



Racal Instruments™

1256L

LXI Switching System

The Racal Instruments™ 1256L switching system is a high-density 12-slot switching and control system in a compact 2U rack-mountable package.

This new switching system complies with LXI Core 2011 and is based on the proven legacy Racal Instruments™ 1256 product, which is compatible with the Adapt-a-Switch™ series of plug-in switching and digital I/O products.

Key Features

- Supports Adapt-a-Switch™ plug-in products
- LXI interface with web page control for each switching plug-in
- 12-slot 2U design for space efficiency
- Wide range of switching and digital I/O plug-ins
- High throughput and advanced features for reduced test time
- SCPI command set for remote control from any type of controller
- IVI-C, IVI-Com, and ActivATE™ Test Platform drivers provided

Product Information

Wide Range of Plug-Ins

The 1256L controls up to 12 Adapt-a-Switch™ switching plug-ins. You can easily configure these plug-ins into a high-performance, low-cost solution to satisfy many kinds of switch applications.

A single 1256L can accommodate any one of the following configurations plus many others:

- Matrix up to 4x432
- Multiplexer up to 768 channels
- Up to 960 SPST channels
- Up to 120 1x4 RF multiplexers

High-Speed Switching

The 1256L switching system reduces test times with its high throughput and advanced timesaving features. It is capable of scanning more than 100 channels per second.

Non-Volatile Memory

The non-volatile memory stores up to 100 complete switch states and includes a separate automatic power-up state.

In addition, the 1256L can store all user-designated preferences, such as USB/GPIB address, module names, and path names, and then have these automatically restored at power-up.

Advanced Triggering

The 1256L synchronizes with other equipment using the external trigger in/out signals. Coupled with the advanced scan list features, the triggering facilitates rapid automated measurements with minimal user intervention from the system controller.

Intuitive Web-Based Interface Control

Each switching plug-in has its own powerful web-control interface, which provides easy access to all relay states, system preferences, and non-volatile memory features.

Ethernet, GPIB, and USB Remote Interfaces

The Ethernet, GPIB, and USB remote interfaces provide any terminal or computer with access to all standard features. The remote interfaces are IEEE 488.2 and SCPI compliant. In addition, interfaces can access advanced features:

- **Path Level Switching** – Assign names to relay paths for ease of reference
- **Include Lists** – Automatically close multiple relays with a single command
- **Exclude Lists** – Build large scanners using mutually-exclusive relay groups
- **Scan List** – Define sequentially-closed relay groups
- **Trigger Delays** – Time relay closures to coincide with external events
- **Switch Mode** – Select make-before-break, break-before-make, or immediate relay
- **Confidence Mode** – Automatically verify relay response

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.

General

Front Panel:

- System Power Indicator
- LAN Status Indicator
- System Reset
- USB Type A

System

Slot Capacity

- 12 slots

Switching settling time

- Automatically selected by the mainframe for each module

Electrical

AC Input Voltage

- 100 to 120/200 to 240 VAC

AC Line Frequency

- 50/60 Hz

Input Power

- 500 VA Max

Interface

Rear Panel I/O

Control Port Interfaces

- USB 1.1 full-speed Type B port
- GPIB port (IEEE-488.2)
- Trig In (BNC)
- Trig Out (BNC)

Software

Native Language

- SCPI & SCPI scripting

Driver Support

- IVI-C, IVI-COM, LabVIEW™

Web Page

- Accessed via Ethernet

LXI Certification

- LXI Core 2011 Compliant

Environmental

Temperature

- Operating: 0° C to 50° C
- Storage: -40° C to 71° C

Relative Humidity

- 80% RH at 40° C

Bench Handling

- 4" drop at 45°

Emissions

- CISPR11:2009

Immunity

- EN61326:2006 Class B

Safety

- EN61010-1:2010
- Emergency Shutdown

MTBF

- 19,769 hrs (with fan)

MTTR

- Replace plug-in: <5 min

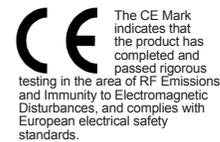
Mechanical

Weight

- 12.8 lbs (5.8 kg)

Dimensions

- 3.5" H x 17.3" W x 18" D
(8.9 cm x 43.9 cm x 45.7 cm)



Ordering Information

408350 : Racal Instruments™ 1256L

LXI Switching System

Accessories

408355: OPT 60, Rackmount Kit

408355-001: OPT 60, Recessed Rackmount Kit

500310-001 : IEEE-488/GPIB Cable (1 m)

500310-002 : IEEE-488/GPIB Cable (2 m)

500310-003 : IEEE-488/GPIB Cable (3 m)



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