

# 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.

## ZIPLink connection systems

**ZIPLinks** consist of PLC interface cables and connector modules that offer "plug and play" capability by plugging one end of the **ZIPLink** cable into an I/O module and the other end into the **ZIPLink** 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.

### DINnectors terminal blocks

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

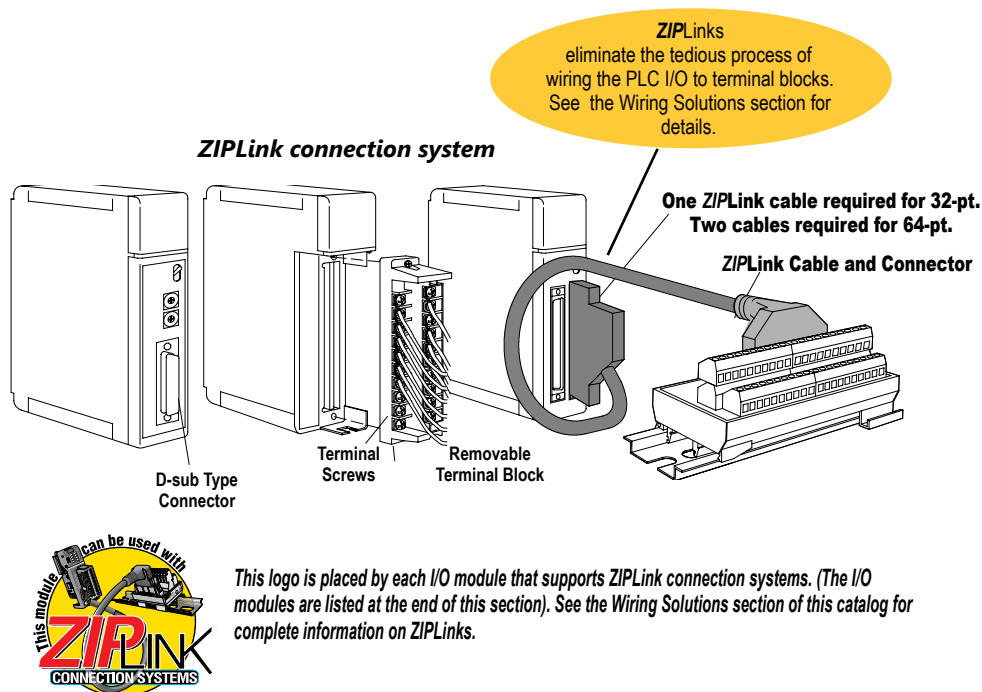
## Need spare parts?

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

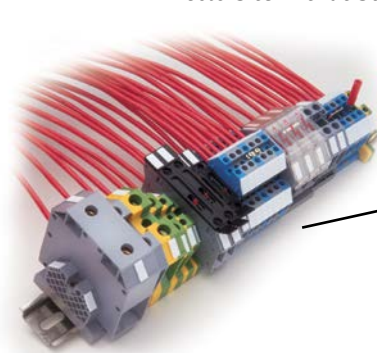
|                                          |                                        |
|------------------------------------------|----------------------------------------|
| • <a href="#">D4-FUSE-2</a> (\$23.00)    | Fuses for <a href="#">F4-08TRS-2</a>   |
| • <a href="#">D4-FILL</a> (\$27.00)      | Filler module to cover empty I/O slots |
| • (retired)                              | 16-pt. module terminal blocks          |
| • <a href="#">D4-IOCVR</a> (\$11.00)     | Replacement terminal block covers      |
| • <a href="#">ZL-D24-CON-R</a> (Retired) | 32/64-pt. ribbon-style connectors      |
| • <a href="#">ZL-D24-CON-X</a> (\$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.



### DINnectors terminal blocks



**DINnectors** 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.