



DaqBook/2000[®] Series

Ethernet-Based Portable Data Acquisition

Models /2001, /2005, & /2020



Features

- Analog input, analog output, frequency input, timer output, and digital I/O; all in one compact and portable enclosure
- Built-in Ethernet connection provides continuous streaming to the PC with no data loss
- 16-bit, 200-kHz A/D converter
- Operates from -30° to +70°C
- Powerable from 10 to 30 VDC, or with included AC adapter
- Synchronous analog, digital, and frequency measurements
- Trigger modes include analog, digital, frequency, and software
- Virtually infinite pre-trigger buffer
- 4 channels of 16-bit, 100-kHz analog output (models /2001 and /2020)
- DaqBook/2020 offers convenient front panel connectors for thermocouple, voltage and frequency measurements all in one box
- DaqBooks attach to over 40 DBK signal conditioning options to assemble a low-cost system, customized to your particular application

Signal Conditioning Options

- Signal conditioning and expansion options for thermocouples, strain gages, accelerometers, isolation, RTDs, etc. — over 40 DBK I/O expansion options are available

Software

- DaqView™ Out-of-the-Box™ software application for effortless data logging and analysis
- Support for Visual Studio® and Visual Studio® .NET, including examples for Visual C++®, Visual C#®, Visual Basic®, and Visual Basic® .NET
- Comprehensive drivers for DASyLab®, LabVIEW®, and MATLAB®
- DaqCal™ software application for easy user-calibration

The DaqBook/2000[®] series of portable data acquisition devices can synchronously measure analog inputs, frequency inputs, and digital inputs. The 16-bit/200-kHz DaqBooks come equipped with built-in signal I/O capability, which can be further expanded and enhanced with over 40 DBK series expansion and signal conditioning options.

See DaqOEM/2000 Series for board-level versions of the DaqBook



DaqBook/2020



DaqBook/2001

The DaqBook/2000 series includes a built-in 10/100BaseT Ethernet interface capable of transferring acquired data back to the PC at the full 200 Kreading/s measurement rate of the DaqBook. Multiple DaqBooks can be attached to a single PC via an Ethernet hub or switch, and are capable of being synchronized and of transferring data continuously at full speed into the PC. Up to 10 DaqBooks can be transferring 200 Kreading/s back to a PC concurrently, with no loss in data.

Packaging and Power. The DaqBook is housed in a rugged metal package, with the same footprint as most notebook PCs (8.5" x 11"). It can be powered from 10 to 30 VDC, or via the included AC power adaptor. Compact battery options are also available for applications where there is no access to DC or AC power. These options can also function as uninterruptible power supplies (UPS), to keep the DaqBook operational during intermittent power outages or voltage drops, such as during

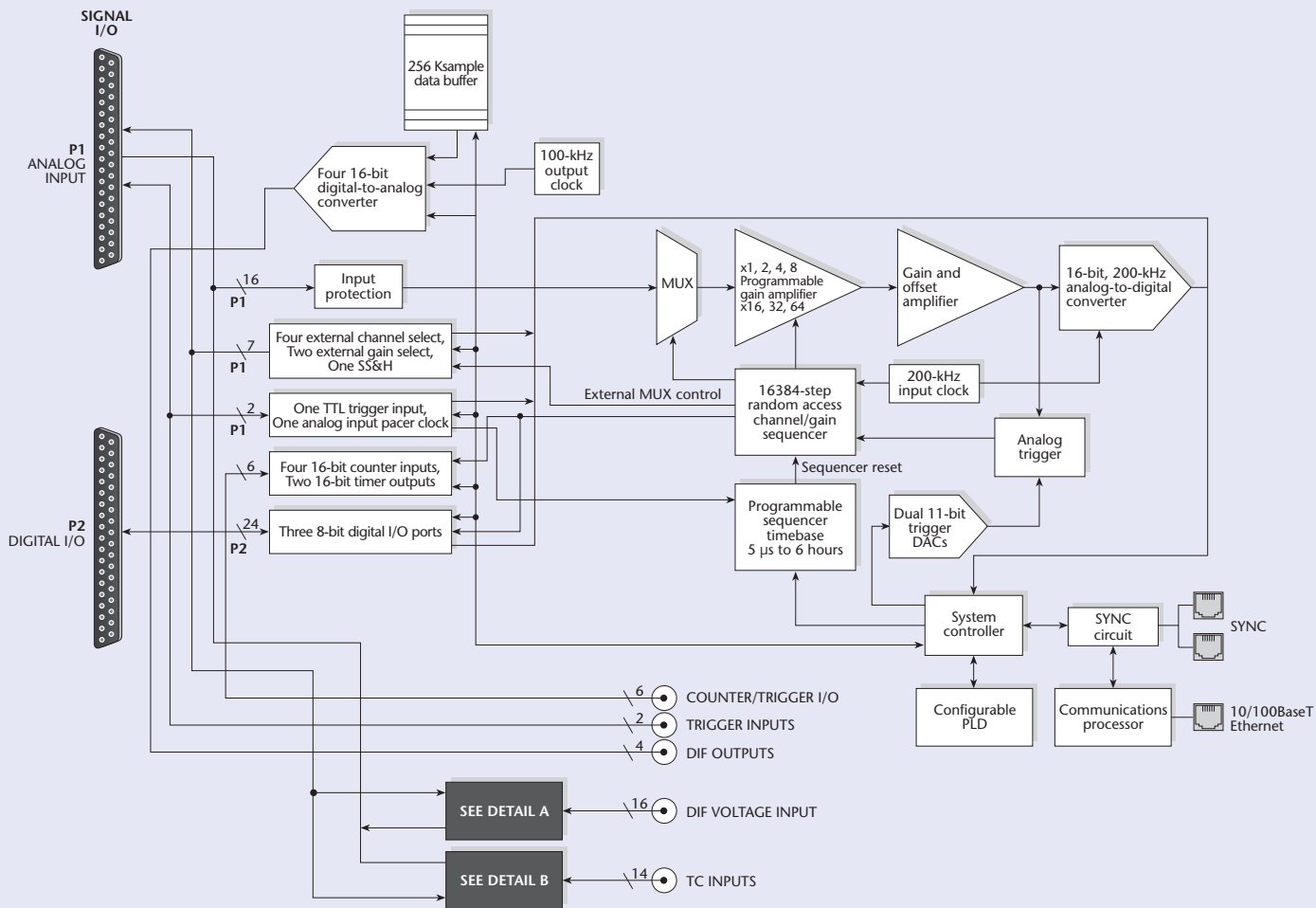
DaqBook/2000 Series Selection Chart			
Feature	DaqBook/2020	DaqBook/2001	DaqBook/2005
Package	2U high, 8.5" x 11"	1U high, 8.5" x 11"	1U high, 8.5" x 11"
A/D	16 bit, 200 kHz	16 bit, 200 kHz	16 bit, 200 kHz
PC Connection	10/100BaseT Ethernet	10/100BaseT Ethernet	10/100BaseT Ethernet
Channel/Gain Sequencer	16,384 locations	16,384 locations	16,384 locations
Built-in Voltage Inputs	16 DIFF plus 14 SE	8 DIFF or 16 SE	8 DIFF or 16 SE
Built-in Thermocouple Inputs	14	0	0
Analog Signal Connection	BNC, mini TC	DB37	DB37
Built-in Digital I/O	24	40	40
Maximum Digital I/O	256	272	272
Built-in Frequency Inputs	4, 16 bit, 10 MHz	4, 16 bit, 10 MHz	4, 16 bit, 10 MHz
Built-in Timer Outputs	2, 16 bit, 1 MHz	2, 16 bit, 1 MHz	2, 16 bit, 1 MHz
Analog Outputs	4, 16 bit, 100 kHz	4, 16 bit, 100 kHz	—
External DAC Pacer Clock Input	no	yes	yes



