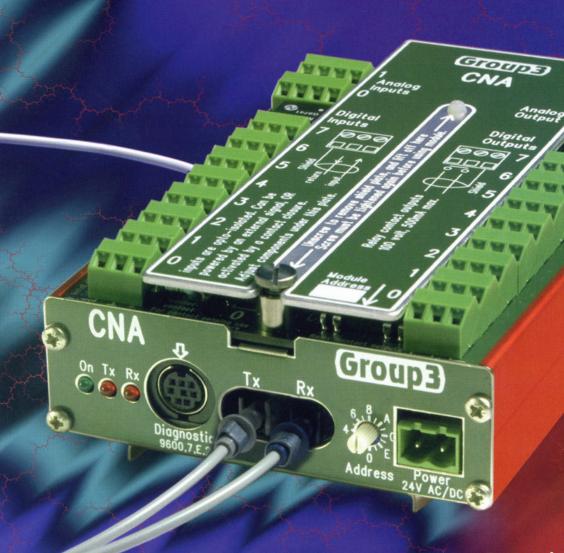
## **CNA Control Module**



The CNA is a compact I/O module with fiber optic communications for use with the Group3 control system. The CNA offers analog and digital input and output channels in one rugged package.

Group3

## **Featuring**

Two analog inputs; 16-bit

One analog output; 16-bit

Eight digital inputs; opto-isolated

Eight digital outputs; relay contacts

Extreme robustness in the face of electrical transients

Can be set to operate as a controller, running an embedded PID algorithm for closed loop control



## **The CNA Control Module**

The CNA is a precision control and monitoring module, offering both analog and digital channels in the one small package. It incorporates many noise resistant features that allow it to operate successfully in harsh electrical environments. In addition to acting as a simple I/O device, an embedded PID function can be enabled to run local closed loop control.

A Loop Controller card in the controlling computer handles all the communications on the fiber optic cables, at a rate of over 1 Mbaud. Up to 48 modules can be run from a single controller card. The CNA has been designed to be integrated into the Group3 control system, and can be used on the same fiber optic loop as the standard multi-board Device Interfaces from Group3, producing a very flexible distributed I/O system.

## **Features**

Two Analog Inputs 16 bit resolution, bipolar, each with differential inputs.

Each channel sampled 30 times per second. Input Ranges: ±10 Volt and ±100mV

One Analog Output 16 bit resolution, output selectable as: ±10 volt range, or 4 to 20 mA current output.

Output controlled directly, or by an embedded PID algorithm for closed loop control.

**Analog** 

Output

**Eight Digital Inputs** Opto-couplers; selectable to sense contact closure, or powered by the input signal.

Eight Digital Outputs Relay contacts, Maximum switching 100 volt, 500mA. Max. switched power - 10W

Fiber Optic Cables Entire module is isolated from the controlling computer, and all other modules.

Standard unit uses HP "versatile link" 1mm plastic fiber cables.

Data rate: 1.15Mbaud.

Diagnostic Port RS-232 Port allows configuration and local control over-ride from a terminal with a

serial port.

Transient Protection All I/O pins on the main board have fast acting, voltage limiting components

installed, coupled with further suppression and isolation on the I/O board.

Robust Software Self diagnosing and fault tolerant software allows graceful recovery from an upset

without operator intervention.

Rugged Metal Case All metal enclosure, with an integral DIN rail locking system.

Excellent shielding from electrical transients.

**Quick Replacement** No tools are required to remove the module from an installation.

Small Size Dimensions, with DIN rail; 160 mm long x 92 mm wide, x 52 mm.

24V Power Supply Requires nominal 24V, 18 to 36 volt DC, or 14 to 26 volt (rms) AC, 3 Watts.

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