

# ACR7000 Series

## Multi-Axis Motion Controllers



## Integrated Motion Solutions

The new ACR7000 series combines performance, value and scalability that meets and exceeds OEM expectations. Built on the well-known ACR9000 platform, the 7000 series utilizes re-imagined hardware designs, well-suited for table top and laboratory style instruments.

Microstepping drives are integrated with the multi-axis motion controller into a single package, saving space, cabling, and reducing installation complexity. Standard 4 axis systems are readily available for prototypes and unique machine designs, yet can easily scale for high volume OEMs. The ACR7000 series is perfect building block for customer specific motion system solutions. Parker's engineering and manufacturing teams have the expertise and agility needed for machine builders looking for a long-term partner.

## Contact Information:

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## Specifications

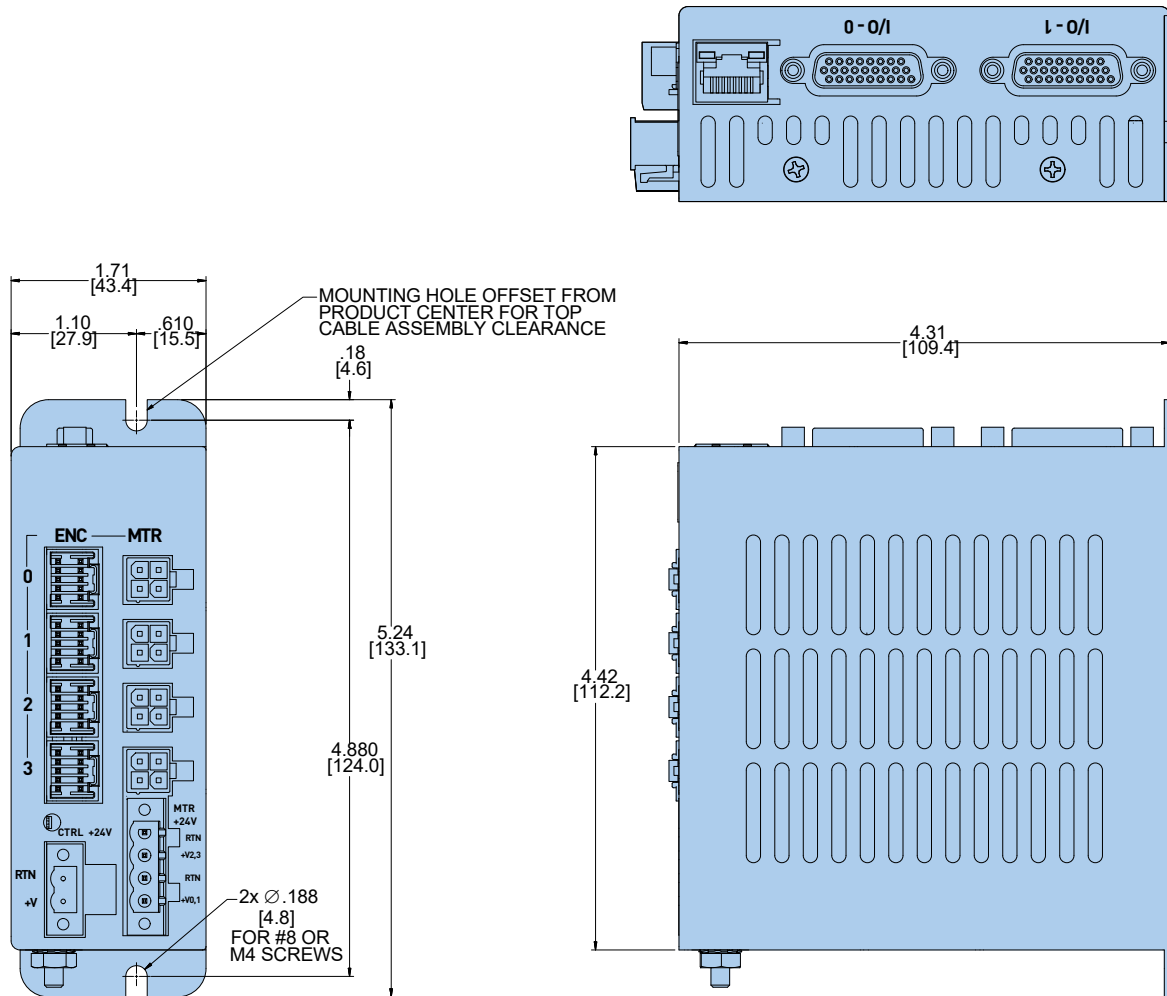
Part Number	ACR74T-A4V2C1
Axes	4
Motor Output	4 Amps/axis (peak of Sine) Each axis is user selectable from 0.5 to 4 Two-phase Stepper Motors
Motor Input Voltage	24VDC
Control Input Voltage	24VDC, 20W
Drive Resolution	Microstepping, selectable to 1/256 steps (51200 steps/rev for 1.8 deg motors)
Digital Inputs	20 programmable inputs, 5-24 VDC Includes 8 available for Position Capture
Digital Outputs	8 programmable outputs, 5-24 VDC Includes 4 available for position based output
Power Stage Enable	Dedicated input shuts down all drives
Encoder Inputs	4 Incremental encoders, 1.6 MHz, differential, A, B, Z signals
Processor	800MHz ARM® Cortex®-A8 processor
Communications	100 Base-T, RJ-45 connector Supports TCP/UDP and EtherNet/IP
Development Software	Parker Motion Manager
API	ComACRServer Libraries for C++,C#, VB.NET, etc
Programming Language	AcroBASIC with 1Mb of user memory
Protective Circuits	Short Circuit, Over Voltage, Over Current, Over Temperature
Standards	CE (LVD), CE (EMC), RoHS



