ICP Electronics Australia Pty Ltd

TEL: 02 9457 6011 sales@icp-australia.com.au www.icp-australia.com.au





□ Features			
Support CiA402 protocol			
4-axis independent control and pulse output up to 4MHz			
■ Pulse output options: CW/ CCW, Pulse/Direction			
4 x Encoder interfaces (A, B, Z), differential			
■ Distance between stations up to 100 m (100BASE-TX)			
Support daisy chain connection			
CE UK ROHS			

■ Introduction

The ECAT-2094P pulse output module is a cost-effective, four-in-one pulse output module. The ECAT-2094P simultaneously controls up to four pulse type motor drivers.

The ECAT-2094P is a standard EtherCAT slave and an EtherCAT master is required to operate the device. The ECAT-2094P supports two operation modes: Free-Run and Distributed Clock (DC).

Pulse type motor drivers can be directly connected to the ECAT-2094P device. The device is designed to operate a pulse-type drive with pulse output. Configuration has to be done by the EtherCAT master and the application program.

The ECAT-2094P has four integrated incremental encoder interfaces. Four 32 bit high frequency encoder counter counts the input signal of external incremental encoders. The encoder can for example be used for homing purposes and for consistency checks.

For each motor three digital input channels are provided: A Left and right hardware limit switch and a home switch. The hardware limit switch which automatically stops the motor when activated, and all three digital inputs can be used for home position search.

■ Applications

- Automated Test Equipment
- Surveillance Systems
- Labeling Machinery
- Packaging
- Semiconductor Manufacturing
- Engraving Machine
- Automatic Feeding Machine



Specifications

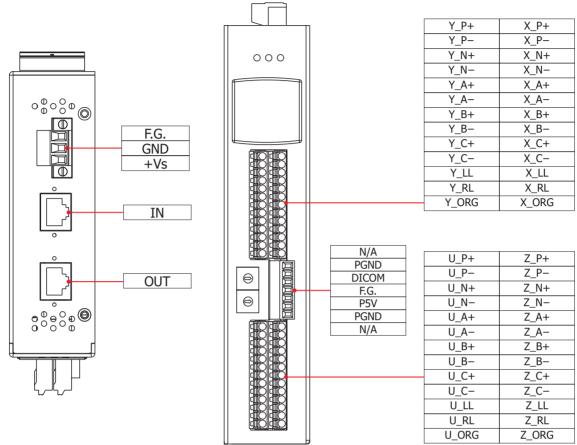
Model		ECAT-2094P			
EMS Protec	ction				
EFT (IEC 61000-4-4)		Signal: 1 KV Class A; Power: 1 KV Class A			
ESD (IEC 61000-4-2)		4 KV Contact for each channel			
Surge (IEC 61000-4-5)		1 KV Class A			
LED Indicators					
Status		1 x Power 1 x Operation State 2 x Communication 12 x DI status 18 x Motion status			
Encoder In	put				
No. of Axes		4, differential			
Mode		A/B phase, CW/CCW, Pules/Dir			
Frequency		1 MHz Max.			
Motor Output					
No. of Axes		4			
Step Frequency		4 MHz Max.			
Digital Inpo	ut				
Channels		12			
Туре		Wet Contact			
ON Voltage Level		10 ~ 24 VDC			
OFF Voltage Level		4 VDC Max.			
Isolation		3750 VDC			
EtherCAT					
Ports		2 x RJ-45			
Distance Between Stations		100 m Max. (100Base-TX)			
Data Transfer Medium		Ethernet/EtherCAT Cable (Min. CAT 5), Shielded			
Cycle Time		0.5 Millisecond			
Distributed Clocks		Yes			
Power					
Input Range		+20 VDC ~ +30 VDC			
Mechanical					
Casing		Metal			
Dimensions	DIN-rail mounting	37 mm x 191 mm x 148 mm			
(W x L x H)	Wall mounting	37 mm x 229 mm x 142 mm			
Installation		DIN-rail mounting or wall mounting			
Environmental					
Operating Te	emperature	-25 ~ +40 °C			
Storage Temperature		-30 ∼ +80 °C			
Ambient Relative Humidity		10 ~ 90% RH, Non-condensing			

ICP Electronics Australia Pty Ltd

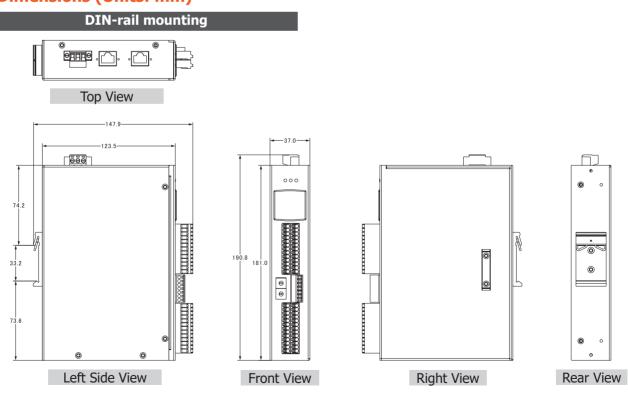
TEL: 02 9457 6011 sales@icp-australia.com.au www.icp-australia.com.au



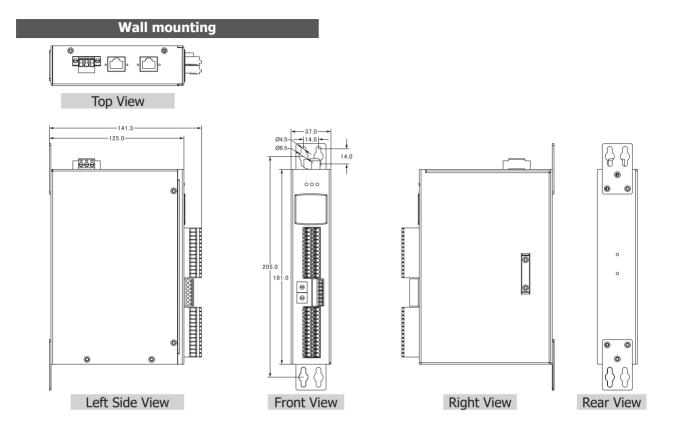
Pin Assignments



■ Dimensions (Units: mm)



ICP Electronics Australia Pty Ltd TEL: 02 9457 6011 sales@icp-australia.com.au www.icp-australia.com.au



■ Wire Connections

Digital Input	Readback as 1	Readback as 0
	+10 ~ +24 VDC	OPEN or <4 VDC
Sink	ORG/RL/LL 3K + - DI.COM	ORG/RL/LL 3K + - DI.COM
Source	+10 ~ +24 VDC	OPEN or <4 VDC
	ORG/RL/LL 3K	ORG/RL/LL 3K - + DI.COM

■ Ordering Information

ECAT-2094P CR EtherCAT slave CiA402 Standard 4-axis pulse output module (Metal Case) (RoHS)