

Register-based and Message-based Switch Controller

- ◆ Register-based and Message-based Modes
- ◆ High-speed Operation
- ◆ Routing Commands
- ◆ IEEE-488.2/SCPI Compliant
- ◆ Single Point of Control for up to Twelve Modules

Racal Instruments™ Option 01T is a daughter board designed to install into any of the Racal Instruments 1260 Series of switch modules, including the Adapt-a-Switch® Carrier, 1260-100. The Adapt-a-Switch carrier is a revolutionary, modular switch platform that delivers unprecedented density and flexibility in a two-slot, C-size, VXIbus module. Refer to the 1260-100 data sheet for product specifications and features.

The Option 01T controls any combination of up to twelve 1260-Series switch modules and/or Adapt-a-Switch plug-in switch cards. If only the 1260-100 Adapt-a-Switch carrier module is being used in a test system, one Option 01T is necessary for every two 1260-100 carrier modules, as each carrier module can accommodate 6 switch cards.

The Option 01T controls and receives all eight TTL trigger lines available on the VXIbus. It offers both message-based and register-based control in one module, combining ease-of-use with high-speed capability. The message-based interface accepts SCPI and IEEE-488.2 commands to communicate with all Racal Instruments VXIbus switch modules. This forms a comprehensive VXIbus switching system with features such as:

Routing Commands

Assigns signal path names such as Oscilloscope, DMM, or Timer/Counter to relay paths to simplify programming.

Power-up Recall

Ensures the system always powers up in a pre-determined state.

Scan

Synchronizes relay selection, which reduces software development time for multiple channel selections.

Include

Controls two or more relays within a module or switch system.

Option 01T PRODUCT INFORMATION

Exclude

Prevents unwanted channel closures by pre-programming fail-safe conditions to prevent switching matrix contentions.

Delays

Inserts user-selectable timing intervals when switching channels to compensate for the response time of other system resources.

Confidence Mode

Verifies correct relay operation after each switching command.

The Option 01T register-based interface writes directly to the control registers of 1260-Series modules and Adapt-a-Switch plug-in switch cards. This provides high-speed relay switching and/or digital I/O operation at less than 9µs per transition.

The Option 01T includes VXIplug&play support for WIN95/NT frameworks, including drivers for LabWindows/CVI and LabVIEW.

OPTION 01T SPECIFICATIONS

VXIBUS INTERFACE DATA

Peak and Dynamic Current

+5VDC 900mA I_{PM}

+5VDC 1mA I_{DM}

GENERAL

Weight

5 oz. (142 g)

Dimensions


8.6"H x 0.75"W x 3.1" D mechanical

MTBF

286,784 hours (MIL-HDBK-217E)

MTTR

<30 minutes

 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

MODEL/DESCRIPTION

Racal Instruments Option -01T, Message-based and Register-based Switch Controller

PART NUMBER

407531-001

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.



EADS North America Defense Test and Services
1.800.722.2528/1.949.859.8999 sales@eads-nadefense.com