Intelligent Parker Amplifier

FtherNet/IP Servo Drive



IPA: Simplfied Motion Integration

The 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. Included with all versions of the IPA is EtherNet/IP, a popular connectivity option to PLCs for easy integration of servo motion in larger machine control applications. The IPA can act as both an EtherNet/IP adapter device supporting I/O and Explicit Messaging and as a Scanner, enabling drive to drive connections and expansion I/O possibilities.

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EtherNet/IP

Add-On Instructions are available for seamless integration with CompactLogix and ControlLogix controllers. The AOI's are Parker created function blocks that encapsulate IPA functionality into the Logix format, allowing the PLC programmer to quickly and confidently incorporate motion into the overall application. IPA specific User-Defined Data Types are imported along with the AOI's, creating recognizable tag names for over four hundred drive parameters for additional diagnostic capability.

In addition to the standard AOI's listed below, developers can also take full advantage of the IPA programming language and to create complex, custom routines called by the PLC. The IPA can also operate as a stand-alone programmable controller, enabling the user to test functions and prototype motion outside of the PLC environment for extra flexibility.

Add-On Instructions

AOI Name	Function
IPA_AxisManager	Manages communication and AOI interaction
IPA_ServoOn	Enables servo control of motor
IPA_ServoOff	Disables servo control of motor
IPA_Move	Initiates absolute or incremental moves
IPA_Home	Initiates homing sequencing
IPA_Jog	Continuous motion at programmed velocity
IPA_Stop	Commands axis to cancel existing move and
IPA_FaultReset	Recover from servo fault conditions
IPA_SetPosition	Establish axis zero point or preset position after homing
IPA_GearIn	Engages ratio following of secondary encoder
IPA_GearOut	Disengages ratio following
IPA_RunProgram	Commands user-defined program to execute

