

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

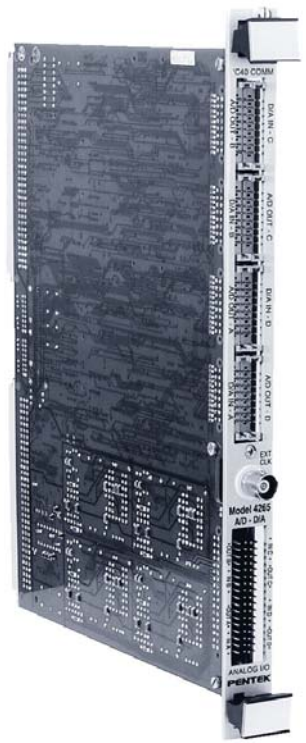
Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Pentek 4265* at our website: ***Click HERE***

Model 4265

16-Ch. 16-bit 50 kHz A/D & D/A Converter VME Board



Features

- Sigma-delta data converters
- Sixteen A/D and sixteen D/A channels
- Integral anti-aliasing filters
- Eight C40 comm ports
- Compatible with Pentek C40 DSP products
- Single-slot 6U VME board

Ordering Information

Model	Description
4265	16-Channel 16-bit A/D and D/A, eight comm ports
Options:	
-001	8-Channel 16-bit A/D and D/A, four comm ports
-002	Programmable sampling rate frequency synthesizer

General Information

The Model 4265 is a 16-channel A/D and D/A converter for digital audio applications. Sampled input and output data are tailored to directly interface with the communications ports of the Texas Instruments TMS320C40 DSP. Front panel comm ports connect directly to all of Pentek's C40 DSP products.

A/D and D/A Groups

The Model 4265 contains four identical four-channel groups of 16-bit A/D conversion and 16-bit D/A conversion. Two C40 comm port interfaces are included in each group.

Programmable gain amplifiers at the A/D inputs and programmable attenuators at the D/A outputs may be set individually for each channel.

Sigma-Delta Converters

The 16-bit sigma-delta A/D's provide inherent anti-aliasing digital filtering with sharp cutoff characteristics and linear phase response. The sigma-delta D/A's provide oversampled output smoothing filters with linear phase response.

The cutoff frequency of the sigma-delta A/D and D/A converters tracks the sampling rate at a fixed ratio of 45%, ideal for most applications.

Sampling Rate Section

The sampling rate for each group is determined by a local programmable divider driven from two socketed DIP crystal oscillators, an external TTL clock, or an optional programmable frequency synthesizer.

Specifications

Input: single-ended, ±2.8 V full scale, 100 kohm impedance, ±0.5 dB frequency response

Input gain: programmable from 0.0 dB to +22.5 dB in 1.5 dB steps

Output: ±2.8 V full scale, 600 ohm impedance, ±0.5 dB frequency response

Output attenuation: programmable from 0.0 to 94.5 dB in 1.5 dB steps

Input and output filters: digital, track at 45% of sampling rate; –74 dB stopband at ≥55% of sampling rate; ±0.1 dB ripple, 0 µs group delay variance

A/D and D/A conversion: 16 bits, 80 dB dynamic range; ±0.9 LSB differential non-linearity; 74 dB SINAD

Compression/decompression: programmable 16-bit linear, or 8-bit A-law or µ-law coding

Sampling rates: 4.0 kHz to 50.0 kHz

Frequency Synthesizer: the optional synthesizer offers the following resolution:

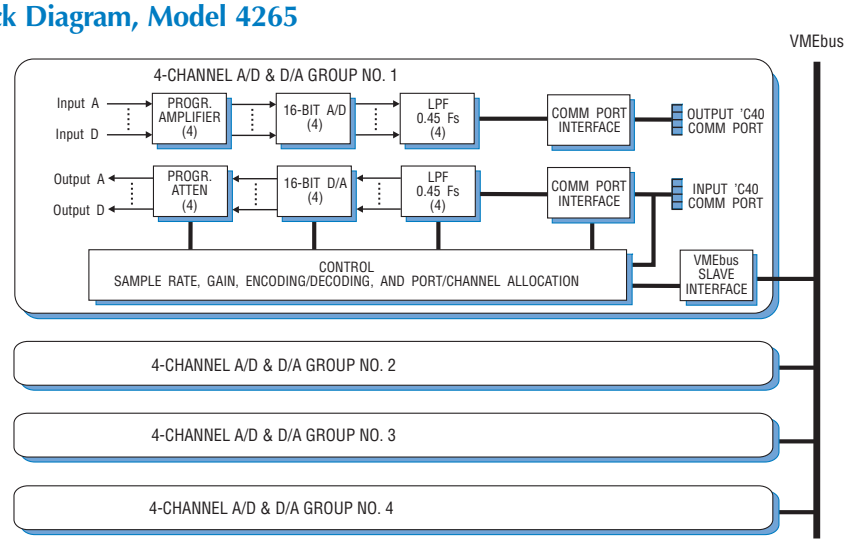
Range	Resolution
24–50 kHz	200 Hz
12–24 kHz	100 Hz
6–12 kHz	50 Hz
4–6 kHz	25 Hz

Control interface: via memory-mapped registers over the VMEbus, or using commands from the input comm port

Power: 4.0 A at +5 V; 0.15 A at +12 V, 0.2 A at –12 V

Size: standard 6U VMEbus board, single slot; board 160 mm (6.3 in.) x 233.5 mm (9.2 in.), panel 0.8 in. wide

Block Diagram, Model 4265



PENTEK **Pentek, Inc.** One Park Way ◆ Upper Saddle River ◆ New Jersey 07458
Tel: 201-818-5900 ◆ Fax: 201-818-5904 ◆ Email: info@pentek.com **www.pentek.com**

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP