

## Key Features

- 152 channels of SPST switches
- 50 Mhz bandwidth minimum; 100 MHz bandwidth typical
- Switches signals up to 2 A or 250 VAC
- Highly density user configurable switching
- Both "include" and "exclude" programmable switching
- Combine several switch needs on a single card


## Racal Instruments ${ }^{\text {TM }}$ 1260-18 <br> Basic High-Density Switch Module

The Racal Instruments ${ }^{\text {TM }} 1260-18$ is a high-density general purpose switch module that provides 152 channels. This configuration allows you to develop application specific switch systems with a minimum number of switch cards.

## Product Information

The 1260-18 provides the necessary bandwidth and current/voltage switch capability to make it the ideal general purpose switch card. The 1260-18 can be user configured in many ways switching up to 250 AC or 2 A per channel.

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

The 1260-12 is controlled by the Racal Instruments ${ }^{\text {™ }}$ Option 01 message-based interface or the Option 01T message-based and register-based interface. All 1260 control features explained on the Option 01 and Option 01T data sheets are available to this module.


152 channels. 1 channel is shown.

The 1260-18 supports "equate" programming lists. This allows you to close a group of relays on the switch module simply by sending a single command to the module. The result is a software configurable module providing the ultimate in flexibility.

## 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.

## DC Performance

Maximum Switching Voltage

- 220 VDC or 250 VAC

Maximum Switching Current

- 2 ADC or 2 AAC

Maximum Switching Power

- 60 W, 125 VA

Path Resistance

- $<0.5 \Omega$

Thermal EMF

- $<15 \mu \mathrm{~V}$


## AC Performance (Into $50 \Omega$ )

Bandwidth (-3dB)

- 50 MHz min
- 100 MHz typ


## Insertion Loss

| Configuration | Single channel |
| :---: | :---: |
| 100 kHz | $<0.1 \mathrm{~dB}$ |
| 1 MHz | $<0.25 \mathrm{~dB}$ |
| 10 MHz | $<0.7 \mathrm{~dB}$ |

## Crosstalk

- 100 kHz : <-80 dB
- $1 \mathrm{MHz}:<-70 \mathrm{~dB}$


## Isolation

- 100 kHz : >80 dB
- $1 \mathrm{MHz}:>55 \mathrm{~dB}$

Capacitance (Open Channel)

- Input to Ground: <50 pF
- Output to Ground: $<50 \mathrm{pF}$
- Input to Output: <5 pF


## Interface

Peak and Dynamic Current

|  | $\mathrm{I}_{\mathrm{PM}}$ | $\mathrm{I}_{\mathrm{DM}}$ |
| :---: | :---: | :---: |
| +24 V | $6 \mathrm{~mA}^{*}$ | 0 mA |
| +5 V | 400 mA | 75 mA |
| $+5 \mathrm{~V} \mathrm{w} /$ <br> Option 01 <br> * per energized relay | 2.5 A | 225 mA |
|  |  |  |

## Environmental

Temperature

- Operating: $0^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
- Storage: $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$

Humidity

- $<30^{\circ} \mathrm{C}: 95 \%, \pm 5 \%$, non-condensing
- $30^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}: 75 \%, \pm 5 \%$
- >40 ${ }^{\circ} \mathrm{C}: 45 \%, \pm 5 \%$


## Altitude

- Operating: 10,000 ft
- Non-Operating: 15,000 ft


## Vibration

- 0.013: double amplitude, 5 to 55 Hz


## Rated Switch Operations

- No load: 100,000,000
- 2 A @ 50 VDC: 100,000


## Mechanical

## Weight

- Slave: 3.2 lb ( 1.45 kg )
- With Option 01: $3.5 \mathrm{lb}(1.60 \mathrm{~kg})$


## Dimensions

- C-size, Single-slot VXIbus Module


## Cooling Requirements

- Without Option 01/01T
- Airflow: $1.0 \mathrm{l} / \mathrm{s}$
-Backpressure: $0.05 \mathrm{~mm} \mathrm{H}_{2} \mathrm{O}$
- With Option 01/01T
- Airflow: 2.0 l/s
- Backpressure: $0.2 \mathrm{~mm} \mathrm{H}_{2} \mathrm{O}$

The CE Mark indicates that the product has
completed and passed rigorous
testing in the area of RF Emissions
and Immunity to Electromagnetic
Disturbances, and complies
European electrical safety
standards.

## Ordering Information

Notes: Compatible smart controllers: A smart card must be installed in the leftmost 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.

407493 : Racal Instruments ${ }^{\text {™ }}$ 1260-18
(Mature)
Basic High-Density Switch Module

## 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 ${ }^{\text {TM }}$ Option 01, Smart Control Module (not installed) with

## manual

OPT-405108-001 : Racal Instruments ${ }^{\text {TM }}$ Option 01 T Smart Control Module installed (manual must be ordered separately; see below)
407531-001 : Racal Instruments ${ }^{T m}$ Option 01T Smart Control Module (not installed) with manual
407407: 160-Pin Mating Connector w/Backshell and Pins (1260-18 uses two)
407408 : 160-Pin Cable Assembly, 24 GA, 6 ft (1260-18 uses two)
407409 : 160-Pin Cable Assembly, 24 GA, 12 ft (1260-18 uses two)
990898 : Insertion Tool
990899 : Extraction Tool
991033 : ERNI Took Kit includes Crimper and Extractor


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