

MicroMuxa

# MICRO MULTIPLEXER, MACRO PERFORMANCE

# **Key Features**



#### COST-EFFECTIVE

Channel expansion with 2-wire (8-channel) or 4-wire (4-channel) switching

#### LIGHTNING PROTECTION

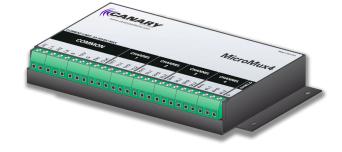
Transient protection on power and control inputs

# COMPATIBLE

Compatible with numerous control modules and a wide range of instruments

# EFFICIENT

Very low operating and quiescent power



The **MicroMux4** is designed to expand the number of instruments that can be read by a compatible Automatic Data Acquisition System (ADAS). It supports two switching modes, 4-channel by 4-wire switching, or 8-channel by 2-wire switching. An internal switch configures the switching mode.

The use of low contact resistance relays means almost universal instrument support, a high degree of lightning protection on the control lines, and virtually infinite channel isolution. The MicroMux4 is compatible with a **wide range of instruments**, including vibrating wire, resistance strain gage, thermocouples, linear potentiometers, and 4-20 mA, among others.

Two control inputs activate the **MicroMux4** and then advance through the channels. Logic levels for either the enable or clocking input can utilize 5 V to 12 V logic input, with a maximum input of 16 V. The control inputs are compatible with a wide variety of control modules including those manufactured by Campbell Scientific<sup>™</sup>, Sutron<sup>™</sup> and Datataker®.

Transient protection in the form of plasma surge arrestors on the control inputs provides high reliability from electrical transients, whether ESD or



lightning. The power inputs are also equipped with transient protection and reverse-polarity protection.

All components, such as terminal blocks, relays, and flash microcontroller, have been selected for ultra-high reliability and function, helping ensure

Configure Multiplexers				x
MUX 1 ^ 2	] —	😵 Model: Gage Type:	CAN MicroMux VWDSP	<b>~</b>
2 3 4 5 6 7 8 ✓		and the second s	Channels: Wires: Enable: Clock:	4 v C1 v
? Help 🖌 Accept 🗶 Cancel				

*MicroMux4 configuration form as presented in Canary Systems'* MultiLogger® software suite

years of reliable and trouble-free operation in demanding environments that may include high heat, humidity, and/or dust.

The MicroMux4 is covered by our standard Limited Warranty for a period of 2 years from the ship date. It may be packaged directly in the Automatic Data Acquisition System (ADAS) enclosure, or installed in a variety of standard enclosures. Contact Canary Systems for enclosure and cable entry options.

**Physical** 

• Dimensions (L×W×H)

• -40 to +85 °C (-40 to +185 °F)

• 165 × 85 × 25 mm

• Operating Temp

# Specifications - MicroMux4 Multiplexer

#### General

- Power Requirements
- 9-16 VDC (unregulated)
- Quiescent Current
- < 0.1  $\mu$ A (Mux Not Enabled)
- Channel Activated Current (2-wire)
- 42 mA
- Channel Activated Current (4-wire)
- 42 mA Control Line Input Impedance
- <10 KΩ</li>
- Control Line Input Levels
- 5 V thru 12 V (16 V max)

#### **Relays**

- Contact Isolation Voltage
- 1500 V
- Relay Contact Type
- Gold-clad silver alloy
- Relay on Resistance
- 50 mΩ
- Relay Coil Resistance
- 1,028 Ω
- Relay Operate Time
- ~2 ms
- Relay Release Time
- ~1 ms
- Relay Max Switching Voltage
- 125 VAC, 110 VDC • Relay Max Switching Current
- 2 A
- Relay Mechanical Life
- Minimum 108 Cycles

Campbell Scientific™ is a trademark of Campbell Scientific, Inc. Sutron™ is a trademark of the Sutron Corportation. Datataker® is a registered trademark of Datataker P/L.

