180 W
$10 \mathrm{GHz}: 60 \mathrm{~W}$
18 GHz: 50 W

| Frequency <br> Range (GHz) | DC-3 | $3-8$ | $8-12.4$ | $12.4-18$ |
| :--- | :---: | :---: | :---: | :---: |
| Insertion Loss <br> (MAX dB) | 0.2 | 0.3 | 0.4 | 0.5 |
| Isolation <br> (MIN dB) | 80 | 70 | 60 | 60 |
| VSWR (MAX) | $1.2: 1$ | $1.3: 1$ | $1.4: 1$ | $1.5: 1$ |



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 H 2 O

## 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
$30 \mathrm{~g}, 11 \mathrm{~ms}, 1 / 2$ sine wave
Vibration
0.013 in.: (pk-pk) $5-55 \mathrm{~Hz}$

Bench Handling
4-inch drop at 450

## 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 $1.5^{\prime \prime}$ W x 9.5" D (Dual-Slot Plug-In)
Front Panel I/O Interface Connector SMA male (not supplied)

C The CE Mark indicates E that the product has completed and passed rigorous testing in the area of RF Emissions, Immunity to RF Emissions, Immunity to
Electromagnetic Disturbances and complies with European electrical safety standards.

## ORDERING INFORMATION

## MODELIDESCRIPTION

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

