

## Specifications

Number of Resistance Channels:	Two.
Type Resistors:	Two sets of programmable resistors, each set consisting of twelve (12) ¼ watt, twenty turn cermet potentiometers.*
Minimum Resistance Step:	Variable from 10 ohms to 100 ohms.*
Maximum Resistance Output:	Adjustable from 40,950 to 409,500 ohms.*
Maximum Input Voltage:	30 V <sub>RMS</sub> , 42.2 V <sub>p-p</sub> , 60 V DC.
Resistance Resolution:	Variable for 10 ohms to 100 ohms.*
Standard Step Size:	100 ohm minimum step size, factory calibration.
Resistance Accuracy: **	Variable resistors: $\pm 0.3$ ohms $\pm 1\%$ of programmed value, 10 ohms steps. $\pm 0.3$ ohms $\pm 0.3\%$ of programmed value, 100 ohm steps.
Resistance Differential Linearity:	Variable resistors, $\pm 0.015$ ohms $\pm 2\%$ of programmed value, 10 ohms steps. $\pm 0.015$ ohms $\pm 0.6\%$ of programmed value, 100 ohm steps.
Resistance Temperature Coefficient:	$\pm 0.01\%$ of programmed value per degree C.
VXIbus Compatibility:	Fully compatible with the VXIbus Specification 1.3 for message-based instruments with the Halt switch in the ON position. The module meets or exceeds all VXIbus power, cooling, emissions and susceptibility specifications.
VXI Device Type:	VXI message based instrument.
VXI Protocol:	Word serial.
VXI Card Size:	C size, one slot wide.

\* Standard values. Fixed or variable resistors of the user's choice may be substituted.

\*\* Resistance accuracies assume a known offset resistance value and compensation for that offset value in programming. If no programming compensation is performed, add  $\pm 2.5$  ohms to the accuracy specification.

Module-Specific Commands:	All module-specific commands and data are sent via the VXibus Byte-Available command. All module-specific commands are made up of ASCII characters. Module-specific data may be in either ASCII or binary format.
VMEbus Interface:	Data transfer bus (DTB) slave - A16, D16 only.
Interrupt Level:	Switch selectable, levels 1 (highest priority) through 7 (lowest).
Interrupt Acknowledge:	D16; lower 8 bits returned are the logical address of the module.
VXibus Protocol Events Supported:	VXibus events are returned via VME interrupts. The following events are supported and returned to the VX4342 Module's commander:  REQUEST TRUE (In an IEEE-488 system, this interrupt will cause a Service Request (SRQ) to be generated on the IEEE-488 bus.)
VXibus Registers:	ID Device Type Status Control Protocol Response Data Low See Appendix A for definition of register contents.
ID Register Contents:	FFFC (Colorado Data Systems' manufacturer's ID)
Power Requirements:	All required dc power is provided by the power supply in the VXibus mainframe.
Voltage:	+ 5 Volt supply: 4.75 V dc to 5.25 V dc.
Current (Peak Module, $I_{PM}$ ):	+ 5 Volt supply: 2.1A
Current (Dynamic Module, $I_{DM}$ ):	+ 5 Volt supply: 1.79 APP
Fuses:	Replacement fuse: Littlefuse P/N 273004
Cooling:	Provided by the fan in the VXibus mainframe. The module will have a temperature rise of 10°C with 1.5 liters/sec of air and a pressure drop of 0.03 mm of H <sub>2</sub> O.

Temperature, Ambient:	0°C to +50°C, operating. -40°C to +85°C, storage.
Humidity:	Less than 95% R.H. non-condensing, 0°C to +30°C. Less than 75% R.H. non-condensing, -30°C to +40°C. Less than 45% R.H. non-condensing, -40°C to +50°C.
VXI Bus Radiated Emissions:	Complies with the VXIbus Specification.
VXI Bus Conducted Emissions:	Complies with the VXIbus Specification.
Module Envelope	
Dimensions:	VXI C size. 262 mm x 353 mm x 30.5 mm (10.3 in x 13.9 in x 1.2 in)
Dimensions, Shipping:	When ordered with a Tek/CDS mainframe, this module will be installed and secured in one of the instrument module slots (slots 1 - 12). When ordered alone, the module's shipping dimensions are: 406 mm x 305 mm x 102 mm. (16 in x 12 in x 4 in).
Weight:	1 kg (2.2 lb).
Weight, Shipping:	When ordered with a Tek/CDS mainframe, this module will be installed and secured in one of the instrument module slots (slots 1 - 12). When ordered alone, the module's shipping weight is: 3.13 kg (3.5 lb).
Mounting Position:	Any orientation.
Mounting Location:	Installs in an instrument module slot (slots 1-12) of a C or D size VXIbus mainframe. (Refer to D size mainframe manual for information on required adapters.)
Front Panel Signal Connectors:	9 pin DE-9P connector (pins). Refer to Appendix B for connector pinouts.
Recommended Cable:	73A-719S Data Cable.
Equipment Supplied:	1 - VX4342 Module.
Optional:	73A-719S Analog Cable or 73A-784S Hooded Connector. Option 1M - MATE TMA.
Software Version:	V3.4