Model 8257

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#### Features

- Ideal development platform for Pentek's Models 5950 and 6001 8-Channel A/D & D/A Zynq UltraScale+ RFSoC Processor
- 1-slot, small footprint development chassis
- Optional dual MPO interfaces support 100 GigE
- Suppots VITA 66.4

#### **General Information**

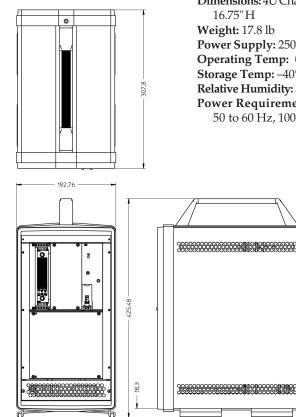
The Model 8257 is a low cost 3U VPX chassis ideal for developing applications on Pentek's Model 5950 Quartz<sup>™</sup> RFSoC board. Providing power and cooling to match the 5950 in a small desktop footprint, the chassis allows access to all required interfaces on the 5950 front panel and Model 5901rear transition module. The 8257 can be configured with optional rearpanel dual MPO optical connectors to support the 5950's dual 100 GigE interfaces.

## **Optical Interface**

The 8257 can be optioned with optical support, providing a path from the 5950's VITA 66.4 backplane interface to the exterior of the chassis with standard MPO connectors. With the 5950's built-in functions include a dual 100 GigE interface, data acquisition and waveform generator engines, the chassis supports high-speed data streaming through the optical interface.

## **Development Environment**

At the heart of the Model 5950 is Xilinx's Zynq UltraScale+ RFSoC FPGA. It contains 8 channels of 4 GHz 12-bit A/Ds, 8 channels of 6.4 GHz 14-bit D/As and is enabled with a multi-processor ARM architecture running Linux. The FPGA supports



communication interfaces typically found on general purpose processors including: USB, RS-232, Ethernet, and DisplayPort. The 5950's rear transition module provides access to these interfaces as well as JTAG and general purpose I/O. This allows the 5950, 5901 rear transition module and 8257 chassis to operate as a stand-alone 1-slot development platform. Developers can connect a notebook or desktop PC with Xilinx's Vivado Design Suite and Pentek's Navigator Design Suite and develop, run and debug their application on the 5950.

## The Quartz Family

Quartz brings the performance and high density integration of the RFSoC to a wide range of different application spaces with a uniquely flexible design path. Quartz is available in standard form factors like the 5950 3U VPX board, or as the Model 6001 QuartzXM, a small 2.5" x 4" module. With the QuartzXM Carrier Design Kit, the 6001 can be deployed on application specific custom carriers. In the custom carrier environment, the 5950 combined with the 8257 provides a path for engineers to immediately start software and IP development while a hardware carrier design is developed in parallel.

# **Specifications**

Dimensions: 4U Chassis, 7.59" W x 12.12" D x 16.75" H Weight: 17.8 lb Power Supply: 250 Watts Operating Temp: 0° to +50° C Storage Temp: -40° to +85° C Relative Humidity: 5 to 95%, non-condensing Power Requirements: 100 to 240 VAC, 50 to 60 Hz, 1000 W max.

# Ordering Information

### Model Description

8257 1-Slot 3U VPX Development Chassis for Quartz

#### **Options:**

-110 Dual MPO optical interfaces

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