Intelligent Parker Amplifier
Ethernet Servo Drive/Controller

The new Intelligent Parker Amplifier or *IPA*, is a 1.5 axis servo drive/controller based on the ACR control platform. Available in two power levels, 400W and 1500W, the IPA can drive a wide range of rotary and linear motors and supports a number of industry standard feedback protocols. The IPA provides a dual port Ethernet interface which gives the machine builder the flexibility needed to create cost effective motion control solutions.

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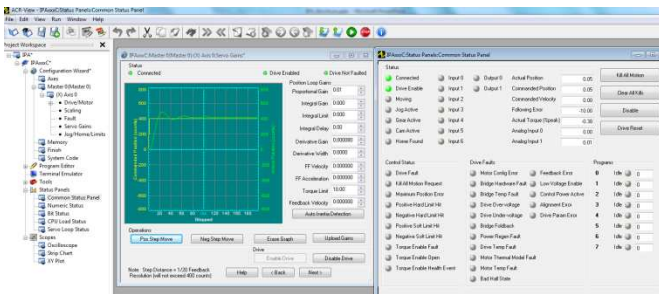| Part Number	Description
IPA04-HC	400W Servo Drive Controller
IPA15-HC	1500W Servo Drive Controller

ENGINEERING **YOUR** SUCCESS.

Motion

The IPA is built on the proven and powerful AcroBASIC programming language used in the Parker ACR family of motion controllers. Project development is managed with the ACR-View development software that provides the user with the tools to program, commission, tune and debug applications. Motion and machine control features include:

• Multitasking of up to 16 different tasks
• Incremental, absolute and continuous moves
• Trapezoidal and S-Curves profiles
• High speed (1 ms) position captures
• Registration moves
• Electronic gearing and camming

Visualization

Combined with Parker's Interact Xpress HMI platform the IPA becomes an affordable machine solution. Xpress supports connections to multiple IPA and other PLCs at the same time, with an easy to use development environment and award winning graphics.

Communications

EtherNet/IP gives IPA users a popular connectivity option to PLCs for easy integration of servo motion in larger machine control application. The IPA is an EtherNet/IP adapter device supporting both I/O and Explicit Messaging. Add-On Instructions are available for seamless integration with Logix controllers. Users can also take full advantage of the IPA programming language and to create complex, custom routines called by the PLC

Performance

At the core of the IPA is outstanding servo performance for the most demanding applications. The IPA can be paired with wide range of Parker rotary and linear servo motors, utilizing cost effective incremental encoders or absolute feedback devices based on high speed serial protocols. Recommend motors include

• MPE Economy OEM-Style Motors
• BE Series High Torque Servo Motors
• SM Slotless Servos
• MPP and MPJ Industrial Motors
• Trilogy Linear Motors and Actuators

Specifications

	IPA04-HC	IPA15-HC
Continuous Current	3.0	6.3
Peak Current	9	18.9
Rated Motor Power	400W	1500W
Peak Motor Power	1200W	4500W
Size	3.0" W x 7.0" H x 5.3" D	3.4" W x 7.0" H x 5.3" D
Drive Input Voltage	100-240VAC Single Phase	
Servo Update	62.5 μ seconds	
Digital Inputs	7 programmable inputs, 5-24 VDC (3 high-speed 1us capture, 4 standard)	
Digital Outputs	4 programmable outputs, 5-24VDC	
Analog Inputs	2 @ 12-bit resolution	
Enable Input	2 redundant inputs for torque disable	
Primary Encoder	Incremental encoder, EnDat 2.2 absolute encoder	
Secondary Encoder Input	Incremental encoder, 1.6 MHz, differential, A, B signals	
Communications	100 Base-T, Dual RJ-45 connectors, Supports TCP/UDP and EtherNet/IP	
Development Software	ACR-View 6.4 and higher	
API	Libraries for C++,C#, VB.net, etc	
Programming Language	AcroBASIC with 1Mb of user memory	
Standards	UL Recognized 508c, CE (LVD), CE (EMC), RoHS	
	EtherNet/IP Conformance Tested	
Environmental	0-45 C , 0-95% Humidity	

Motor Family	Connector Type	Motor Cable	Feedback Cable (incremental encoder)	Feedback Cable (EnDat absolute encoder)
MPE	**C1**	71-030630-XX	71-030631-XX	N/A
BE, SM, MPP/J	**PS**	P-1A1-XX (0-6A)	F-1A1-XX	F-1A2-XX
		P-3B1-XX (>6 amps)		
	PS (High-flex)	PH-1A1-XX (0-6A)	FH-1A1-XX	FH-1A2-XX
		PH-3B1-XX (>6 amps)		

5.46
[138.7]

5.26
[133.5]

5.04
[128.0]

.69
[17.5]

CAUTION!
RISK OF ELECTRIC SHOCK
HAZARDOUS VOLTAGE EXISTS
INSIDE UNIT FOR 420 TO 35 MIN

.51
[13.0]

.42
[10.7]

OVERALL WIDTH
3.00 [76.1] FOR -04
3.41 [86.7] FOR -15

1.78
[45.3]

2x .28
[7.1]

.20
[5.1]

6.680
[169.7]

2x Ø.180 [4.6]
FOR #8 OR M4
SCREW

.12
[3.0]

7.00
[177.8]

2x COVER CUT OUT
FOR CLARITY

2.37
[60.2]

3.41
[86.7]
FOR -15

1.00
[25.4]
FOR -15

.63 FOR -04
[15.9]

FAN FOR -15 ONLY