

CANopen Interface System with Copley Amplifiers

Overview

Soft Servo Systems offers a variety of PC-based CNC and general motion control (GMC) products for OEM machine builders. Each product is available with a choice of several servo and I/O communications hardware platforms, including the CANopen interface system.

This innovative servo system is based on CANopen digital servo communications technology, and works with Copley Control's Accelus[™] and Accelnet[™] digital servo amplifiers (and third-party servo motors).

In the CANopen platform, users connect exactly the number of servo drives they need.

CANopen Features

- Economically efficient
- Simple setup and wiring
- Proven technology in use for over two decades
- Drive parameters can be changed on-the-fly
- Tightly synchronized drives close all servo loops (each servo amplifier closes the servo actuator's feedback loop locally)

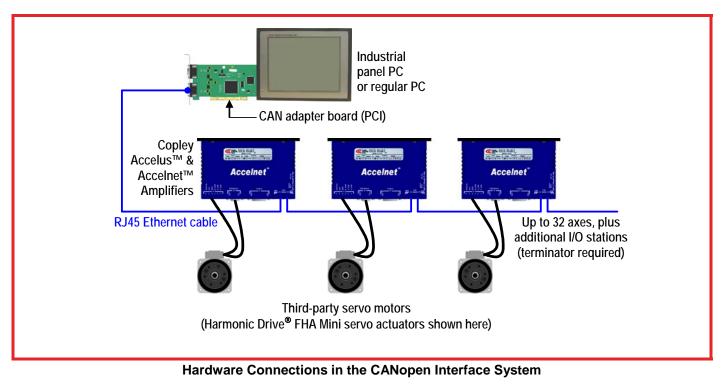
Host CPU HMI/CNC operation G code processing Interpolation Position control Smoothing CAN PCI adapter card CAN Ethernet CAN Ethernet CAN Ethernet CAN Ethernet CAN Ethernet Smoothing Soft PLC

CANOpen Communications

CANopen is an economically efficient fieldbus network for industrial control, based upon CAN (Controller Area Network). This high-speed, real-time network provides simple, fast network control. Up to 32 stations (plus additional I/O stations) can be integrated in one network, using an RJ45 Ethernet interface cable and a CAN PC card, with no hardware interface modules necessary.

CANopen Interface Specifications

- Cycle time of 4 ms
- CAN bit rate: up to 1 Mbit/sec
- Timestamp resolution: 1 µs



I/0

Each Copley Accelus[™] amplifier offers 6 digital inputs and 2 digital outputs; each Copley Accelnet[™] amplifier offers 12 digital inputs and 3 digital outputs.

Networked Copley CANopen I/O modules will be available in the near future, and each will provide 72 points of digital I/O; 12 analog inputs; 12 PWM outputs; 8 dedicated digital inputs for the CAN node address and bit-rate; and 2 outputs for CAN status LED drive.

Copley Controls Corporation

Copley Controls, a division of Analogic Corporation, is a worldwide leader in high power amplifiers for the semiconductor, medical, pharmaceutical and automated assembly/ inspection industries. Headquartered in the US with a division in England, Copley Controls has 20 years of experience and sales offices and local technical support in the US, Europe and Asia. For more information, visit <u>www.copleycontrols.com</u>.