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# Parker Controllers

## Dimensions



## Ordering Information

	①	②	③	④	⑤	⑥
<b>Order Example:</b>	ACR7	4	T	-	A4	V2 C1

- |  |   |
|--|---|
| ① <b>Series</b><br>ACR7 ACR7000 Series | ④ <b>Motor Output Current</b><br>4 4 Amps |
| ② <b>Number of Axes</b><br>4 4 Axes    | ⑤ <b>Drive Voltage</b><br>2 24VDC         |
| ③ <b>Drive Technology</b><br>T Stepper | ⑥ <b>Enclosure</b><br>1 EMC Cover         |

# Connections

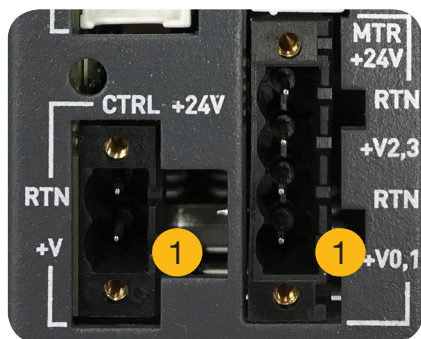
ENC - Encoder Input Connectors (4)	
Pin	Signal
1	A+
2	A-
3	B+
4	B-
5	Z+
6	Z-
7	+5V
8	GND 5V
9	Earth
10	Earth



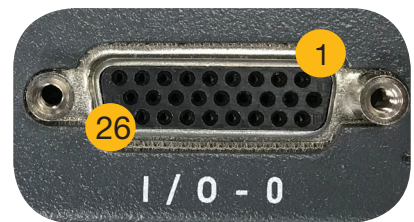
MTR - Motor Output Connectors (4)	
Pin	Signal
1	Motor A-
2	Motor B-
3	Motor A+
4	Motor B+

	I/O - 0	I/O - 1
Pin	Signal	Signal
1	Input 0	Input 6
2	Input 1	Input 7
3	Input 2	Input 8
4	Input 3	Input 9
5	Input 4	Input 10
6	Input 5	Input 11
7	Input 24	Input 28
8	Input 25	Input 29
9	Input 26	Input 30
10	Input 27	Input 31
11	D.GND	D.GND
12	Output 32	Output 36
13	Output 33	Output 37
14	Output 34	Output 38
15	Output 35	Output 39
16	D.GND	D.GND
17	Enable Input	N/C
18	GND	D.GND
19	24VDC out	24VDC out
20-26	D.GND	D.GND

CTRL +24V Control Power Input	
Pin	Signal
2	GND
1	+24VDC



MTR +24V Motor Power Input	
Pin	Signal
4	GND24V
3	Motor 2/3 +24V
2	GND24V
1	Motor 0/1 +24V



Mating connectors removed for detail