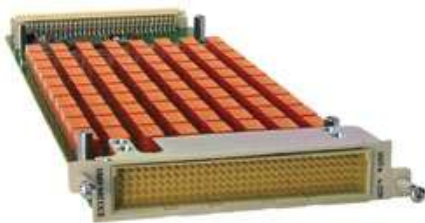


DATA SHEET



EX1200-5001

EX1200-5006

80-CHANNEL 2 A FORM A (SPST) SWITCH

40-CHANNEL 2 A FORM A (SPST) SWITCH

FEATURES

Can be mixed and matched to create application specific configurations

Ideal for general purpose switching of up to 300 V (AC/DC) or 2 A

Can be used to switch a common point to either power or ground (Form C)

Connect together using external wiring for flexible switch design

Easy to use configuration software facilitates end-to-end path-level switching for simplified programming



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RELIABLE DATA FIRST TIME EVERY TIME

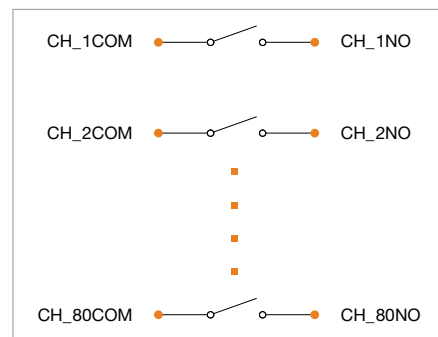
OVERVIEW

The EX1200-5001 (80 channels) and EX1200-5006 (40 channels) are high-density general purpose 2 A SPST switch modules designed for systems where individual relays can be used to route signals to/from the units under test (UUT) or combined externally to form user-defined configurations. These relays are commonly used to create complex signal distribution networks that can be reconfigured through different wiring in test adapters. Up to 240 SPST 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.

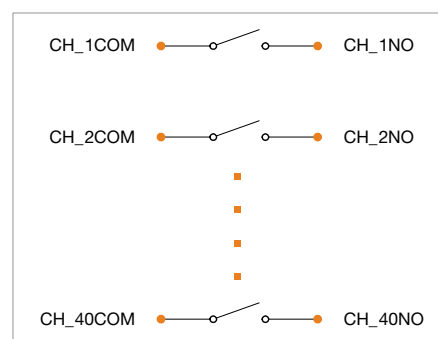
Since these modules may be used to switch power to the UUT or interface, the digital input lines on the EX1200 series mainframes support the ability to force all relays automatically to their normally open state if a fault condition occurs. This approach instantly removes all power to the UUT or interface. These modules can be automatically configured in the setup phase at the beginning of each scan step to facilitate test sequencing and control.

The EX1200-5001 and EX1200-5006 can be controlled programmatically using IviSwitch-compliant calls. Both path-level programming and individual relay control are available.

EX1200-5001 BLOCK DIAGRAM



EX1200-5006 BLOCK DIAGRAM



General Specifications

CHANNEL COUNT	80 SPST / 40 DPST
EX1200-5001	40 SPST / 20 DPST
EX1200-5006	300 V DC, 300 V AC rms
MAXIMUM SWITCHING VOLTAGE	2 A
MAXIMUM SWITCHING CURRENT	60 W DC, 125 VA
MAXIMUM SWITCHING POWER¹	10 mV DC, 10 µA (resistive)
MINIMUM CONTACT RATING²	
RATED SWITCH OPERATIONS	
Mechanical	1 x 10 ⁸ (no load)
Electrical	1 x 10 ⁶ @ 50 V DC, 0.1 A (resistive) or 10 V DC, 10 mA (resistive)
SWITCHING TIME	< 3 ms
PATH RESISTANCE	< 300 mΩ
INSULATION RESISTANCE	> 1 X 10 ⁹ Ω
MAXIMUM THERMAL OFFSET PER CHANNEL (HI-LO)	< 1 µV
CAPACITANCE	
Open channel	< 50 pF
Channel-mainframe	< 80 pF
High-low	< 50 pF
BANDWIDTH (-3 dB)	80 MHz (typical)
CROSSTALK (TYPICAL)	
100 kHz	< -55 dB
1MHz	< -45 dB
ISOLATION (TYPICAL)	
100 kHz	< -50 dB
10 MHz	< -35 dB
CONNECTOR TYPE	160-pin

Notes:

1. Maximum switched power is derated non-linearly as voltage is increased.
2. This value is in reference to a resistive load. Minimum capacity changes depending on switching frequency and environmental conditions.

Ordering Information

EX1200-5001	80-channel 2 A form A (SPST) switch
EX1200-5006	40-channel 2 A form A (SPST) switch
ACCESSORIES AND TOOLS	
70-0363-504	Strain relief bracket (includes connector, recommended accessory)
70-0363-503	Strain relief bracket kit (without connector)
52-0109-000	Crimp pin (includes 100 crimp pins)
27-0088-160	Mating connector (one per board)
46-0010-000	Crimp tool (DIN)
46-0011-000	Extraction tool (DIN)
70-0363-505	160-pin, unterminated cable assembly, 3 ft
70-0367-005	EX1200-TB160SE terminal block, single-ended module (EX1200-5001 only)