

IHVM-4

4-Channel Isolated High Voltage Module for Daxus® DXS-100 and SmartCorder® DDX-100 Data Acquisition Systems

MODULE OVERVIEW

The IHVM-4 is a high voltage input module for the AstroNova Daxus® DXS-100 and SmartCorder® DDX-100 data acquisition systems. The IHVM-4 is ideal for high voltage measurements at up to 200 KS/s.



IHVM-4 Daxus



IHVM-4 SmartCorder

MODULE HIGHLIGHTS

- **4 high voltage inputs (up to 1,000 V)**
- **Multiple input ranges provide maximum resolution**
- **Simultaneous sampling at up to 200KS/s/ch**
- **16-bit Resolution**
- **Built-in counter and timer functions**

ORDERING INFORMATION

For the ISEV-4 High Speed Isolated Voltage Input Module

SYSTEM	PART NO.
Daxus® DXS-100	32950030
SmartCorder® DDX-100	32950630

POPULAR ACCESSORIES

ITEM	PART NO.	DESCRIPTION
GL-40	13442000	General Use Lead Set contains 2 each — probe handles, right angle to straight plug test lead, test clips, and medium alligator clips (1 red, 1 black)
LC-40	13441003	1 pair of test leads / clips (1 red, 1 black)
LC-40S	13441201	Test Leads/Spades pair of test leads with spade connector for # 8 screw
CLM-420A	26487100	4 to 20 mA Current Loop Adaptor for current loop measurements
SL261	24661201	Current Probe reads AC or DC current, 100 A maximum
MR411	24661200	Current Probe reads AC or DC current, 600 A maximum
MR521	24661100	Current Probe reads AC or DC current, 1500 A maximum
MN255	24661300	Current Probe reads AC current, 240 A maximum
SR759	24661400	Current Probe reads AC current, 1200 A maximum

IHVM-4 SPECIFICATIONS

INPUTS	
Input Channels Per Module	4
Viewable Channels Per Module	16 (includes processed math channels)
Connector	Guarded banana jacks (red/black)
Input	Differential, DC coupled
Bandwidth	35 KHz (-3dB)
Rated Isolation	600 VRMS or DC, Cat III (channel to chassis and other channels), 1000 VDC, Cat II (channel to chassis and other channels)
Sample Rate	200 kS/s/ch
A/D	16 bit SAR (one per channel)
Anti-Aliasing Filter	4 pole Bessel
Cold Start Drift	< 0.02% att + .02% span (60 min.)
Off Ground Measurements	Yes
Zero Suppression	Yes, digital.
Attenuator Ranges	40, 200 and 1000 Volt
Measurement Ranges	± 1000 V (1000 VFS or 2000 VFS w/ zero offset), ± 200 V (200 VFS or 400 VFS w/ zero offset), ± 40 V (40 VFS or 80 VFS w/ zero offset.)
Minimum Span	2VFS
Max Rated Input	600 Vrms or DC, Cat III, 1000V DC, Cat II
DC Accuracy (25°C)	± 0.06% of attenuator
Overshoot	< 0.25%
Intrinsic Noise (pk-pk)	< 0.18% of attenuator + .05% of span (40V att), < 0.045% of attenuator + .02% of span (200V att), < 0.015% of attenuator + .025% of span (1000V att)
IMR at 60 Hz	Better than -70 dB
Crosstalk	Better than -80 dB
Min Input Impedence	> 10 Megohm
COUNTER TIMER FUNCTIONS	
Frequency Counter Capability	Yes, all channels. Software selectable.
Counter Modes	Gated time frequency counter, cycle based frequency counter, pulse event counter, gated pulse event counter, quadrature counter, pulse width detector, period width detector, duty cycle detector, edge separation detector.
Frequency Ctr Range (Menu)	Up to 80 KHz
Frequency Ctr Range (Spec'd)	2 – 30 KHz
Frequency Ctr Accuracy	± 0.07% of Measurement + .002 Hz
Min Counter Input Amplitude	25% of span for freq and pulse counters, 90% of span for all other modes
Pulse Counter Range	4000000000 maximum. (16 bit display resolution)
Pulse Width Accuracy	.002% of measurement + .00167% of span + 0.7 µs
Pulse Width Range	25 µs – 2500000
Edge Separation Accuracy	.002% of measurement + .00167% of span + 0.7 µs
Edge Separation Range	25 µs – 5000000 µs
Period Width Accuracy	.001% of measurement + .00167% of span + 0.7 µs
Period Width Range	25 µs – 100000 µs (10 Hz – 30 KHz)
Duty Cycle Accuracy	.5% (Inputs in the 1 Hz - 5 KHz range with 5% - 95% duty cycles)
Counter Timebase	50 MHz

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