

OP4200 Specifications

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OP4200 General Specifications

Product name	OP4200
CPU	ARM Processor dual-core Cortex A9 1GHz
Memory	16 GB SD card, 1024 MB SRAM
O/S	Linux-based real-time operating system
FPGA	Xilinx Zynq XC7Z030, Kintex-7 FPGA, 125K LUT
I/O lines	128 lines, routed to cassette conditioning modules
Communication ports	2 GTX SFP connectors, up to 5Gbps
I/O connectors	DB37F RS232 CAN
I/O cassette slots	4 slots for I/O cassettes
Power supply	External Power supply, 100-240VAC, 50-60Hz, 60VA 24V \pm 10% @ max 2.5A
Dimensions	25 x 22x 28 cm (9.8" x 8.7" x 11.2") HxWxD
Weight	4.54kg (10 lbs)
Operating temperature	10 to 35 °C (50 to 95°F)
Storage temperature	-55 to 85°C (-67 to 185°F)
Maximum rated ambient temperature	40C° (104°F)
Relative humidity	10 to 90% non-condensing
Maximum altitude	2000 m (6562 ft.)

OP4230-1 Specifications

Product Name	OP4230-1
Part Number	429-0019
Number of channels	16 single-ended
Resolution	16 bits
Default range	\pm 16 Volts
Maximum current	15 mA
Max. Sampling Frequency	1 MS/s

Min Conversion/Acquisition Time	1 s per channel
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Dynamic Characteristics

Calibration	Programmable gain and offset calibration for each D/A. Calibration factors are stored in on-board non-volatile memory (EEPROM)
Maximum noise	20 mV peak-to-peak
Maximum offset	± 10 mV
Recommended warm-up time	5 min.
Calibration interval	as required
Dimensions	6.60 cm x 12.50 cm (2.6" x 4.92")

Environmental

Operating temperature	10 to 40 °C
Storage temperature	-55 to 85 °C
Relative humidity	10 to 90%, non-condensing
Maximum altitude	2,000 m

OP4240-1 Specifications

Product Name:	OP4240-1
Part Number	429-0018
Number of channels:	16 differential
Resolution:	16 bits
Max. Sampling Frequency:	400 kS/s
Min Conversion / Acquisition Time:	2.5 s per channel
ADC Type:	8 x Dual ADC

Nominal Input Ranges

Full Scale	+/- 20.0 V
Calibration	Calibration factors are stored in on-board non-volatile memory (flash memory). This memory is not accessible for calibration.
Recommended warm-up time:	5 min.
Calibration interval:	as required
Dimensions:	6.60 cm x 12.50 cm (2.6" x 4.92")

Environmental

Operating temperature	10 to 40 °C
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Storage temperature	-55 to 85 °C
Relative humidity	10 to 90%, non condensing
Maximum altitude	2,000 m

OP4242-1 Specifications

Product name	OP4242 analog to digital converter (16 analog inputs - 2 MSPS)
Part number	429-0020
Number of channels	16
Resolution	16 bits
Input impedance	1 M
Max. Sampling Frequency	2 MSPS
ADC Type	8 x Dual ADC
Input voltage range	± 20V
Bandwidth	Small signal (-3 dB): 400 kHz
Accuracy	±10mV on the entire ±20V range
System noise max.	5mVrms
Recommended warm-up time	5 min.
Dimensions	6.60 cm x 12.50 cm (2.6" x 4.92")
Operating temperature	0 to 50 °C (32 to 122°F)
Storage temperature	-55 to 85°C (-67 to 185°F)
Relative humidity	10 to 90%, non-condensing
Maximum altitude	2,000 m (6562 ft.)

OP4250-1 Specifications

Product name	OP4250-1 (32 optoisolated digital inputs)
Number of channels	32 digital inputs
Isolation	Optical isolator
Connection mode	Anode and cathode available on the connector
Input current	3.6 mA, current limiting diode
Reverse voltage protection	Schottky diode
Maximum reverse voltage protection	30 Volts
Detection threshold	Separate Schmitt Trigger
Voltage range	4 to 30 Vdc
Delay Low-to-High	<= 160 ns

Delay High-to-Low	<= 130 ns
Dimensions	6.60 cm x 12.50 cm (2.6" x 4.92")
Operating temperature	10 to 40 °C (50 to 104°F)
Storage temperature	-55 to 85°C (-67 to 185°F)
Relative humidity	10 to 90%, non-condensing
Maximum altitude	2,000 m (6562 ft.)

OP4260-1 Specifications

Product name	OP4260-1 (32 digital outputs - push-pull)
Number of channels	32 digital outputs 2 banks of 16, fully isolated and independent of each other
Isolation	Galvanic isolator
Output Protection	50 mA resettable fuse
Protection thresholds	Overvoltage: 30V ±5% Under-voltage protection 5V ±2.5% Reverse voltage: maximum 30 V.
Output Voltage range	5 to 30 Vdc max
Output configuration	Push-pull, tri-state output
Delay Low-to-High	<= 90ns @ 25°C for 30 V <= 200ns @ 25°C for 5 V
Delay High-to-Low	<= 90ns @ 25°C for 30 V <= 200ns @ 25°C for 5 V
Rise/Fall times	<= 15 ns
Dimensions	6.60 cm x 12.50 cm (2.6" x 4.92")
Operating temperature	10 to 40 °C (50 to 104°F)
Storage temperature	-55 to 85°C (-67 to 185°F)
Relative humidity	10 to 90%, non-condensing
Maximum altitude	2,000 m (6562 ft.)