

DATA SHEET



EX1200-5004

32-CHANNEL 5 A SPDT SWITCH

FEATURES

Integral shield attenuates noise and crosstalk between adjacent channels/modules

Up to 192 individual SPDT relays in a 1U full-rack mainframe

Ideal for hot switching general purpose signals up to 5 A

Fail-safe interrupt forces relays open in case of external fault condition

IVIswitch compliant drivers facilitate path level commands to simplify programming

Mix/match with RF and/or highdensity multiplexers for a flexible switching subsystem in a small footprint



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RELIABLE DATA FIRST TIME EVERY TIME

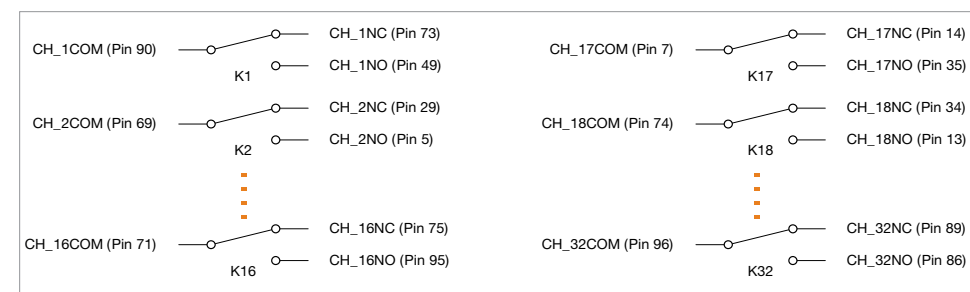
OVERVIEW

The EX1200-5004 is a high-density 5 A switch module designed for switching applications such as process control, appliance pass/fail testing, and on/off control. Up to 192 individual SPDT relays can be accommodated in a 1U full-rack mainframe for maximum density.

The modules can also be configured with other EX1200 series switch modules as part of a flexible system switch design.

Since the EX1200-5004 is typically used to switch power to the device under test or interface panel, it will respond to a fail-safe interrupt signal provided through the EX1200 system general purpose digital I/O. By programming this module as a 'listener' to a fail-safe input, all relays can be forced to automatically open to instantly remove power from the UUT or interface in the event of an external fault condition.

BLOCK DIAGRAM



General Specifications

CHANNEL COUNT	32 SPDT
MAXIMUM SWITCHING VOLTAGE	250 V AC rms, 110 V DC
MAXIMUM SWITCHING CURRENT	5 A
MAXIMUM SWITCHING POWER	150 W DC, 1250 VA per channel 18 kW per switch module
RATED SWITCH OPERATIONS	
Mechanical	1×10^7
Electrical	5×10^5
SWITCHING TIME	< 3 ms
PATH RESISTANCE	< 0.15 Ω
INSULATION RESISTANCE	> $1 \times 10^9 \Omega$
MAXIMUM THERMAL OFFSET PER CHANNEL (HI-LO)	< 7 μ V
CAPACITANCE	
Open channel	< 50 pF
Channel-mainframe	< 80 pF
BANDWIDTH (-3 dB)	40 MHz (typical)
CROSSTALK (TYPICAL)	
100 kHz	< -55 dB
1 MHz	< -35 dB
10 MHz	< -18 dB
ISOLATION (TYPICAL)	
100 kHz	< -50 dB
1 MHz	< -45 dB
10 MHz	< -40 dB
INSERTION LOSS (TYPICAL)	
100 kHz	< 0.1 dB
1 MHz	< 0.2 dB
10 MHz	< 1.0 dB
CONNECTOR TYPE	104-pin

Ordering Information

EX1200-5004	32-channel, 5 A SPDT switch
ACCESSORIES AND TOOLS	
52-0195-000	Connector kit (includes two connectors, two backshells and 104 crimp pins)
52-0196-000	50-pin connector and backshell (no pins) – two required
46-0024-000	Tool, hand crimp
46-0037-000	Tool, contact insertion
46-0025-000	Tool, turret head positioner
46-0036-000	Tool, contact extraction