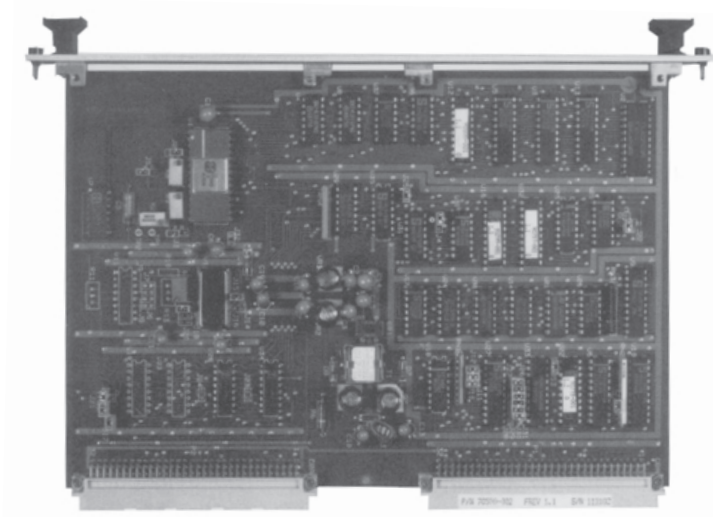
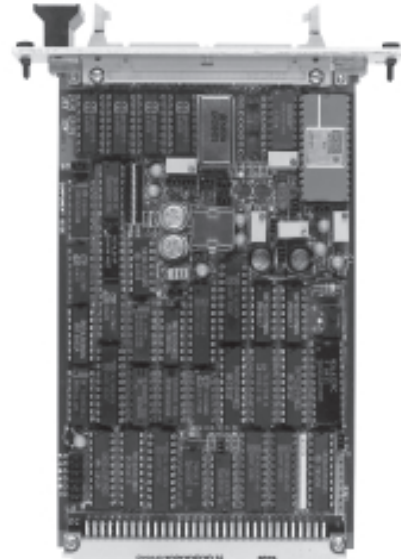


XVME-500/590

Analog Input Modules



XVME-590



XVME-500

Features

- 16 SE/8 DI analog input channels (expandable to 32 SE/16 DI)
- 12-bit resolution
- Bipolar or unipolar input ranges
- High-speed option
- Compatible with Analog Devices signal conditioning equipment

Applications

- Process control
- Machine control
- Temperature measurement
- Signal processing

Overview

The XVME-500 is a complete, single-high, VMEbus-compatible analog input module, capable of performing 12-bit A/D conversions on up to 32 different input channels.

Each module comes standard with two 8-channel multiplexers which can be configured for 16 single-ended, 16 pseudo-differential, or 8 differential analog inputs. Two additional 8-channel multiplexers can be installed, using Xycom Automation's XVME-910 channel expansion kit.

The XVME-500 supports unipolar and bipolar inputs. Voltage ranges include 0-10V, $\pm 5V$, and $\pm 10V$. Resistor-selectable gain ranges from 1 to 1000.

For applications not allowing I/O to be routed out the front panel, the XVME-590 offers the same functionality as the XVME-500. In a 6U form factor, the I/O is routed via the VMEbus P2 connector on the back of the board.

Hardware Specifications

Number of Channels

Single-ended	16 (32 optional)
Differential	8 (16 optional)

A/D Input Full-Scale Voltage Ranges

Unipolar	0-10 V
Bipolar	±5 V and ±10 V

Resistor-Selectable Gain (XVME-500/1)

1, 10, 100, 1000 (on-board) or user-installed resistor

Programmable Gain (XVME-500/2 and XVME-500/3)

Range 1	1, 2, 5, or 10
Range 2	4, 8, 20, or 40
Range 3	10, 20, 50, or 100

Maximum Input Voltage 20 V

Accuracy

Resolution	12 bits
Linearity	±0.5 LSB
Differential linearity	±0.5 LSB
Monotonicity	Guaranteed

Input Impedance 10 M ohm, min.

Operating Common Mode Voltage 14 V

Common Mode Rejection Ratio 60 db, min.

Throughput 20 KHz

Electrical Specifications

Supply voltage	+5V, ±5%
Supply current	1.9 A, max / 1.6 A, typ.

Environmental Specifications

Temperature

Operating	0° to 65° C (32° to 149° F)
Nonoperating	-40° to 85° C (-40° to 185° F)

Humidity

20% to 80% RH, non-condensing

Altitude

Operating	Sea level to 10,000 ft. (3048 m)
Nonoperating	Sea level to 40,000 ft (12192 m)

Vibration

Operating	5 to 2000 Hz .015" (.38 mm) peak-to-peak displacement 2.5 g (maximum) acceleration
Nonoperating	.030" (.76 mm) peak-to-peak displacement 5.0 g (maximum) acceleration

Shock

Operating	30 g peak acceleration 11 msec duration
Nonoperating	50 g peak acceleration 11 msec duration

VMEbus Compliance

- Complies with VMEbus specification, IEEE 1014
- A16:D16/D08(E0) DTB Slave
- Interrupter - I(1)-(I7)(STAT), ROAK
- Interrupt Vector - D08(O)(DYN)
- Form factor (XVME-500) - SINGLE
6.5" × 3.94" (165.1 mm × 100.01 mm)
- Form factor (XVME-590) - DOUBLE
9.2" × 6.3" (233.35 mm × 160 mm)

Warranty Information

The XVME-500 and XVME-590 carry a two-year parts and labor warranty.

Ordering Information

XVME-500/1: 16 SE/8 DI Channel Analog Input
XVME-500/4: 32 SE/16 DI Channel Analog Input
XVME-590/1: 6U XVME-500/1 with I/O out the P2 Connector

XYCOM AUTOMATION, INC.

750 North Maple Road
Saline, Michigan 48176-1292
Phone: (734) 429-4971
FAX: (734) 429-1010

Call toll-free: 1-800-AT-XYCOM
<http://www.xycomautomation.com/>

XYCOM CANADA, INC.

461 North Service Road West, Unit B36
Oakville, Ontario L6M 2V5 Canada
Phone: (905) 825-0281
FAX: (905) 825-0282

XYCOM AUTOMATION LTD.

NORTHERN EUROPE
21 Tenter Road, Moulton Park
Northampton NN3 6AX England
Phone: +44-1604-790-767
FAX: +44-1604-790-722

XYCOM AUTOMATION S.r.L.

SOUTHERN EUROPE
Via Chambery 93/107/U
10142 Torino, Italy
Phone: 39-011-770-5311
FAX: 39-011-770-53270