I/O Modules

H4-CTRIO high-speed counter module

Select the H4-CTRIO if your application requires:

- More than one quadrature encoder
- More than one single up counter
- Pulse outputs
- Output operations on the module based on counts, without interaction with the CPU scan

The CTRIO is configured using a Windows-based "Wizard" utility, eliminating the need for ladder logic programming to configure the module. Multiple CTRIO modules can be used in a base to support additional input/output pulse trains.

Analog module selection tips

If you're going to control the speed of an AC inverter or drive with a DL405 analog module, make sure you select the current sourcing F4-04DAS-1 isolated analog output module. Complete module specifications are listed later in this section.

*ZIP*Link connection systems

ZIPLinks consist of PLC interface cables and connector modules that offer "plug and play" capability by plugging one end of the ***ZIP***Link cable into an I/O module and the other end into the ***ZIP***Link connector module. This eliminates the tedious process of wiring PLC I/O to terminal blocks. For more information, refer to Wiring System for DL405 PLCs later in this chapter or the Wiring Solutions section in this catalog.

DIN*nector*s terminal blocks

DIN*nector*s are DIN rail mounted connectors or terminal blocks. All DIN*nector*s are UL, CSA, VDE, SEV, RINA and IEC approved. Refer to the Terminal Blocks section of this catalog for details.

Need spare parts?

Sometimes it is helpful to have extra I/O module connectors or spare fuses. The DL405 spare parts and accessories are listed below:

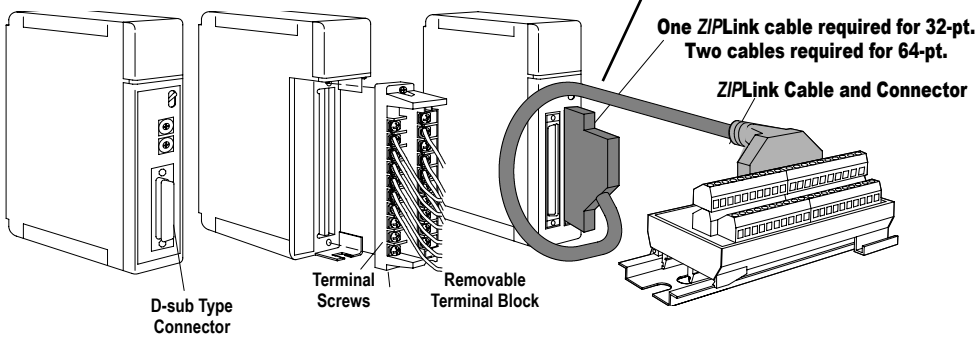
• D4-FUSE-2 ($23.00)	Fuses for F4-08TRS-2
• D4-FILL ($28.00)	Filler module to cover empty I/O slots
• (retired)	16-pt. module terminal blocks
• D4-IOCVR ($11.00)	Replacement terminal block covers
• ZL-D24-CON-R (Retired)	32/64-pt. ribbon-style connectors
• ZL-D24-CON-X ($89.00)	32/64-pt. solder-style connectors

Next steps?

Now that you understand the factors affecting your choice of I/O modules, it's time to choose the ones that best fulfill your needs. Review the module specifications later in this section. If you have any questions, give us a call. When you have selected the modules you need, proceed to the next section to choose an I/O configuration scheme that best suits your application.

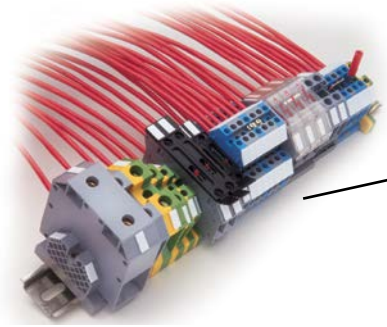
ZIPLinks eliminate the tedious process of wiring the PLC I/O to terminal blocks. See the Wiring Solutions section for details.

ZIPLink connection system



This logo is placed by each I/O module that supports ZIPLink connection systems. (The I/O modules are listed at the end of this section). See the Wiring Solutions section of this catalog for complete information on ZIPLinks.

DIN*nectors* ***terminal blocks***



DIN*nector*s provide a means of connecting and identifying two or more wires within the demands of an industrial environment. See the Terminal Blocks section for details.