

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

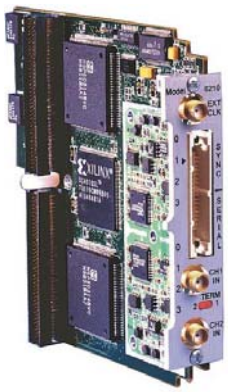
Expert team | Trust guarantee | 100% satisfaction

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

Find the *Pentek 4290* at our website: ***Click HERE***

Model 6210

Dual Narrowband Receiver, Demod and A/D VIM-2 Module



ReadyFlow Board Support Libraries

Features

- VIM-2 module for VIM-compatible processor boards
- Two identical channels include amplifier, A/D, digital receiver and demod
- Up to 65 MHz A/D sampling with 12-bit accuracy
- Prog. gain input amplifiers
- Anti-aliasing lowpass filters
- Receiver decimation range from 4 to 16,384
- Cartesian-to-polar converter for AFC and AM, FM, FSK and PSK demodulation
- 255-tap programmable-coefficient FIR filter
- Synchronization across channels and other 6210's

Ordering Information

Model	Description
6210	Dual Narrowband Receiver, Demod and A/D VIM-2 module
Option:	
-021	53 MHz internal ref. (optimum output specs)

General Information

Model 6210 is a VIM-2 module which attaches directly to VIM-compatible processor boards. It forms a complete 2-channel software radio system including tuning, filtering and demodulation.

Two Model 6210's may be attached to a VIM-compatible processor board to form a 4-channel software radio which utilizes all four processors while occupying only one VMEbus slot. Alternatively, the Model 6210 may be combined with another VIM-2 module to provide additional I/O functions.

Input Section

Each channel includes a wideband input amplifier followed by a programmable-gain amplifier and a 25 MHz lowpass anti-aliasing filter. Both of these may be bypassed for undersampling applications. Analog inputs are accepted through front panel SMA connectors.

A/D Converters

Each channel employs an Analog Devices AD6640 12-bit A/D converter capable of sample rates up to 65 MHz. The A/D sample clock is derived either from an external reference supplied to a front panel SMA connector or an internal 64 MHz crystal.

The A/D converters operate synchronously from the same sampling clock to support multichannel applications where phase between channels must be maintained.

Digital Downconverters

The output of each A/D converter feeds the Intersil HSP50214B digital downconverter and communication signal processor.

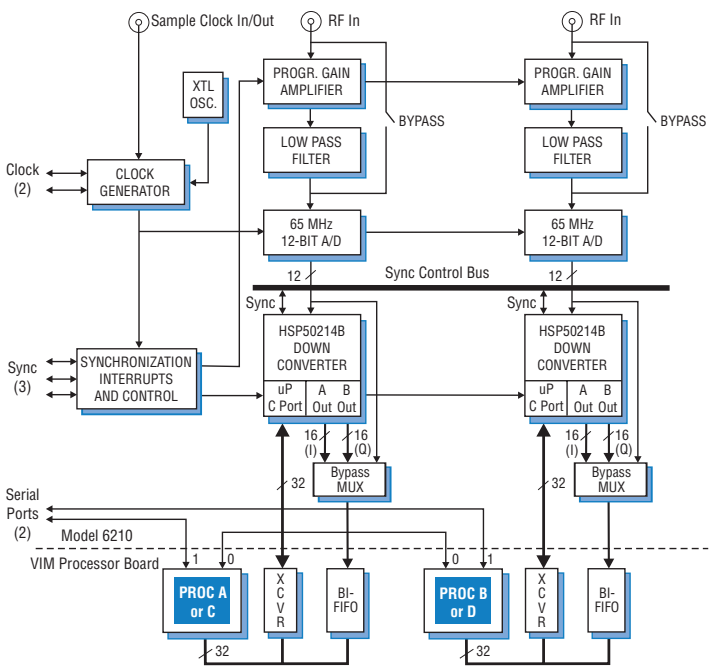
Included in the HSP50214B is an input local oscillator (NCO) and a mixer to translate input signals down to baseband. The mixer is followed by multistage digital filters with programmable filter coefficients.

A second processing section consists of a resampling polyphase filter which operates with a second 50 MHz clock asynchronous to the input clock. This allows for a maximum output bandwidth of 929 kHz with 84 dB SFDR at an output sampling rate of 12.24 MHz (use Option -021 for these output specifications). Built-in hardware for cartesian-to-polar conversion provides magnitude and phase outputs. A FM discriminator and FIR filter delivers FM output.

A digital multiplexer allows either the digital receiver output or the A/D output to be sent into the processor board BI-FIFO to support direct, wideband input data capture.

A front panel ribbon cable bus allows multiple 6210's to share a common sample clock and synchronize the phase of the digital receivers across modules.

Block Diagram, Model 6210



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