

常规参数

PXI 总线类型: PXI Express

波形因数: 其他

RoHS 认证: 是

操作系统: Windows

模拟输入

单端通道: 16

差分通道: 0

模拟输入分辨率: 24bits

最大电压范围: -10 至 10V

最大电压灵敏度: 14 μ Vrms

最小电压范围: -1 至 1mV

最小电压灵敏度: 2.2 μ Vrms

量程数量: 2

同步采样: 是

板载内存: 4095

激励电流: 4mA

总谐波失真(THD): 98dBc

动态范围: 114dBFS

信号调理: 抗混叠滤波器, 电流激励

模拟输出

通道数量: 0

I/O

双向通道: 0

输入通道: 0

输出通道: 0

连接器: 0

尺寸

长: 100mm

宽: 60mm

高: 10mm

产品介绍

Detect voltages from 10 V to 2.2 μ V (2 amplifier gains for measurement flexibility)

DC- and AC-coupled analog inputs for measurement flexibility

24-bit resolution ADCs with 114 dB dynamic range

16 simultaneously sampled analog inputs at up to 204.8 kS/s

Software-configurable 4 mA IEPE and TEDS for microphones and accelerometers

Synchronization of up to 272 channels at full bandwidth in a single PXI Express chassis

The NI PXIe-4497 is a high-accuracy data acquisition (DAQ) module specifically designed for high-channel-count sound and vibration applications. With 16

simultaneous channels in a single PXI Express module, it has twice the density of any other simultaneously sampled device from NI. When you use the NI PXIe-4497 in an 18-slot PXI Express chassis, you can synchronize up to 272 channels and acquire data at 204.8 kS/s per channel. And because the module is programmed with NI-DAQmx featuring DAQmx Channel Expansion functionality, the data acquisition code is the same for 1, 16, or 272 channels. For even larger noise mapping microphone arrays, dynamic structural test, or data streaming applications, you can synchronize more than 13,000 channels in a multichassis PXI Express system.

Signal Connectivity

NI 449x devices have two 4X InfiniBand connectors, AI0-7 and AI8-15, each carrying eight input channels. The 4X InfiniBand is widely used in high-performance computing applications because it provides excellent signal integrity with a shield plate between input signal pairs. NI offers a variety of cabling options including a shielded breakout cable with eight BNC connectors and a 19 in. rack-mountable adapter with 32 BNC connectors.

Best Value: Buy Hardware and Software Together

NI PXIe-4497 modules are programmed with NI-DAQmx and are optimized for use with the Sound and Vibration Measurement Suite. The suite provides signal processing functionality for performing audio measurements, fractional-octave

analysis, frequency analysis, transient analysis, and order tracking. For an interactive software experience, the Sound and Vibration Assistant can quickly acquire, analyze, and log acoustic, noise, and vibration data.