

Racal Instruments™ OBSOLETE 1255A Enhanced Optical and Microwave GPIB Switching System

The 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.

Key Features

- · 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

Product Information

GPIB and RS-232 Control

The 1255A comes complete with both an internal IEEE-488 and RS-232 interface. The included VXI*plug&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.

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 correctly

- 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

You can 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 Microwave.



Specifications

Note: The Astronics Test Systems policy is one of continuous development and improvement. Consequently, the equipment may vary in detail from the description and specifications in this publication.

Electrical Specifications

AC Input Voltage

• 100, 120, 220, or 240 VAC ±10%

AC Line Frequency

• 47 to 66 Hz

Max Input Power

• 150 VA max

Host Computer Interface

• GPIB (IEEE-488) and RS-232

Interface

Front Panel Annunciators

- ON: Power on
- FAIL: Self-test failure
- ADDR: 1255A addressed by host
- · SRQ: SRQ bit in status byte is set

Software (Rev J)

- Microsoft Win32[®] application programming interface-based VXI*plug&play* compatible disk shipped with instrument contains: LabWindows™/CVI driver
- Executable Soft Front Panel Requires: VISA or VTL 3.0
- LabView™ driver available

Environmental

(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 to 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°

Racal Instruments™ 1255A (Obsolete)

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

MTBF

• 40,428 hrs

MTTR

• <5 min

Mechanical

Dimensions

- 5.25" H x 16.75" W x 15.63" D
- (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

 GPIB; RS-232 (9-pin D-sub); Sync/ Trigger (9-pin D-sub)

The CE Mark indicates that the product has completed and passed rigorous and Immunity to Electromagnetic Disturbances, and complete with European electrical safety standards.

Ordering Information

407604 : Racal Instruments™ 1255A (Obsolete) GPIB/RS-232 High-Performance Switch System

Accessories:

407404 : Option 65, Chassis Slides/Rack-Mount Kit Opt-407609 : Option 71, 220/240 Volt Input Fuse 407428 : Spare blank plate 602248 : RS232 Cable, 10 Ft (3.05 m) 500310-001 : IEEE-488/GPIB Cable (1 m) 500310-002 : IEEE-488/GPIB Cable (2 m) 500310-001 : IEEE-488/GPIB Cable (3 m)



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