

ISEV-4

4-Channel Isolated Voltage Input Module for DAXUS® DXS-100,
SmartCorder® DDX-100 and Everest® EV-5000 Data Acquisition Systems

MODULE OVERVIEW

The ISEV-4 input module provides 4 isolated voltage inputs with double banana connectors.



ISEV-4 for Daxus® DXS-100



ISEV-4 for SmartCorder® DDX-100

MODULE HIGHLIGHTS

- **4 high voltage inputs**
(250 Vrms or ± 400 V DC)
- **Simultaneous sampling at up to 200kS/s/ch**
- **Full 16-bit resolution over the selected input range**
- **0.04% accuracy (10V, 20V and 40V attenuators)**
- **250 VRMS or DC Cat II Rated Isolation**
- **Built-in counter and timer functions**

ORDERING INFORMATION

For the ISEV-4 High Speed Isolated Voltage Input Module

SYSTEM	PART NO.
Daxus® DXS-100	32950005
SmartCorder® DDX-100/Everest® EV-5000	32950605

POPULAR ACCESSORIES

ITEM	PART NO.	DESCRIPTION
GL-40	13442000	General use test lead set
LC-40	13441003	1 pair of test leads / clips (1 red, 1 black)
ADP-4810	25765000	High voltage probe for up to 1,000 Vrms

ISEV-4 SPECIFICATIONS

ANALOG INPUTS	
Channels Per Module	4
Connector	Guarded banana jacks (red/black)
Input	Single-ended, AC/DC coupled
Bandwidth	40 KHz (-3dB)
Sample Rate	200 KHz
Rated Isolation	250 VRMS or DC, Cat II (iso-common to chassis and other iso-commons)
A/D	16 bit SAR (one per channel)
Anti-Aliasing Filter	4 pole Bessel
Cold Start Drift	< 0.1% of attenuator (60 min.)
AC Coupled 3dB Point	< 0.54 Hz
Off Ground Measurements	Yes
Zero Suppression	Yes, digital.
Attenuator Ranges	1, 10, 100, 200 and 400 Volt
Measurement Ranges	± 400 V (400 VFS or 800 VFS w/ zero offset) ± 200 V (200 VFS or 400 VFS w/ zero offset) ± 100 V (100 VFS or 200 VFS w/ zero offset) ± 10 V (10 VFS or 20 VFS w/ zero offset) ± 1 V (1 VFS or 2 VFS w/ zero offset. 0.1V min span)
Max Rated Input	250 Vrms or DC, Cat II
Max Transient Input	± 800 V peak (not to exceed 250Vrms)
DC Accuracy (25°C)	$\pm 0.06\%$ of attenuator
Overshoot	< 0.25%
Intrinsic Noise (pk-pk)	$< 0.02\%$ of attenuator + .02% of span (400V through 10V atts) $< 0.16\%$ of attenuator + .02% of span (1V att)
IMR at 60 Hz	Better than -85 dB
Min Input Impedance	> 1 Megohm
COUNTER TIMER	
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 – 40 KHz
Frequency Ctr Accuracy	$\pm 0.07\%$ 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 μ s
Pulse Width Range	25 μ s – 2500000
Edge Separation Accuracy	.002% of measurement + .00167% of span + 0.7 μ s
Edge Separation Range	25 μ s – 5000000 μ s
Period Width Accuracy	.001% of measurement + .00167% of span + 0.7 μ s
Period Width Range	25 μ s – 100000 μ s (10 Hz – 40 KHz)
Duty Cycle Accuracy	.5% (Inputs in the 1 Hz - 5 KHz range with 5% - 95% duty cycles)
Counter Timebase	50 MHz

World Headquarters
 600 East Greenwich Ave
 West Warwick, RI 02893 USA
 Toll-Free: 877-867-9783
 Tel: +1-401-828-4000
 daq@astronovainc.com
 tm.astronovainc.com

China
 Part D, Building No. 3 Plot Section
 No. 81 Meiyue Road
 Pilot Free Trade Zone
 (Shanghai) 200131
 Tel: +86 21 5868 3687
 tm.astronovainc.cn

European Headquarters
 Waldstrasse 70
 63128 Dietzenbach
 Deutschland
 Tel: +49 (0) 6074-31025-00
 tm.astronovainc.de