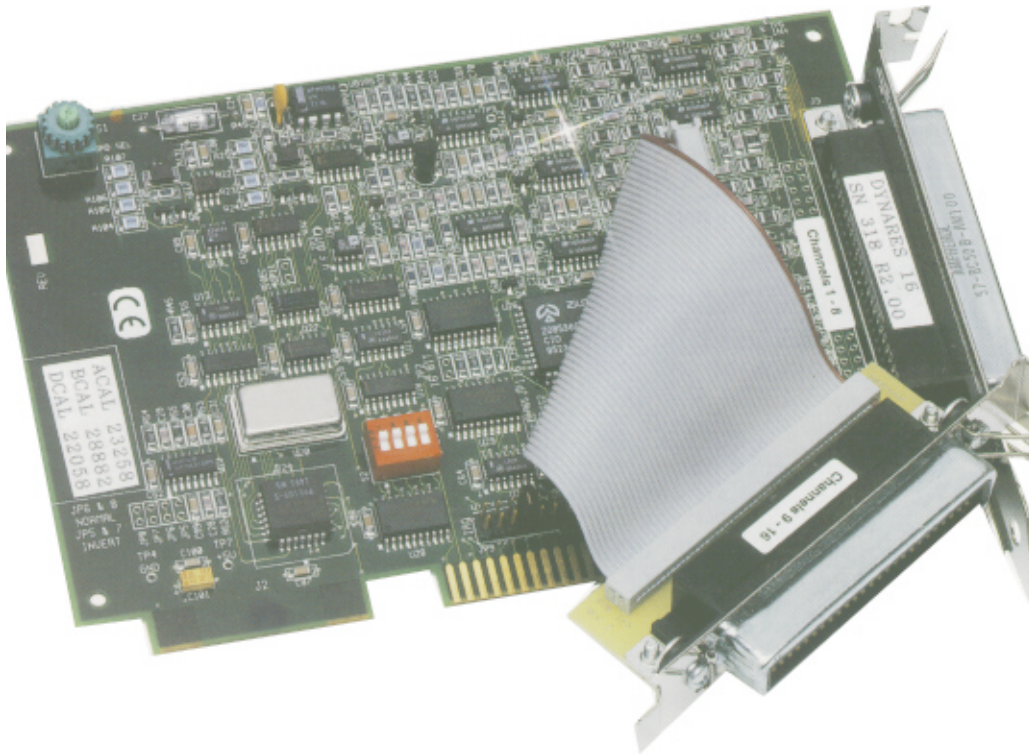


# WB-DYNARES Boards



50 mv up to 10V (unipolar or bipolar). Digital outputs are also selected as inputs or outputs for any channel via software. Analog inputs are protected up to 50 Volts continuous, 150 volts momentary.

The WB-DYNARES boards can provide precise measurement of thermocouples. Eleven thermocouple types are supported. When used for thermocouple measurement a special version of the WB-DYNARES boards (with -TC suffix) should be used. These boards include factory calibrated terminal panels which can be used to read thermocouples, millivolts or volts.

All WB-DYNARES boards are shipped with Quicklog PC data acquisition software. Quicklog PC is a 20 icon version of WorkBench PC described in the software section of the catalog. For a more comprehensive off-the-shelf software solution, the WB-DYNARES boards are also compatible with WorkBench PC and WorkBench for Windows.

**\$695**  
Basic Unit

- ✓ 900 to 1700HZ Conversion Rate
- ✓ 12-bit to 20-bit Resolution
- ✓ 8 or 16 Analog Inputs
- ✓ 8 or 16 Digital I/O Lines
- ✓ 1 Counter/Timer

