

# 7056



- 20- or 10-channel scanner configuration
- 1-pole in 20-channel mode, 2-pole in 10-channel mode
- Screw terminal connections on quick disconnect card

## Ordering Information

7056 General Purpose Scanner

# 7058



- Sub-pA offset current
- 10-channel scanner
- Maintains current path for unselected channel
- Triax connectors

## Ordering Information

7058 Low Current Scanner Card

### Accessories Supplied

7024-3 Low Noise Triax Cable, 0.9m (3 ft.)

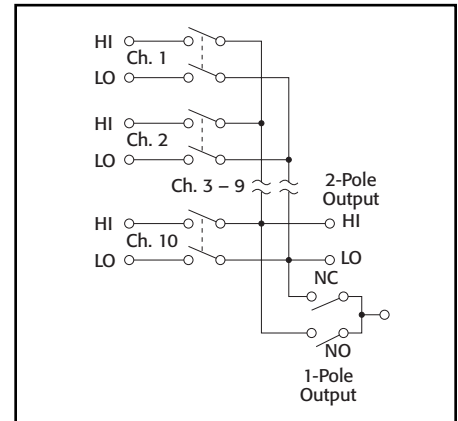
# General-Purpose Scanner Card

## Quick Disconnect

The Model 7056 is a 10-channel scanner card with electrical connection made through a quick disconnect screw terminal card (Model 7055). It is a cost-effective and versatile solution to relay switching applications. Each channel of the card has two Form A (SPNO) contacts. The switch can be wired for either 2-pole or 1-pole switching through the selection of the appropriate output. In 1-pole operation, channels HI and LO operate as independent, isolated inputs, thereby effectively doubling the number of input channels. In 20 channel mode, use as a one of 20 channel selector switch.

**CHANNELS PER CARD:** 10 in 2-pole mode, 20 in 1-pole mode.  
**CONTACT CONFIGURATION:** 2-pole Form A; includes quick disconnect card. HI or LO switched to a separate output for 1-pole mode. Common guard connection.  
**CONNECTOR TYPE:** Screw terminal, #18AWG maximum wire size. Terminals mounted on quick disconnect portion of 7056.  
**RELAY DRIVE CURRENT:** 24mA per relay typical.  
**MAXIMUM SIGNAL LEVEL:** 150V, 250mA, 10VA (resistive load only).  
**CONTACT LIFE:**  $>10^8$  closures cold switching;  $>10^7$  closures at maximum signal levels.  
**CONTACT RESISTANCE:**  $<2\Omega$  to rated life.  
**CONTACT POTENTIAL:**  $<100\mu\text{V}$  per contact pair input to output with copper leads ( $<50\mu\text{V}$  typical).

**ACTUATION TIME:**  $<2\text{ms}$ , exclusive of mainframe.  
**CHANNEL ISOLATION:**  $>10^9\Omega$ ,  $<20\text{pF}$  typical.  
**INPUT ISOLATION, DIFFERENTIAL:**  $>10^9\Omega$ ,  $<50\text{pF}$  typical.  
**INPUT ISOLATION, COMMON MODE:**  $>10^9\Omega$ ,  $<150\text{pF}$  typical.  
**COMMON MODE VOLTAGE:** 150V peak.  
**CHANNEL CROSSTALK:**  $<50\text{dB}$  @ 1MHz into 50 $\Omega$  load.  
**EMC:** Conforms to European Union Directive 89/336/EEC.  
**SAFETY:** Conforms to European Union Directive 73/23/EEC (meets EN61010-1/IEC 1010).  
**OPERATING ENVIRONMENT:** 0° to 50°C, up to 35°C at 70% RH.  
**STORAGE ENVIRONMENT:** -25°C to 65°C.



# Low Current Scanner Card

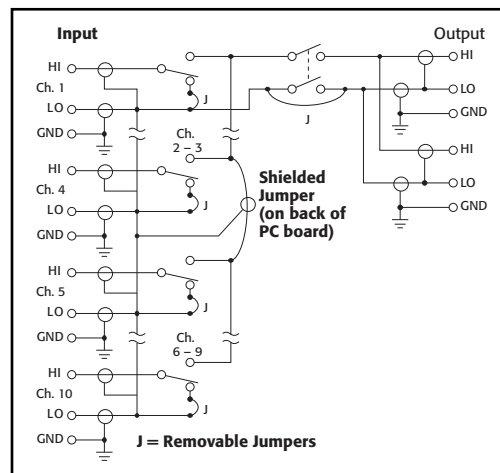
For optimum low-level current switching up to 10 channels, the Model 7058 is designed to introduce minimal offset current error (under 1pA), while guarding ensures that high isolation ( $10^{15}\Omega$ ) is maintained between input HI to input HI. Removable jumpers allow channels to be configured as voltage switches. Triaxial input connectors provide better shielding and permit direct connection to Keithley electrometers.

**CHANNELS PER CARD:** 10.  
**CONTACT CONFIGURATION:** Single pole, break-before-make for signal HI input. Signal LO is common for all 10 channels. When a channel is off, signal HI is connected to signal LO through an internal removable jumper.  
**CONNECTOR TYPE:** Two-lug triaxial.  
**RELAY DRIVE CURRENT:** 24mA per relay typical.  
**MAXIMUM SIGNAL LEVEL:** 200V, 100mA (resistive load only).  
**CONTACT LIFE:**  $>10^7$  closures cold switching;  $>10^6$  closures at maximum signal levels.

**CONTACT RESISTANCE:**  $<1\Omega$  to rated life.  
**CONTACT POTENTIAL:**  $<250\mu\text{V}$   
**ACTUATION TIME:**  $<15\text{ms}$ , exclusive of mainframe.  
**CHANNEL ISOLATION:**  $>10^{15}\Omega$ ,  $<0.1\text{pF}$  with internal jumper removed.  
**INPUT ISOLATION:**  $>10^{10}\Omega$ ,  $<50\text{pF}$  (Input HI to Input LO).  
**OFFSET CURRENT:**  $<10^{-12}\text{A}$  ( $<10^{-13}\text{A}$  typical).  
**COMMON MODE VOLTAGE:**  $<100\text{V}$  peak.

## ACCESSORIES AVAILABLE

7024-3	Low Noise Triax Cable, 3 ft.
7024-10	Low Noise Triax Cable, 10 ft.
7025-10	Low Noise Triax Cable with one end unterminated, 10 ft.



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