

7013-C 7013-S

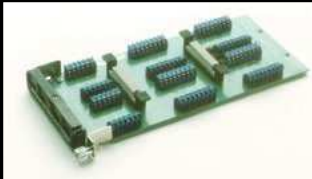


- 20 independent 2-pole switches
- 500nV, 100pA offsets

Ordering Information

- 7013-C** 20-channel, 2-pole Independent Switch with 96-pin Mass Terminated Connector Board
- 7013-S** 20-channel, 2-pole Independent Switch with Screw Terminal Connector Board

7015-C 7015-S



- Quad 1×10 (40-channel) solid-state multiplexer
- 30,000 hours MTBF
- Scan/measure over 300 ch/s

Ordering Information

- 7015-C** 40-channel, 2-pole Independent Switch with 96-pin Mass Terminated Connector Board
- 7015-S** 40-channel, 2-pole Independent Switch with Screw Terminal Connector Board

20-channel Isolated Switch Cards

This isolated switch card contains 20 independent channels that can be connected in a wide variety of configurations. Each channel is 2-pole. The isolated switch configuration provides the greatest flexibility because the switches can be connected as needed. Both sides of each 2-pole relay are available for connection.

RELAY SWITCH CONFIGURATION: 20 independent channels of 2-pole switching.

CONTACT CONFIGURATION: 2-pole Form A (Hi, Lo).

CONNECTOR TYPE: 7013-C: 96-pin male DIN connector.

7013-S: Screw terminal, #16AWG maximum wire size, with 0.092 inch O.D. 28 conductors per card maximum. #22AWG typical wire size with 0.062 inch O.D. 88 conductors per card maximum.

MAXIMUM SIGNAL LEVEL: DC Signals: 110V DC between any two pins, 1A switched. 30VA (resistive load).

AC Signals: 125V rms and 175V AC peak, between any two pins, 1A switched, 60VA (resistive load).

COMMON MODE VOLTAGE: 175V peak, any pin to chassis.

CONTACT LIFE: Cold Switching: 10⁸ closures.

At Maximum Signal Levels: 10⁵ closures.

CHANNEL RESISTANCE (per conductor): <1Ω.

OFFSET CURRENT: <100pA.

CONTACT POTENTIAL: 7013-C: <2μV per channel contact pair (HI, LO); <5μV per single contact. 7013-S: <2μV per contact pair (HI, LO); <5μV per single contact.

ACTUATION TIME: 3ms.

ISOLATION: Channel to Channel: >10¹⁰Ω, <25pF.

Differential: >10¹⁰Ω, <50pF. **Common Mode:** >10¹⁰Ω, <100pF.

CROSSTALK (1MHz, 50Ω Load): <-50dB.

INSERTION LOSS (50Ω Source, 50Ω Load): <0.1dB below 1MHz, <3dB below 10MHz.

RELAY DRIVE CURRENT (per relay): 16mA.

EMC: Conforms to European Union Directive 89/336/EEC.

SAFETY: Conforms to European Union Directive 73/23/EEC (meets EN61010-1/IEC 1010).

ENVIRONMENT: Operating: 0° to 50°C, up to 35°C <80% RH. **Storage:** -25°C to 65°C.

ACCESSORIES AVAILABLE

FOR 7013-C

- 7011-KIT-R 96-pin Female Connector Kit
7011-MTC-1 96-pin Mass Terminated Cable, Female to Female, 1m
7011-MTC-2 96-pin Mass Terminated Cable, Female to Female, 2m

FOR 7013-S

- 7013-ST Extra Screw Terminal Connection Board

SERVICES AVAILABLE

- 7013-C-3Y-EW 1-year factory warranty extended to 3 years from date of shipment
7013-S-3Y-EW 1-year factory warranty extended to 3 years from date of shipment

40-channel Solid State Multiplexer Cards Quad 1×10 Configuration

The Model 7015 40-channel solid state multiplexer is designed for multipoint measurement applications that require high reliability and increased scanning speeds. With an MTBF of more than 30,000 hours, the 7015 can handle applications that require continuous use over longer periods of time. The solid state switch technology also provides fast switching times for scanning rates of over 300 channels/measurements per second when used with the 7002/2001 or 7001/2001 combination.

MULTIPLEX CONFIGURATION: 4 independent 1×10 2-pole multiplex banks or 2 independent 1×10 4-pole multiplex banks. Adjacent banks can be connected together. Jumpers can be removed to isolate any bank from the backplane.

CONTACT CONFIGURATION: 2-pole Form A (Hi, Lo).

CONNECTOR TYPE:

7015-C: 96-pin male DIN connector.

7015-S: Screw terminal, #16AWG maximum wire size, with 0.092 inch O.D. 28 conductors per card maximum. #22AWG typical wire size with 0.062 inch O.D. 88 conductors per card maximum.

MAXIMUM SIGNAL LEVEL: 175V peak between any two pins, 34mA resistive load, 0.3VA max., 1×10⁹V-Hz max.

COMMON MODE VOLTAGE: 175V peak, any pin to chassis.

CONTACT TYPE: Solid state switch.

CHANNEL RESISTANCE (per conductor): <210Ω.

CONTACT POTENTIAL: 7015-C: <5μV per channel contact pair.

7015-S: <4μV per channel contact pair.

OFFSET CURRENT: <1nA.

ACTUATION TIME: <500μs.

ISOLATION: Bank: >10⁹Ω, <25 pF.

Channel to Channel: >10⁹Ω, <50 pF.

Differential: Configured as 1×10: >10⁹Ω, <100pF.

Configured as 1×40: >10⁹Ω, <200pF.

Common Mode: Configured as 1×10: >10⁹Ω, <375pF.

Configured as 1×40: >10⁹Ω, <1100pF.

INSERTION LOSS (50Ω Source, 1MΩ Load): <0.1dB below 250kHz, <3dB below 500kHz.

ACCESSORIES AVAILABLE

FOR 7015-C

- 7011-KIT-R 96-pin Female Connector Kit
7011-MTC-1 96-pin Mass Terminated Cable, Female to Female, 1m
7011-MTC-2 96-pin Mass Terminated Cable, Female to Female, 2m

SERVICES AVAILABLE

- 7015-C-3Y-EW 1-year factory warranty extended to 3 years from date of shipment
7015-S-3Y-EW 1-year factory warranty extended to 3 years from date of shipment

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