

# **SPECIFICATIONS**

**CIO-DAS08Ž C-AOH**  
**CIO-DAS08Ž C-AO**  
Analog Input & Digital I/O



Revision F, N{ [‐] 200È  
© Copyright 200È, MEASUREMENT COMPUTING CORPORATION

## **Power consumption**

+5V	200 mA typical, 240A max
+12V	
CIO-DAS08/JR	17 mA typical, 22mA max
CIO-DAS08/JR-AO	27 mA typical, 35mA max
-12V	
CIO-DAS08/JR	28 mA typical, 36mA max
CIO-DAS08/JR-AO	28 mA typical, 36mA max

## **Analog input section**

A/D converter type	AD574
Resolution	12 bits
Number of channels	8 single-ended
Input ranges	$\pm 5V$
A/D pacing	Software-polled
Data transfer	Software-polled
A/D conversion time	25 $\mu s$
Throughput	System-dependant
Gain drift (A/D specs)	$\pm 50$ ppm/ $^{\circ}C$
Zero drift (A/D specs)	$\pm 10$ ppm/ $^{\circ}C$
Absolute maximum input voltage	$\pm 30V$ continuous

## **Analog Output (CIO-DAS08/JR-AO Only)**

D/A converter type	AD7237
Resolution	12 bits
Number of channels	2
Output Ranges	$\pm 5V$
D/A pacing	Software-paced
Data transfer	Programmed I/O
Offset error	$\pm 2$ LSB typical, $\pm 5$ LSB max
Gain error	$\pm 2$ LSB typical, $\pm 5$ LSB max
Differential nonlinearity	$\pm 0.9$ LSB max
Relative accuracy	$\pm 1$ LSB max
Monotonicity	Guaranteed monotonic to 12 bits over temperature
D/A Gain drift	$\pm 25$ ppm/ $^{\circ}C$ max
Settling time (10V step to $\pm 1/2$ LSB)	10 $\mu s$ max
Current Drive	$\pm 5$ mA
Output coupling	DC
Output impedance	0.5 Ohms max
Miscellaneous	Update DACs simultaneously

## **Digital Input / Output**

Digital Type

Output

74LS273

Input

74LS244

Configuration

8 fixed input, 8 fixed output

Number of channels

8

Output High

2.7 volts min @ -0.4 mA

Output Low

0.5 volts max @ 8 mA

Input High

2.0 volts min, 7 volts absolute maximum

Input Low

0.8 volts max, -0.5 volts absolute minimum

## **Environmental**

Operating temperature range

0 to 50°C

Storage temperature range

-20 to 70°C

Humidity

0 to 90% non-condensing

**Measurement Computing Corporation**  
**10 Commerce Way**  
**Suite 1008**  
**Norton, Massachusetts 02766**  
**(508) 946-5100**  
**Fax: (508) 946-9500**  
**E-mail: [info@mccdaq.com](mailto:info@mccdaq.com)**  
**[www.mccdaq.com](http://www.mccdaq.com)**