



Enhanced Optical and Microwave GPIB Switching System

Racal Instruments 1255A Switch System provides four slots for VXIbus C-Sized 1260-Series switch modules. It contains all the necessary interfaces for developing a comprehensive switch system, while significantly reducing cost with the elimination of mainframes and controllers..

- ◆ **Maximizes Switch Density**
- ◆ **Reduces ATE Switching Cost**
- ◆ **Four VXIbus C-Sized Switch Card Capacity (1260-Series)**
- ◆ **Built-In IEEE-488 and RS232 Controllers**
- ◆ **VXIplug&play Compatible**
- ◆ **Ideal for Optical and Microwave Switching Systems**

GPIB and RS-232 Control

The 1255A comes complete with both an internal IEEE-488 and RS-232 interface. The included VXIplug&play compliant drivers make it an easy addition to any system. The 1255A additionally provides a message-based interface that controls multiple 1260-Series switch cards via the VXI local bus.

1260-Series Switch Family Compatibility

As with all 1260-Series switches, the local bus is used to transmit control signals from the internal controller to all 1260 cards in the chassis.

The 1255A will support the entire line of Racal Instruments switch modules with signals from DC to light. The system also provides an upgradeable path to a full VXIbus system, if ever a larger ATE system capability is needed.

Switch modules can be of mixed or dedicated signal type. An excellent selection of 1x2, 1x4, 1x8, and 2x2 switches are available. These optical switches are ideal for SONET test, fiber-optic component test, and fiber network monitoring.

Extensive Software Features

The 1255A includes powerful software features such as:

Self Test- executed automatically at power-up; ensures that CPU, memory, and switching module handshaking are functioning correct!

Non-Volatile Memory- stores relay configurations for fast, easy setup

Power-Up Recall- automatically recalls a complete system configuration at power-up

Relay Monitoring- provides confidence checking of all relays

Scan Mode- provides synchronous scanning of multiple test points

External Trigger- allows external device to trigger switching operations

Easy Maintenance Features

Users maintain the 1255A with ease. A pluggable power supply and easy-to-clean fan filter simplify maintenance

Accessories and Options

Rack mount ears and blanking plates (3) are included with the chassis The unit can be rack mounted with either the annunciator panel or the switching modules facing the front.

The 1255A is part of our extensive family of VXIbus switching systems, which offers modules in configurations ranging from matrices to multiplexers, and signal type from DC to Optical.

1255A PRODUCT SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

AC Input Voltage

100, 120, 220, or 240 VAC $\pm 10\%$

AC Line Frequency

47 to 66 Hz

Max Input Power

150 VA max

Host Computer Interface

GPIOB (IEEE-488) and RS-232

ENVIRONMENTAL DATA

(Designed to meet MIL-T-28800 Type III, Class 5, Style F)

Temperature Range

Operating: 0° C to 50° C

Storage: -40° C to 70° C

Humidity

95% non-condensing

Vibration

0.013 in. double-amplitude,

5-55 Hz

Altitude

Operating: 10,000 ft.

Storage: 15,000 ft.

Shock

30 g, 11 ms, 1/2 sine wave

Bench Handling

4-inch drop at 45°

SOFTWARE (REV J)

WIN Framework *VXIplug&play* compatible disk shipped with instrument contains: LabWindows/CVI driver Executable Soft Front Panel Requires: VISA or VTL 3.0 LabView driver available

FRONT PANEL ANNUNCIATORS

ON: Power on

FAIL: Self-test failure

ADDR: 1255A addressed by host

SRQ: SRQ bit in status byte is set

MECHANICAL

Dimensions (H x W x D)

5.25" x 16.75" x 15.63"

(133.4 mm x 425.5 mm x 397.0 mm)

Weight

17.2 lbs. (7.8 kg)

Rack Mounting

Standard 19" rack mount

Rear Panel Connectors

GPIOB; RS-232 (9-pin D-sub);

Sync/Trigger (9-pin D-sub)

EMC (COUNCIL DIRECTIVE 89/336/EEC)

EN55011, Group 1, Class A

EN50082-1, IEC 801-2,3,4

SAFETY (LOW-VOLTAGE DIRECTIVE 73/23/EEC)

EN61010-1


RELIABILITY

MTBF

40,428 hrs.

MTRR

<5 min.

 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

<u>MODEL/DESCRIPTION</u>	<u>PART NUMBER</u>
Racal Instruments 1255A, GPIOB/RS-232 High-Performance Switch System	407604
Chassis Slides/Rack-Mount Kit	407404
220/240 Volt Input Fuse	407406
European Power Cord	Opt-404131
RS-232 Cable, 10 ft. (3.05 m)	602248
IEEE-488/GPIOB Cable (2.0 m)	500310-002
WIN 95 PCI-GPIOB Card	777158-01
WIN NT PCI-GPIOB Card	777073-01

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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