SYDOR

TECHNOLOGIES



INFINITION JUNCTION BOX (JB-6e)

COMPLEX MEASUREMENTS—CRITICAL RESULTS

FEATURES

- Buffer system enables reliable processing and data transfer for long periods of time
- Easy to use interface
- Compact design
- Conditions signals & transfers data for up to 2 radars simultaneously

APPLICATIONS

- Ballistic Armor Testing
- Ballistic Gel Testing
- Impact Testing for Body Armor
- Trejectory Tracking

ABOUT THE INFINITION JUNCTION BOX (JB-6e)

The JB-6e Junction Box is designed to provide a simple, compact and reliable solution to interfacing various instrumentation Doppler radars without compromising performance. At the heart of the JB-6e is a powerful MCU-FPGA system combined with a two channel 2.5 MHz, 16-bit A/D that provides outstanding performance and flexibility. The JB-6e performs signal conditioning, sampling and transfer over a 100 Mbps Ethernet link of up to two radar signals simultaneously. By using an internal ~32 MB FIFO buffer, the JB-6e can reliably process and transfer data for long periods of acquisition without compromising data integrity.

One of the main objectives targeted by the JB-6e is to provide a simpler and lower cost solution. This objective is fulfilled in two ways. First, a small and robust enclosure makes the JB-6e easily carried around without being cumbersome, while offering the essential connection possibilities for acquisition hardware. Data transfer is implemented using a standard 100 Mbps Ethernet interface allowing the JB-6e to be used without any dedicated data acquisition hardware and therefore usable with any type of computer including laptops, independently of the operating system. The Ethernet connectivity also allows the end-user to make the JB-6e accessible through a wireless network if desired.

The internal MCU-FPGA system used by the JB-6e can also be programmed to any specific task that your experiments may require. Should you need to perform any specific digital processing, please let us know and we will be pleased to assist.

PRODUCT SPECIFICATIONS

- ADC Resolution: 16-bit
- Signal Memory: 30 MBytes
- Connectivity Doppler: Ethernet 100 Mbit/s
- Antenna Inputs: 2 Differential (± 10 Vpp max, analog)
- Trigger Input: 1 Analog Standard (± 10 Vpp max, analog)
- Trigger Output: 1 TTL
- Operating Temp: +10 to +40 degC
- Supply: 115 Vac 60 Hz 1.0 A (North American Model); 2330 Vac 50 Hz 0.5 A (European Model)
- Dimension: 10 cm x 37 cm x 32 cm
- Weight: 5.2 kg
- Approvals: Pending

INFINITION

Sydor Technologies is a proud distributor for Infinition

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