

BK PRECISION



DAQ3120 Product Catalog

2026

DAQ3120 Benchtop Data Acquisition System

The DAQ3120 Benchtop Data Acquisition System combines a 6-½ digit digital multimeter (DMM) and a data logger in one compact and modular design.



DAQ3120 Benchtop Data Acquisition System

This system's built-in multimeter offers high accuracy and support for various measurements, including AC and DC voltage and current, resistance, frequency, temperature, strain, and capacitance.

Its data logging capabilities include recording directly to a USB drive or the internal non-volatile memory, capable of storing 100 kilo points of data with time-stamps for all readings.

In standalone operation, the 4.3" color display and intuitive user interface provide all the tools necessary to monitor and analyze data. Visualize the data with flexible display options including data tables, trend charts, and histograms.

The DAQ3120 provides versatile connectivity options, including LAN, USB (USBTMC and USBVCP), and optional micro GPIB, for seamless integration with PCs.

Features and Benefits

- 3-slot base unit with built-in 6-½ digit DMM
- Basic 0.0035% DCV accuracy
- Measures up to 600 VDC / 400 VAC
- Up to 450 channels/s scan rate
- Up to 120 channels per system
- 100 kpts internal non-volatile memory with time stamp for all readings
- Measures 14 different input signals:
 - Temperature with thermocouples, RTDs, and thermistors
 - AC/DC voltage and current
 - Resistance with 2-wire and 4-wire
 - Direct strain and bridge strain
 - Frequency and period
 - Capacitance
- Digital I/O interface offers external triggering and alarm outputs
- Log or copy data directly to a USB drive
- Includes LAN, USB (-TMC and -VCP), and micro-GPIB (-GPIB model only) interfaces

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Modules and Ordering Information

This system offers three customizable slots and a choice of seven different modules, featuring a plug-and-play design that lets users reconfigure the instrument as their application needs evolve.

Each module offers unique benefits such as measuring high amplitudes up to 600 V DC (400 V AC), capturing transients with scan rates up to 450 channels per second, and increasing channel count up to 120 single-ended measurements.

Beyond measurement, modules provide mixed-signal input and output ports for controlling external devices and reading digital signals. Dedicated switching modules offer signal-routing matrices and single-pole double-throw (SPDT) relays, giving users flexibility in how they connect to and control DUTs.



DAQ3120 Modules Overview

Modules	Input Type	No. of Channels	Speed (CH/s)	Max. Voltage	Max. Current	Bandwidth	Thermal Offset	Internal DMM
DM300 Solid-State Multiplexer	2-wire solid-state (4-wire selectable)	20	450	120 V	-	10 MHz	< 4 μ V	✓
DM301 Multiplexer with Current CH	2-wire armature (4-wire selectable)	20 + 2 ⁽¹⁾	80	300 V	1 A	10 MHz	< 4 μ V	✓
DM303 Single-Ended Multiplexer	1-wire armature (common low)	40	80	300 V	-	10 MHz	< 1 μ V	✓
DM304 4 x 8 Matrix	2-wire armature	32	-	300 V	-	10 MHz	< 1 μ V	-
DM307 Multifunction Module	16-bit Digital I/O	16 ⁽²⁾	-	42 V	-	-	-	-
	100 kHz Totalizer input	1	-	42 V	-	10 MHz	-	-
	18-bit DAC output	2	-	\pm 12 V	\pm 24 mA	-	-	-
DM308 Actuator/General Purpose Switch	Single Pole Double Throw (Form C relay)	20	-	300 V	-	-	< 4 μ V	-
DM309 High Voltage and Current	2-wire armature (4-wire selectable)	8 + 2 ⁽¹⁾	60	600 V DC 400 V AC	2 A	10 MHz	< 4 μ V	✓

Supported DMM Functions

Modules	AC/DC Voltage	AC/DC Current	Frequency & Period	2-Wire Resistance	4-Wire Resistance	Thermocouple	2-Wire RTD	4-Wire RTD	Thermistor	Capacitance
DM300 Solid-State Multiplexer	✓	-	✓	✓	✓	✓	-	-	-	-
DM301 Multiplexer with Current CH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DM303 Single-Ended Multiplexer	✓	-	✓	✓	-	-	✓	-	✓	✓
DM309 High Voltage and Current	✓	✓	✓	✓	✓	✓ ⁽¹⁾	✓	✓	✓	✓

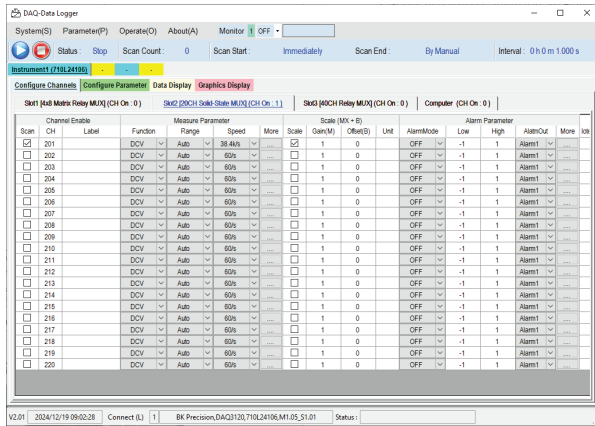
- (1) The additional two channels are dedicated current inputs
- (2) Channels are split into two 8-bit digital input/output registers
- (3) Requires external cold junction and manual reference setting

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Remote Operation

DAQ-Data Logger PC Software

Free to download from the B&K Precision product page, the DAQ-Data logger PC software offers a comprehensive solution for test configuration and remote control, streamlining data acquisition workflows. This software allows users to monitor critical parameters in real-time and connect up to four units simultaneously.



Virtual Front Panel control via Web Interface

This instrument features a built-in web interface that enables users to operate the DAQ3120 remotely from any device on the network. The web interface provides a virtual front panel that mirrors the DAQ3120 and offers all the same functions, like configuring channels, executing scans, and monitoring measurements.



About B&K Precision

For more than 70 years, B&K Precision has provided reliable and value-priced test and measurement instruments worldwide.

B&K Precision is headquartered in Yorba Linda, California, with development, sales and service subsidiaries located in Europe and Asia. Our European customers are most familiar with B&K Precision through Sefram, our subsidiary located in St. Etienne, France, from which we serve our customers in Europe, the Middle East, and Africa. Engineers in Asia know us through our B&K Precision Taiwan subsidiary. Our office in Taipei provides sales, service and support to our customers in Asia. Our independent services center in Singapore and Brazil service customers in Singapore, Malaysia, Vietnam, Indonesia and South America respectively.



- B&K Precision group member
- Independent service center
- Service center location