

# Racal Instruments™

# 1260-20

## Power Switch Module

The Racal Instruments™ 1260-20 is designed for high-current switching of AC line power, DC power supplies and AC or DC current sources. Power switch networks may be configured from 20 independent DPST switches. Up to 8 A at 250 VAC<sub>rms</sub> or 5 A at 48 VDC may be switched through each two-wire channel.

### Key Features

- Provides switching for AC or DC power supplies and current sources
- Power switch networks may be configured from 20 independent DPST relays
- Switches up to 8 A at 250 VAC<sub>rms</sub> or 5 A at 48 VDC
- Carry current up to 10 A
- Configured as 20 DPST relays

### Product Information

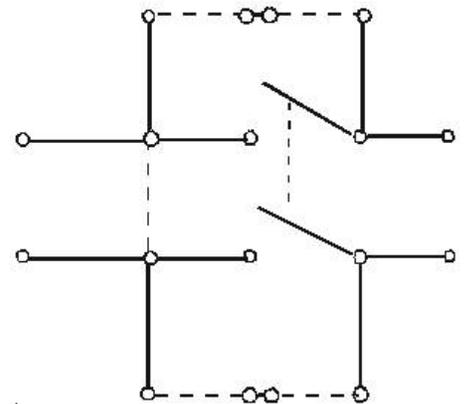
Separate connections to both sides of the relay contacts permit each channel to function independently or to be configured as custom networks. Each channel features mounting holes for installation of series and shunt elements to serve as arc suppressors, filters, etc.

Relay coil current monitoring is available to provide confidence checking which gives the user assurance of proper relay operation.

The Racal Instruments™ Option 01 or 01T switch controller is required to communicate with the 1260-20. The Option 01 should be used for applications with existing Option 01 software, but for all new applications the Option 01T should be used. The Option 01T provides message-based operation for ease of use and register-based operation for maximum speed.

The Option 01T provides a single point of software control for the switching system with advanced features such as include, exclude, scan, relay monitoring, user defined path names, and reset states.

The 1260 series includes VXI*plug&play* support for frameworks based on Microsoft Win32® application programming interface, including drivers for LabWindows™/CVI and LabVIEW™.



20 independent relays. 1 channel is shown, with provision for addition of series and shunt elements.

## 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.

### Maximum Switchable Voltage (Terminal-Terminal or Terminal-Chassis)

- 250 VDC or AC<sub>rms</sub>, 380 VAC<sub>pk</sub>

### Maximum Switchable Current (DC or AC<sub>rms</sub>)

- Per Channel: 8 A
- Per Module: 160 A

### Maximum Switchable Power

- Per Terminal: 150 WDC, 2000 VA

## DC Performance

### Path Resistance

- 150 mΩ max at 5 ADC
- 50 Ω typ

### Isolation

- >10<sup>9</sup> Ω

## AC Performance (Into 50 Ω)

### Capacitance

- Open Channel: <20 pF
- Channel-Chassis: <20 pF
- High-Low: <50 pF

### Bandwidth (-3 dB)

- 30 MHz

### Insertion Loss

- 100 kHz: <0.1 dB
- 1 MHz: <0.1 dB
- 10 MHz: <1.5 dB

### Crosstalk

- 100 kHz: <-60 dB
- 1 MHz: <-40 dB
- 10 MHz: <-20 dB

## Interface

### Power Requirements (I<sub>PM</sub>)

- +5 V: 0.4 A (2.8 A with Option 01/01T installed)
- +24 V: 10 mA per relay (energized)

## Mechanical

### Weight

- 2.56 lb (1.15 kg) without Option 01/01T
- 2.84 lb (1.28 kg) with Option 01/01T

### Dimensions

- C-size, Single-slot VXIbus Module

### Cooling Requirements

- Airflow: 4.0 l/sec
- Backpressure: 0.05 mm H<sub>2</sub>O

## Ordering Information

Notes: Compatible smart controllers: A smart card must be installed in the left-most slot of a set of 1260-xx series switch cards. There are two options:

- Option 01: Native command set. For use in previously designed switching systems that used the Option 01.
- Option 01T: SCPI command set. For use in new systems and previously designed systems that used the Option 01T.

The 1260-20 is supplied with one set of mating connectors and solder pins. Additional connectors and optional crimp type pins can be ordered using the part numbers shown below.

### 404773 : Racal Instruments™ 1260-20

20 Channel, DPST, 250 V, 8 A Switch

### Options and Accessories:

OPT-401901-005 : Racal Instruments™ Option 01, Smart Control Module installed (manual must be ordered separately; see below)

404820-005 : Racal Instruments™ Option 01, Smart Control Module (not installed) with manual

OPT-405108-001 : Racal Instruments™ Option 01T Smart Control Module installed (manual must be ordered separately; see below)

407531-001 : Racal Instruments™ Option 01T Smart Control Module (not installed) with manual

601850 : Connector Body

601849 : Connector Pins

602089-001 : GMCT Crimp Contact, Female

602089-921 : Hand Crimp Tool

9099 : Insertion Tool

9081 : Extraction Tool



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