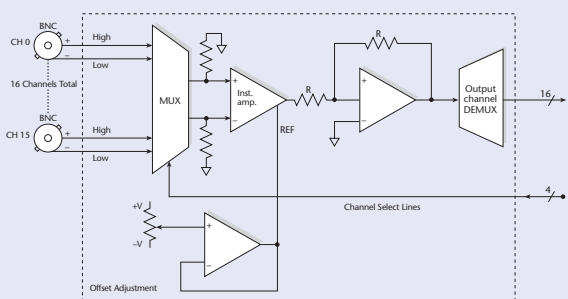
DaqBook/2000[®] Series

General Information

DaqBook/2020 Block Diagram

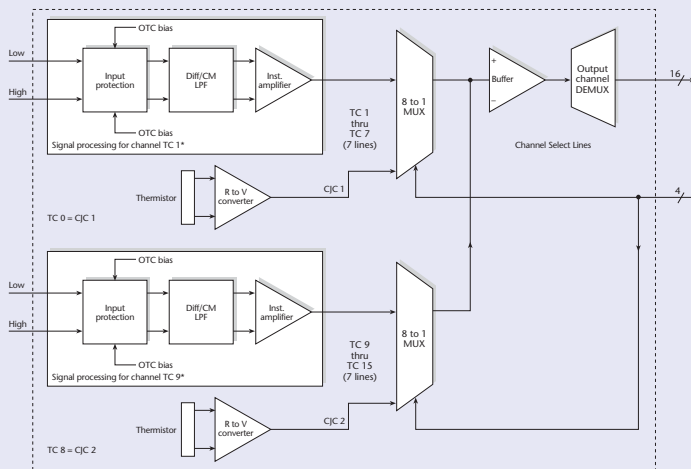


Detail A – Differential Voltage Inputs



* The 14 thermocouple circuitry channels, TC1 through TC7 and TC9 through TC15, each have their own signal processing block, consisting of input protection, a low-pass filter, and an instrument amplifier. Channels TC0 and TC8 are used for Cold Junction Compensation (CJC).

Detail B – Thermocouple Inputs





DaqBook/2000[®] Series

General Information

The example systems below illustrate typical systems assembled using the DaqBook/2020 and DaqBook/2001 A/D mainframes.

DaqBook/2020



DaqBook/2020 (front and back)



DaqBook/2020 system plus 32 additional channels of analog input (DBK85)



DaqBook/2020 system plus 112 additional channels of thermocouple input (DBK90)

DaqBook/2001 & /2005



DaqBook/2001 (front and back)



DaqBook/2001 plus DBK60 module with three internal signal conditioning boards



DaqBook/2001 plus 14 channels of thermocouple inputs (DBK84)



DaqBook/2001 plus 112 channels of thermocouple input (DBK90)