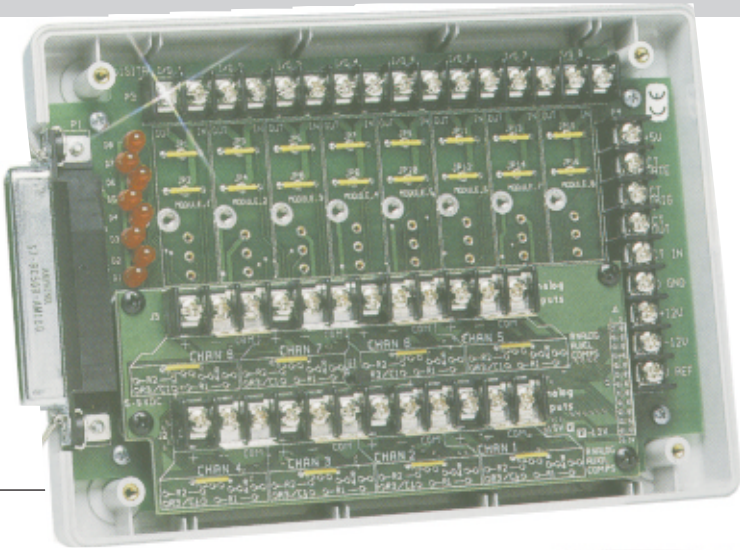
The DYNARES family of high accuracy, low noise, ISA-bus data acquisition boards provide the most accurate measurements for a broad range of signals of any plug-in board on the market today! They incorporate a unique Voltage-to-Frequency (VTF) converter, renowned for its exceptional noise rejection, high resolution, and long-term stability.

WB-DYNARES boards incorporate dynamic resolution, whereas the resolution improves as the signal decreases. Enjoy resolution that is 10 times better than conventional 12 bit and 16 bit boards at 1/10 of full

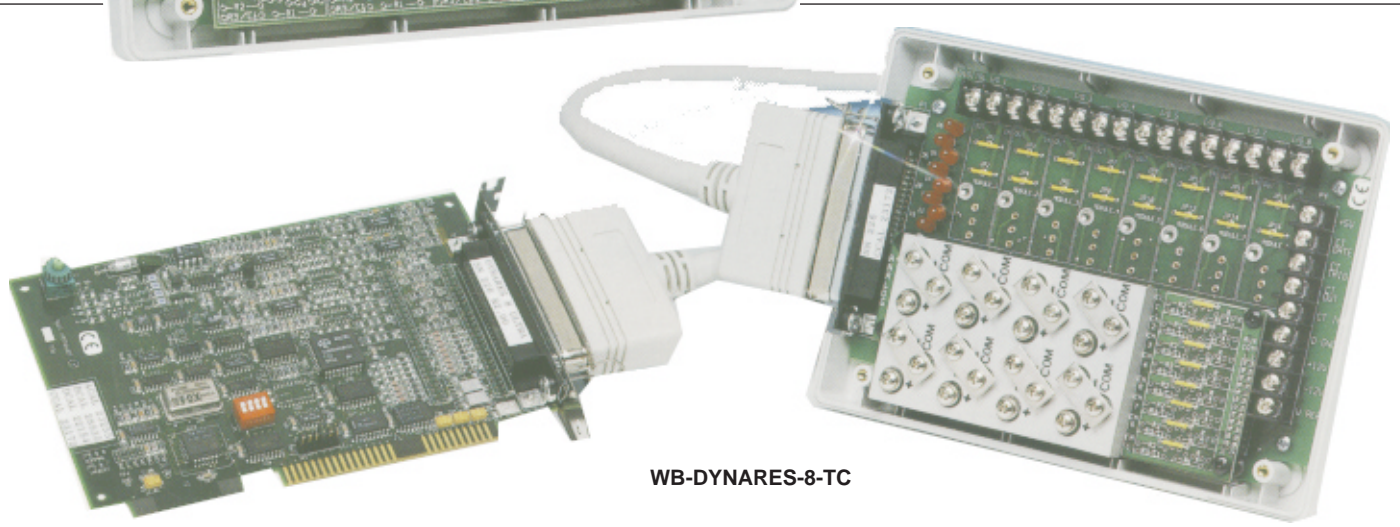
scale. It uses a low-noise integrating converter with two microvolts noise, and can sample at 60 or 50 Hz to virtually eliminate power line frequency noise. Six gain ranges are software selectable for any channel, and any combination from

