

# PCM-3813I

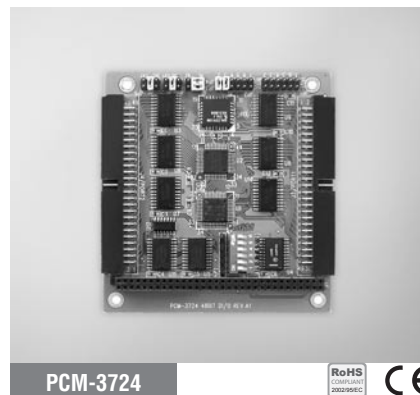
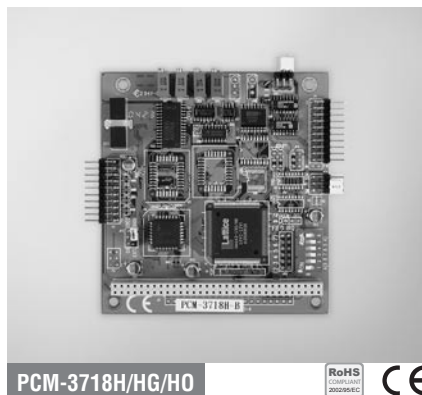
# PCM-3718H/HG/HO

# PCM-3724

100 kS/s, 12-bit, 32-ch Isolated Analog Input PCI-104 Module

100 kS/s, 12-bit, 16-ch PC/104 Multifunction Module

48-ch Digital I/O PC/104 Module



## Features

- 32 single-ended or 16 differential analog inputs
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain for each input channel
- Automatic channel/ gain/ SD scanning
- Onboard ring buffer (1,024 samples)
- Isolation protection (2,500 V<sub>DC</sub>)
- Software polling, internal or external pacer sampling modes supported
- BoardID™ switch

## Specifications

### Analog Input

- Channels** 32 single-ended or 16 differential or combination
- Resolution** 12 bits
- Max. Sampling Rate** 100 kS/s
- Ring Buffer Size** 1,024 samples
- Input Range and PGA Bandwidth**

Gain	0.5	1	2	4	8
<b>Unipolar</b>	N/A	0 ~ 10	0 ~ 5	0 ~ 2.5	0 ~ 1.25
<b>Bipolar</b>	±10	±5	±2.5	±1.25	±0.625
<b>Bandwidth</b>	5.0 MHz	5.0 MHz	4.0 MHz	1.3 MHz	0.6 MHz

- Input Protect** 30 Vp-p
- Input Impedance** 100 MΩ/10pF (off); 100 MΩ/100pF (on)
- Trigger Mode** Software polling, onboard programmable pacer, or external TTL trigger

### General

- Bus Type** PCI-104
- I/O Connectors** 1 x IDC-40 pin
- Dimensions (L x H)** 96 x 90 mm (3.8" x 3.5")
- Operating Temperature** 0 ~ 60° C (32 ~ 140° F) (refer to IEC 68-2-1, 2)
- Storage Temperature** -20 ~ 70° C (-4 ~ 158° F)

## Ordering Information

- PCM-3813I** 100 kS/s, 12-bit Isolated AI PCI-104 Module
- ADAM-3937** DB37 DIN-rail Wiring Board

## Specifications

### Analog Input

- Channels** 16 single-ended / 8 differential
- Resolution** 12 bits
- Max. Sampling Rate** 100 kHz\* (DMA transfer)  
\*80 kHz on P4-based (or upper) system
- Input Impedance** 10 MΩ
- Sampling Modes** Software, pacer or external

### Input Range

PCM-3718H and PCM-3718HO	<b>Bipolar</b>	±10, ±5, ±2.5, ±1.25, ±0.625
	<b>Unipolar</b>	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25
PCM-3718HG	<b>Bipolar</b>	±10, ±5, ±1, ±0.5, ±0.1, ±0.05, ±0.01, ±0.005
	<b>Unipolar</b>	0 ~ 10, 0 ~ 1, 0 ~ 0.1, 0 ~ 0.01

### Analog Output (PCM-3718HO only)

- Channels** 1 (12 bits)
- Output Range**

Internal Reference	Unipolar (V)	0 ~ 5, 0 ~ 10
<b>External Reference (V)</b>		0 ~ 10, 0 ~ -10

- Slew Rate** 10 V/μs
- Output Impedance** 0.1 Ω max.

### Digital Input/Output

- Channels** 16, 5V/TTL
- Input Voltage** Logic 0: 0.8 V max. Logic 1: 2.0 V min.
- Output Voltage** Logic 0: 0.33 V max. @ 6 mA Logic 1: 3.84 V min. @ 6 mA

### General

- Bus Type** PC/104
- I/O Connectors** 2 x 20-pin box header
- Dimensions (L x H)** 96 x 90 mm (3.8" x 3.5")
- Power Consumption** Typical: 5 V @ 180 mA Max.: 5 V @ 400 mA
- Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- Storage Temperature** -40 ~ 85° C (-40 ~ 185° F)

## Ordering Information

- PCM-3718H** 100 kS/s, 12-bit Multi. PC/104 Module
- PCM-3718HG** 100 kS/s, 12-bit High-gain Multi. PC/104 Module
- PCM-3718HO** 100 kS/s, 12-bit Multi. PC/104 Module w/AO
- ADAM-3920** 20-pin DIN-rail Flat Cable Wiring Board
- PCLD-780** Screw Terminal Board w/ Two 20-pin Flat Cables
- PCL-10120-1** 20-pin Flat Cable, 1 m
- PCL-10120-2** 20-pin Flat Cable, 2 m

## Features

- 48 TTL digital I/O lines
- Supports dry contact and wet contact
- Keeps the I/O port setting and DO state after system reset
- Output status read-back
- Channels simulate 8255 PPI mode 0
- Interrupt triggering, rising/falling edge

## Specifications

### Digital Input

- Channels** 48 (shared with output)
- Compatibility** 5 V/TTL
- Input Voltage** Logic 0: 0.8 V max. Logic 1: 2.0 V min.
- Interrupt Capable Ch.** 2

### Digital Output

- Channels** 48 (shared with input)
- Compatibility** 5 V/TTL
- Output Voltage** Logic 0: 0.5 V max. @ 6 mA Logic 1: 2.0 V min. @ -6 mA

### General

- Bus Type** PC/104
- I/O Connectors** 2 x 50-pin box header
- Dimensions (L x H)** 96 x 90 mm (3.8" x 3.5")
- Power Consumption** 5 V @ 90 mA
- Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- Storage Temperature** -40 ~ 85° C (-40 ~ 185° F)

## Ordering Information

- PCM-3724** 48-ch Digital I/O PC/104 Module w/ 50-pin Cable
- ADAM-3950** 50-pin DIN-rail Flat Cable Wiring Board
- PCLD-782B** 24-ch IDI Board w/ 20-pin & 50-pin Flat Cables
- PCLD-785B** 24-ch Relay Board w/ 20-pin & 50-pin Flat Cables
- PCL-10150-1.2** 50-pin Flat Cable, 1.2 m