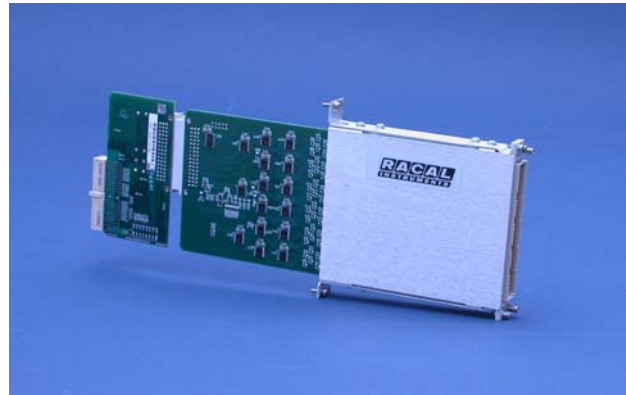


PXI/cPCI High-Density, 80-Channel, SPST Switching Module Model 1260-1118



- ◆ **Adapt-a-Switch® High-Density SPST Switching Module on a Racal Instruments PXI Carrier**
- ◆ **Excellent Signal Integrity, Low Crosstalk, Isolation, and Insertion Loss**
- ◆ **Extended 12.1-inch Depth for High-Density, High Channel Count, and Market-Leading Performance**
- ◆ **Excellent AC Performance, 100 MHz Bandwidth (-3dB)**
- ◆ **Unmatched 8 MHz Data Transfer Speed**

Model 1260-1118, a PXI SPST switch, is an innovative seamless integration of an off-the-shelf Adapt-a-Switch® SPST Switching Module on a Racal Instruments PXI carrier. The module installs in any PXI/cPCI chassis without the need for user supplied software or hardware to install or operate.

The 12.1 inch module length has market-leading performance that utilizes the available service area between the front of a chassis and a cable/connector receiver. Model 1260-1118 has 85% greater component density than a typical PXI switch module, providing higher switch performance. Its 80 channels provides 400% more channel capacity than the typical 16-channel PXI module.

Each channel can switch up to 2A, which is ideal for high current applications such as DC loads and AC line power control. The 250 VDC/250 VAC switching voltage is 100% greater than typical

150 VDC/125 VAC ratings and is ideal for switching power supply applications or low-to-medium power applications.

The high 100 MHz bandwidth, low crosstalk, isolation, and insertion loss make the 1260-1118 ideal to use with function/pulse generators, universal counter/timers, and oscilloscopes. The 80 SPST channels make the module ideal for general switching requirements such as ATE loads and data transfer. The SPST architecture allows the user to interconnect the relays externally to create custom multiplexers and matrices.

Model 1260-1118 has 8 MHz data transfer speed, incomparably faster

than typical 150 instructions/cycle resulting in the fast data transfer speed required in timely, uninterrupted data acquisition and processing.

The electromechanical relays are interchangeable inputs/outputs that are able to meet the most demanding of test requirements. Interface connectors are not provided with the 1260-1118 and must be ordered separately. A six-foot unterminated cable assembly is available as a standard option.

In keeping with cPCI requirements, the module can be ordered either as a 5 V or 3.3 V PXI bus voltage module.

The module includes drivers for LabWindows/CVI 5.1 and LabVIEW 7.0.

Model 1260-1118 SPECIFICATIONS

INPUT

Maximum Switching Voltage
220 V DC or 250 V AC

Maximum Switching Current
2 A

Maximum Switching Power
60 W, 125 VA

DC PERFORMANCE

Path Resistance
<500 mΩ

Insulation Resistance
> 10⁹ Ω

Thermal EMF
< 10⁰ μV

AC PERFORMANCE

Bandwidth (-3 dB)
100 MHz

Insertion Loss
100 kHz: <0.5 dB
1 MHz: < 1.0 Db

Isolation (50Ω)
100 kHz: > 80 dB
1 MHz: > 40 dB

Crosstalk (50Ω)
100 kHz: < 80 dB
1 MHz: < -40 dB

Capacitance

Channel-Chassis: <200 pF
Open Channel: < 20 pF

INTERFACE DATA

Cooling

Airflow: 3.0 l/s
Back Pressure: 0.7 mm H₂O

Power Requirements

+5 VDC at 150 mA plus 30 mA per energized relay (730 mA max.)

ENVIRONMENTAL DATA

(All Environmental Conditions Tested to MIL-PRF-28800F, Class 3)

Temperature

Operating: 0° C to 55° C
Storage: -40° C to 71° C

Relative Humidity

5% to 95% RH non-condensing <-30° C
5% to 75% RH above 30° C
5% to 45% RH above 40° C

Altitude

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

Shock

30 g peak, ½ sine, 11 ms pulse

Random Vibration

Operating: 5 to 500 Hz, 0.3 Grms
Non-Operating: 5 to 500 Hz, 2.1 Grms

Bench Handling

4-inch drop at 45°

EMC

Emissions/Immunity

EN61326: 1997 + A1: 1998, Class A

Safety

EN61010-1: 1993 + A2: 1995

RELIABILITY

Switching Time

< 3 ms (includes settling time)

Rated Switch Operation

Mechanical: 1x10⁸
Electrical: 1x10⁶ @ 50 V, 0.1 A
1x10⁶ @ 10 V, 10 mA

MTBF

783,668 hrs. (MIL-STD-217E) relays not included

MTTR

< 5 minutes

MECHANICAL

Weight

44.8 oz. (1.27 kg)

Dimensions

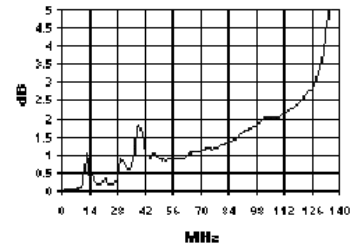
4.44" H x 0.85" W x 12. 1" D

Front Panel I/O Interface Connector

1260-118: 160-Pin DIN Connector
1260-118A: 64-Pin DIN Connector

TYPICAL CHANNEL

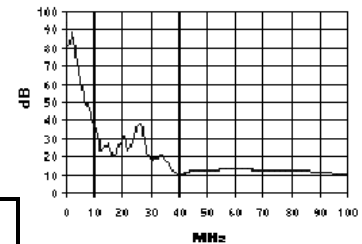
Insertion Loss



Crosstalk



Isolation



Note: Each 1260-1118 requires one mating connector.

The CE Mark indicates that the product has completed and passed rigorous testing in the area of RF

ORDERING INFORMATION

Model	Description	Part Number
1260-1118-3	PXI AaS, High-Density 80 Channel SPST, 2A, 3.3V Bus Voltage	1260-1118-001
1260-1118-5	PXI AaS, High-Density 80 Channel SPST, 2A, 5 v Bus Voltage	1260-1118-002
408000-001	PXI to AaS Carrier/Enclosure 3.3 V Kit	408000-001
408000-002	PXI to AaS Carrier/Enclosure 5 V Kit	408000-002
407408-001	160-pin Cable Assembly, 6ft., 24 AWG	407408-001
407664	160-pin Connector Kit w/Strain Relief	407664
602004	64-pin DIN Connector, EDC (1A)*	602004

*Use of this Connector May Limit Maximum Current to 1A