To Order (Specify Model Number)		
Model Number	Price	Description
WB-DYNARES-8-ULTRA	\$1195	8 channel high resolution board requires one terminal panel
WB-DYNARES-16-ULTRA	1795	16 channel high resolution board requires two terminal panels
WB-DYNARES-8	695	8 channel board, requires one terminal panel
WB-DYNARES-16	1195	16 channel board, requires two terminal panels
WB-DYNARES-8-ULTRA-TC	1594	WB-DYNARES-8-ULTRA board with one terminal panel for thermocouple and voltage measurement
WB-DYNARES-16-ULTRA-TC	2593	WB-DYNARES-16-ULTRA board with two terminal panels for thermocouple and voltage measurement
WB-DYNARES-8-TC	1094	WB-DYNARES-8 board with one terminal panel for thermocouple and voltage measurement
WB-DYNARES-16-TC	1993	WB-DYNARES-16 board, includes two terminal panels for thermocouple and voltage measurement

Each WB-DYNARES board includes a complete user's manual and Quicklog PC data acquisition software.



WB-T71-GP  
Terminal Panel



WB-DYNARES-8-TC

**Digital I/O:**

WB-DYNARES-8 &  
WB-DYNARES-8-ULTRA: 8 I/O  
WB-DYNARES-16 &  
WB-DYNARES-16-ULTRA: 16 I/O

Each channel individually selectable through software as input or output; outputs are open collector and will drive up to 30 Vdc @ 50 mA inputs are TTL compatible

**Counter/Timer:** 16 bit, up to 2 MHz

**Operating Temperature:** 0 to 50°C

**Power:** 1.9 W

**Terminal Panels**

Model Number	Price	Description
WB-T71-GP	\$249	Voltage/millivolt terminal panel with plastic enclosure and cables
WB-T71-RTD-50K	329	RTD Terminal Panel with plastic enclosure and cable

*Ordering example: WB-DYNARES-8 board with WB-T71-GP terminal panel, \$695 + \$249 = \$944.*

**Resolution and Scan Time**

Mode	WB-DYNARES		WB-DYNARES ULTRA	
	Effective Resolution	Scan Rate	Effective Resolution	Scan Rate
Low Noise	18 bit	60/50 Hz	18 to 20 bit	60/50 Hz
Normal	12 bit to 15 bit	1200 Hz	16 to 19 bit	200 Hz
Fast	10 bit to 13 bit	1700 Hz	12 to 15bit	900 Hz

**Accuracy and Noise Rejection**

	WB-DYNARES					WB-DYNARES ULTRA				
	Resolution at Full Scale	Resolution at 10% of Scale	Accuracy (the larger of)		Internal Noise (RMS)	Resolution at Full Scale	Resolution at 10% of Scale	Accuracy (the larger of)		Internal Noise (RMS)
			% Range	% Rdg				% Range	% Rdg	
-5 to 50 mV	12 µV	1.2 µV	0.08%	–	1 µV	0.8 µV	0.08 µV	0.04%	–	.5 µV
-25 to 25 mV	12 µV	1.2 µV	0.16%	–	1 µV	0.8 µV	0.08 µV	0.08%	–	.5 µV
-50 to 500 mV	120 µV	12 µV	0.05%	0.2%	5 µV	8 µV	0.8 µV	0.01%	0.05%	2.5 µV
-250 to 250 mV	120 µV	12 µV	0.05%	0.2%	5 µV	8 µV	0.8 µV	0.01%	0.05%	2.5 µV
-1 to 10 V	2.4 mV	0.24 mV	0.05%	0.2%	100 µV	150 µV	15.0 µV	0.01%	0.05%	50 µV
-5 to 5 V	2.4 mV	0.24 mV	0.05%	0.3%	100 µV	150 µV	15.0 µV	0.01%	0.10%	50 µV