

PXI-5403 8-Channel Function Generator Module

16-bit 10 kHz CPCI/PXI waveform output module with
eight programmable channels

At a Glance

PXI-5403 is an 8-channel 16-bit function generator module for 3U CPCI/PXI signal generation systems.

The module outputs sine, square, triangle, and sawtooth waveforms with programmable frequency, amplitude, offset, and output impedance.

Each channel supports up to ± 10 V output amplitude and 10 kHz maximum frequency, with a minimum output current of ± 10 mA.



PXI-5403 8-Channel Function Generator Module

Product Overview

PXI-5403 provides eight programmable waveform-output channels in a compact 3U CPCI/PXI module.

The module is designed for automated test systems that require low-frequency function generation with software-controlled frequency, amplitude, offset, coupling, and impedance settings.



Key Features

- **Eight Output Channels**

Eight waveform channels support multi-point signal generation in PXI/CPCI systems.

- **16-Bit Control**

Amplitude and offset control use 16-bit resolution.

- **Standard Waveforms**

Sine, square, triangle, and sawtooth waveforms are supported.

- **Programmable Output**

Frequency, amplitude, offset, and output impedance are software programmable.

- **10 kHz Maximum Frequency**

The output frequency supports operation up to 10 kHz.

- **PXI Integration**

The 3U single-width 4HP form factor supports chassis-based test-system integration.

Technical Specifications

Signal Output	
Channel Count	8 channels
Resolution	16 bits
Output Voltage	+/-10 V
Output Frequency	10 kHz maximum; programmable
Waveform Types	Sine, square, triangle, sawtooth
Coupling	DC
Output Impedance	50 ohm or 75 ohm; programmable
Output Current	+/-10 mA minimum
Accuracy and System	
Voltage Accuracy	reading x 0.1% +/-1 mV @ 25 deg C
Frequency Accuracy	reading x 0.01% +/-0.2 Hz @ 25 deg C
Operating System	Windows 7 / Windows 8 / Windows 10 / Linux
Driver Support	VISA-based PNP driver
Form Factor	3U single-width, 4HP

Environmental Grades

Condition	Commercial C	Industrial I	Military J
Operating Temperature	0 to +50 deg C	-20 to +50 deg C	-40 to +50 deg C
Storage Temperature	-20 to +70 deg C	-40 to +70 deg C	-55 to +85 deg C
Humidity	95% @ 25 deg C, non-condensing	95% @ 25 deg C, non-condensing	95% @ 25 deg C, non-condensing

Temperature values are specified in degrees Celsius.

Ordering Information

Model	Description	Availability
Default Configuration		
PXI-5403	8 channels; 16 bits; 10 kHz; +/-10 V; commercial grade	Standard
PXI-5403-I	8 channels; 16 bits; 10 kHz; +/-10 V; industrial grade	Optional
PXI-5403-J	8 channels; 16 bits; 10 kHz; +/-10 V; military grade	Optional
3002026	SMB-K3 cable with SFF-50-1.5-1 cable, 50 cm	Standard

Default configuration is PXI-5403, 8 channels, 16 bits, 10 kHz, +/-10 V, commercial grade.

Ordering format is PXI-5403-X, where X selects the temperature grade: C for commercial grade, I for industrial grade, and J for military grade.

Packing List

Item	Description	Quantity
8-Channel Function Generator Module	8 channels; 16 bits; 10 kHz; +/-10 V; commercial grade	1 unit
Accessory Cable	SMB-K3 cable with SFF-50-1.5-1 cable, 50 cm	9 sets
User Manual	Product use and maintenance information	1 copy
Certificate of Conformance	Factory inspection certificate	1 copy

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Specifications subject to change without notice. Per AS/NZS standards.