The WBK10A provides seamless expansion of eight voltage channels on any WaveBook system. The WBK10A integrates automatically into existing systems for effortless expansion without compromising throughput or timing.

WBK10A functions as an integral part of the WaveBook data acquisition system, taking full advantage of its scan sequencer to control channel gains over all channels. As a result, all expansion channels can be randomly accessed and are available to contribute to multi-channel triggering.

Like the WaveBook, the WBK10A can operate from a standard AC line, an optional rechargeable battery supply, a 12V car battery, or any 10 to 30 VDC supply.

The WBK10A has a small form factor, letting you expand your system without expanding your space requirements.

Features
- Adds eight differential voltage input channels to the WaveBook
- Operates from 10 to 30 VDC
- Accepts one WBK11/HR, WBK12A, or WBK13A low-pass filter & simultaneous sample and hold option

The WBK10A adds eight differential analog inputs to your WaveBook system

Specifications (18 to 28 °C)
- Warm-up: 30 minutes to rated specifications
- Environment
  - Operating: 0 to 50 °C; 0 to 95% humidity, non-condensing
  - Storage: -20 to +70 °C
- Power: 0.35A @ 15V
- Dimensions: 285 mm W x 220 mm D x 35 mm H
  (11" x 8.5" x 1.375")
- Weight: 1.3 kg (2.8 lbs)
- Connector: BNC
- Channels: 8 differential
- Maximum Overvoltage: 35 VDC
- Ranges: Fully software selectable
  - Unipolar: 0 to ±10V, 0 to +5V, 0 to +2V, 0 to +1V
  - Bipolar: ±10V, ±5V, ±2V, ±1V, ±0.5V
- Input Bandwidth: DC to 500 kHz
- Input Impedance: 5M Ohm (single-ended); 10M Ohm (differential) in parallel with 30 pF
- Total Harmonic Distortion: -84 dB (DC to 20 kHz)
- Anti-Alias Filter
  - Type: 5 pole Butterworth; 20 kHz low pass software enabled*
  - Power: 0.35A @ 15V

Accuracy & Noise

<table>
<thead>
<tr>
<th>Range</th>
<th>Accuracy</th>
<th>Noise (rms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10V</td>
<td>±0.01% reading, ±2 ppm range</td>
<td>3 LSB</td>
</tr>
<tr>
<td>0 to 2V</td>
<td>±0.01% reading, ±1 ppm range</td>
<td>3 LSB</td>
</tr>
<tr>
<td>0 to 1V</td>
<td>±0.01% reading, ±1 ppm range</td>
<td>3 LSB</td>
</tr>
<tr>
<td>±10V, ±5V, ±2V, ±1V, ±0.5V</td>
<td>±0.01% reading, ±0.009% range</td>
<td>3 LSB</td>
</tr>
<tr>
<td>±1V</td>
<td>±0.01% reading, ±2 ppm range</td>
<td>3 LSB</td>
</tr>
<tr>
<td>±0.5V</td>
<td>±0.01% reading, ±1 ppm range</td>
<td>3 LSB</td>
</tr>
</tbody>
</table>

* See WBK12A or WBK13A for other filter options

Ordering Information
- Description: 8-channel expansion module including AC adapter and cables
- Part No.: WBK10A

Accessories & Cables
- Rack mount kit: RackDBK2
- 5-pin male DIN to 5-pin male DIN provides convenient connection between WaveBook power input connectors and DBK30A (also used to daisy-chain input power to expansion modules): CA-115
- CE Compliant Cables
  - 1 male BNC to male BNC: CA-150-1
  - 8 male BNC to male BNC: CA-150-8

Product Compatibility
- ✔ WaveBook

* ✔ See WBK12A or WBK13A for other filter options