



I/O Expansion and I/O Modules

I/O Expansion

The main control unit provide 4 or 8 internal I/O expansion slots. An RS-485 port is provided for external I/O expansion. This RS-485 port is used to connect to the I/O expansion units, 87K4 or 87K8. Only serial I/O modules can be installed in the I/O expansion unit. The main control module can control up to 255 serial I/O modules through one RS-485 port.

I/O Modules

There are two types of I/O modules, parallel and serial. The parallel modules are high speed modules and have to be installed in the Main Control Unit. The serial I/O modules can be installed in either the main control unit or expansion unit. There are over 40 different parallel/serial I/O modules available. These modules include D/I, D/O, A/D, D/A, Timer/Counters, motion control, encoder interfaces, Storage Flash, Battery backed-up SRAM, ASICKey and a Printer interface.

The modules can be mixed and matched to the application in either the 4 or 8-slot control unit. I/O expansion can either be achieved through an I/O expansion bus, or alternatively through connection to another controller to the network.

Parallel I/O Modules

Parallel I/O modules provide the following features.

- High speed A/D: 100K samples/second
- High speed D/A: 30K from -10V to +10V
- High speed D/I & D/O
- High speed motion control module, stepping/servo
- High speed encoder module
- High performance Counter/Frequency modules
- High speed multi-channel RS-232/RS-422/RS-485 modules
- Printer interface & X-Socket interface module
- X-Socket interface module

Serial I/O modules

<u>Model No.</u>	<u>Descriptions</u>
I-87033	High speed A/D * 8 channels, 100K samples/second max.
I-87016	2 * strain gage input
I-87017	8 * analog input
I-87018	8 * thermocouple input
I-87022	2 * fully isolated D/A
I-87024	4 * D/A, common ground
I-87051	16 * D/I, 3.5V ~ 30V
I-87052	8 * isolated D/I, differential input
I-87053	16 * isolated D/I
I-87054	8 * isolated D/I + 8 * isolated D/O
I-87055	8 * D/I, 8 * D/O
I-87057	16 * isolated D/O, 100mA, 30V max.
I-87063	4 * isolated D/I + 4 * Relay (220V)
I-87064	8 * power relay
I-87065	8 * SSR AC
I-87066	8 * SSR DC
I-87068	8 * Relay (1A)
I-87082	2 * counter/frequency, 1 ~ 100K
I-87083	8 * counter, DC to 100K