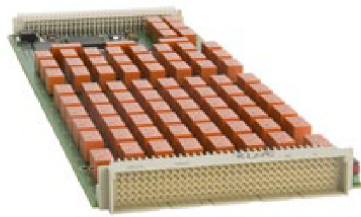


D A T A S H E E T



EX1200-3072

72-CHANNEL 2-WIRE 300 V/2 A MULTIPLEXER

FEATURES

High-density 300 V/2 A multiplexing scanning
(up to 432 two-wire channels in 1U footprint)

Two individual (1x36) 2-wire multiplexer banks
programmably combinable to form a 1x72 multiplexer

Configure as 2- or 4-wire multiplexers under
program control

Internal capacitive discharge relays keep high
voltages from disturbing sensitive measurement points

Supports thermocouple, RTD, and thermistor measurements

Optional screw-terminal junction box includes
built-in cold-junction compensation

Direct routing to DMM through internal analog
measurement bus simplifies field wiring



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R E L I A B L E D A T A F I R S T T I M E E V E R Y T I M E

General Specifications

CHANNEL COUNT	(1 x 72) 2-wire, dual (1 x 36) 2-wire, or (1 x 36) 4-wire
RELAY TYPE	Electromechanical, fail-safe
MAXIMUM SWITCHING VOLTAGE	300 V AC rms, 300 V DC
MAXIMUM SWITCHING CURRENT	2 A
MAXIMUM SWITCHING POWER ¹	60 W DC, 125 VA
MINIMUM CONTACT RATING ²	10 mV DC, 10 μ A (resistive)
RATED SWITCH OPERATIONS	
Mechanical	1×10^8 (no load)
Electrical	1×10^6 @ 50 V DC, 0.1 A resistive or 10 V DC, 10 mA (resistive)
SWITCHING TIME	< 3 ms
PATH RESISTANCE	< 500 m Ω
INSULATION RESISTANCE	> $1 \times 10^9 \Omega$
MAXIMUM THERMAL OFFSET PER CHANNEL (HI-LO)	< 3 μ V
CAPACITANCE	
Open channel	< 50 pF
Channel-mainframe	< 20 pF
High-low	< 50 pF
BANDWIDTH (-3 dB)	40 MHz (typical)
CROSSTALK (TYPICAL)	
1 MHz	< -70 dB
10 MHz	< -50 dB
ISOLATION (TYPICAL)	
1 MHz	< -55 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

EX1200-3072	72-channel, 300 V/2 A multiplexer
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
70-0367-002	EX1200-TB160-1 terminal block, differential module