

PXI-6271 MFM

Multi-Function Module

AI, AO, isolated DIO, and programmable PFI functions in one 3U PXI module

At a Glance

PXI-6271 is an MFM multi-function PXI module for mixed analog and digital measurement and control tasks.

The module integrates 8 differential analog input channels, 4 analog output channels, 16 isolated digital I/O channels, and 16 programmable PFI channels.

It supports 100 kSa/s analog input sampling, +/-10 V analog ranges, TTL 5 V digital levels, and VISA-based driver integration.



PXI-6271 MFM Multi-Function Module

Product Overview

PXI-6271 consolidates analog input, analog output, isolated digital I/O, and programmable digital interface functions in a compact PXI card.

The module is suited to mixed-signal test systems that need measurement, stimulus, and digital control from a single slot.



Key Features

- **8-Channel AI**

Analog input supports 8 differential channels at 100 kSa/s with +/-10 V range.

- **4-Channel AO**

Analog output provides 4 channels with +/-10 V output range.

- **16 Isolated DIO**

Digital I/O includes 16 isolated TTL 5 V interface channels.

- **16 Programmable PFI**

Programmable digital interface support adds 16 TTL 5 V PFI channels.

- **PXI Software Support**

VISA-based PNP driver support is provided for Windows and Linux.

- **Compact Form Factor**

The module fits a 3U single-width, 4HP PXI slot.

Technical Specifications

Analog Input	
AI Channels	8 differential channels
AI Sampling Rate	100 kSa/s
AI Voltage Range	+/-10 V
Analog Output	
AO Channels	4 channels
AO Voltage Range	+/-10 V
Digital Interfaces	
DIO Channels	16 isolated digital I/O channels
DIO Level	TTL 5 V
PFI Channels	16 programmable digital interface channels
PFI Level	TTL 5 V
System	
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-6271	MFM module; AI 8 differential, 100 kSa/s, 16 bits; AO 4 channels; DIO 16 channels; PFI 16 channels; commercial grade	Standard
PXI-6271-I	MFM module; AI 8 differential, 100 kSa/s, 16 bits; AO 4 channels; DIO 16 channels; PFI 16 channels; industrial grade	Optional
PXI-6271-J	MFM module; AI 8 differential, 100 kSa/s, 16 bits; AO 4 channels; DIO 16 channels; PFI 16 channels; military grade	Optional
3002029	SCSI68 pin-to-pin adapter cable with large-to-small metal connector, 1 m length	Standard

Default configuration is PXI-6271, AI 8 differential channels, AO 4 channels, DIO 16 channels, PFI 16 channels, commercial grade.

Ordering format is PXI-6271-X, where X selects the temperature grade: C for commercial default, I for industrial, and J for military.

Packing List

Item	Description	Quantity
MFM Multi-Function Module	AI 8 differential, 100 kSa/s, 16 bits; AO 4 channels; DIO 16 channels; PFI 16 channels; commercial grade	1 unit
Accessory Cable	SCSI68 pin-to-pin adapter cable with large-to-small metal connector, 1 m length	2 sets
User Manual	Product use and maintenance information	1 copy
Certificate of Conformance	Factory inspection certificate	1 copy

XGY Pty Ltd

Sydney Engineering Centre

Email: info@xgytek.com | Web: www.xgytek.com

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