

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

GENERAL STANDARDS

General Standards PMC-ADADIO-312 12-Channel 16-Bit Analog I / O PMC Card

The General Standards PMC-ADADIO-312 is a 12-channel analog I/O PMC card engineered for data acquisition and real-time control systems. It integrates eight 16-bit analog input channels, four 16-bit analog output channels, and an 8-bit bidirectional digital I/O port with two control lines. The card delivers simultaneous analog input sampling across all channels with a maximum aggregate rate of 1,600,000 samples per second, supported by a 32K-sample FIFO buffer. Analog output channels support synchronized updates via hardware or software strobe at rates up to 250K samples per second. Factory-configured input/output ranges include ± 10 V, ± 5 V, or ± 2.5 V. Adjustable sampling rate: 305 Hz to 200 kHz per channel; up to 200,000 samples per second per channel in burst and multi-board sync modes Input protection: withstands sustained short-circuit to ground and overvoltage transients up to ± 40



MODEL

**General Standards
PMC-ADADIO-312**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

PMC-ADADIO-312

LISTING

<https://aumictechlabs.com/products/pmc-adadio-312-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The General Standards PMC-ADADIO-312 is a 12-channel analog I/O PMC card engineered for data acquisition and real-time control systems. It integrates eight 16-bit analog input channels, four 16-bit analog output channels, and an 8-bit bidirectional digital I/O port with two control lines.

The card delivers simultaneous analog input sampling across all channels with a maximum aggregate rate of 1,600,000 samples per second, supported by a 32K-sample FIFO buffer. Analog output channels support synchronized updates via hardware or software strobe at rates up to 250K samples per second. Factory-configured input/output ranges include ± 10 V, ± 5 V, or ± 2.5 V.

Technical Specifications

Analog Inputs: Eight channels with 16-bit A/D resolution per channel

Adjustable sampling rate: 305 Hz to 200 kHz per channel; up to 200,000 samples per second per channel in burst and multi-board sync modes

Aggregate sampling: up to 1,600,000 samples per second

Input modes: continuous conversion, triggered-burst scan, loopback

Software-selectable differential or single-ended configuration

SNR: 88 dB (10 Hz to 20 kHz); 80 dB (to 100 kHz)

Remote ground sensing available for single-ended inputs

Input protection: withstands sustained short-circuit to ground and overvoltage transients up to ± 40 V for 10 milliseconds

32K-sample FIFO buffer

Analog Outputs: Four channels with 16-bit D/A resolution per channel

Simultaneous updating via hardware or software strobe

Aggregate data rate: up to 250K samples per second

Output disconnect capability under software control

Accuracy: $\pm 0.007\%$ of reading, $\pm 0.005\%$ of full-scale-range, ± 1.0 mV

Offset and gain trimming via 24 12-bit DACs

Digital I/O: 8-bit bidirectional data port with two control lines

Calibration: Automatic calibration for all analog channels, internally controlled

Loopback feature for built-in-test support

Calibration parameters stored in EEPROM; transferred to calibration DACs during initialization

Autocalibration invoked at any time from the PCI bus

Key Features

High-density analog integration: 12 total I/O channels in single PMC form factor

Flexible input sampling: continuous and burst modes with software control

Low-latency buffering: 32K-sample FIFO minimizes host CPU overhead

Precision output control: synchronized multi-channel updates for coordinated system responses

Internal calibration loop: auto-calibration and loopback testing reduce field maintenance

Software-configurable input impedance and range options

Typical Applications

Multi-channel data acquisition systems

Real-time process monitoring and feedback control

Hardware-in-the-loop simulation and testing

Instrumentation platforms requiring synchronized analog I/O

Compatibility & Integration

Designed as a PMC module for integration into carrier systems. Single connector interface for all I/O signals.

PMCADADIO312 Characteristics / Specifications

PARAMETER	VALUE
Model	PMC-ADADIO-312
Also Known As	ADADIO 12-channel 16-bit analog I/O PMC
Instrument Type	PMC analog input/output module
Analog Inputs	8 simultaneous channels
Analog Outputs	4 channels
Resolution	16-bit analog input and output
Sample Rate Per Channel	up to 200,000 samples per second per input
Aggregate Input Rate	1,600,000 samples per second
Input Fifo	32,000 samples
Sampling Modes	continuous or burst
Output Update	synchronous or asynchronous via independent registers
Analog Ranges	factory configured plus or minus 10 V, plus or minus 5 V, or plus or minus 2.5 V
Digital Data Lines	8 bi-directional
Digital Control Lines	2
Mechanical Package	PMC mezzanine
Manufacturer	General Standards Corporation
Family	ADADIO 12-channel 16-bit analog I/O
Replacement Family	ADADIO2; new designs PMC66-16AISS8AO4
Total Analog Channels	12 (8 in plus 4 out)
Input Architecture	simultaneous sample-and-hold on all eight inputs
Application Class	high-resolution analog I/O on PMC
Host Carriers	PMC carriers for PCI CompactPCI and VME
Product Status	legacy / end of life; ADADIO2 is the in-family replacement

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	PMC-ADADIO-312
Also Known As	ADADIO 12-channel 16-bit analog I/O PMC
Instrument Type	PMC analog input/output module
Analog Inputs	8 simultaneous channels
Analog Outputs	4 channels
Resolution	16-bit analog input and output
Sample Rate Per Channel	up to 200,000 samples per second per input
Aggregate Input Rate	1,600,000 samples per second
Input Fifo	32,000 samples
Sampling Modes	continuous or burst
Output Update	synchronous or asynchronous via independent registers
Analog Ranges	factory configured plus or minus 10 V, plus or minus 5 V, or plus or minus 2.5 V
Digital Data Lines	8 bi-directional
Digital Control Lines	2
Mechanical Package	PMC mezzanine
Manufacturer	General Standards Corporation
Family	ADADIO 12-channel 16-bit analog I/O
Replacement Family	ADADIO2; new designs PMC66-16AISS8A04
Total Analog Channels	12 (8 in plus 4 out)
Input Architecture	simultaneous sample-and-hold on all eight inputs
Application Class	high-resolution analog I/O on PMC
Host Carriers	PMC carriers for PCI CompactPCI and VME
Product Status	legacy / end of life; ADADIO2 is the in-family replacement
Notes	
From General Standards ADADIO product page (8 simultaneous inputs at 200 kS/s/ch, 4 outputs, 32k FIFO, plus	

or minus 10/5/2.5 V ranges). Confirm factory analog range and the 312 configuration code on the installed module.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.