CPU I/O Modules to *ZIP*Link Connector Modules - Productivity3000®

Note: In each table below select the length of cable as follows: (Blank) = 0.5m, -1 = 1.0m, -2 = 2.0m.

Productivity3000 CPU Input Module *ZIP*Link Selector

I/O Module		ZIPLink		
Input Module	# of Terms	Component	Module Part No.	Cable Part No.
P3-08NAS	20	Feedthrough	ZL-RTB20	ZL-P3-CBL20 ZL-P3-CBL20-1 ZL-P3-CBL20-2
P3-08ND3S				
P3-16NA		Feedthrough		ZL-P3-CBL20-L ZL-P3-CBL20-1L ZL-P3-CBL20-2L
P3-16ND3		Feedthrough		
		Sensor	ZL-LTB16-24-1	
P3-32ND3	40	Feedthrough	ZL-RTB40 or ZL-RTB40-1	ZL-CBL40 ZL-CBL40-1 ZL-CBL40-2
		Sensor	ZL-LTB32-24-1	
P3-64ND3 [1]		Feedthrough	ZL-RTB40 or ZL-RTB40-1	
		Sensor	ZL-LTB32-24-1	

Productivity3000 CPU Analog In Module *ZIP*Link Selector

I/O Module		ZIPLink		
Analog Module	# of Terms	Component	Module	Cable*
P3-04ADS	20	Feedthrough	ZL-RTB20 or ZL-RTB20-1	ZL-P3-CBL20-L ZL-P3-CBL20-1L ZL-P3-CBL20-2L
P3-08AD				
P3-16AD-1				
P3-16AD-2				
P3-08RTD	Matched Only	See Note 2		
P3-08THM	T/C Wire Only			
P3-04DA	20	Feedthrough	ZL-RTB20 or ZL-RTB20-1	ZL-P3-CBL20-L ZL-P3-CBL20-1L ZL-P3-CBL20-2L
P3-08DA-1				
P3-08DA-2				
P3-06DAS-1				
P3-06DAS-2				
P3-16DA-1				
P3-16DA-2				
P3-8AD4DA-1				
P3-8AD4DA-2				

Productivity3000 CPU Specialty Module *ZIP*Link Selector

I/O Module		ZIPLink		
Input Module	# of Terms	Component	Module Part No.	Cable Part No.
P3-HSI	40	Feedthrough	ZL-RTB40 or ZL-RTB40-1	ZL-CBL40-S ZL-CBL40-1S ZL-CBL40-2S
P3-HSO				

Note: ***ZIP***Link Connector Modules specifications follow the Compatibility Matrix tables. ***ZIP***Link Cables specifications are at the end of this ***ZIP***Link section.

Productivity3000 CPU Output Module *ZIP*Link Selector

I/O Module		ZIPLink		
Output Module	# of Terms	Component	Module Part No.	Cable Part No.
P3-08TAS	20	Feedthrough	ZL-RTB20 or ZL-RTB20-1	ZL-P3-CBL20 *
P3-08TD1S				ZL-P3-CBL20-L ZL-P3-CBL20-1L ZL-P3-CBL20-2L
P3-08TD2S				
P3-08TRS		Feedthrough		ZL-P3-CBL20 ZL-P3-CBL20-1 ZL-P3-CBL20-2
P3-16TA		Feedthrough		
		Fuse	ZL-RFU20 [4]	
P3-16TD1		Feedthrough	ZL-RTB20 (-1)	
		Fuse	ZL-RFU20 [4]	
		Relay (sinking)	ZL-RRL16-24-1 ZL-RRL16W-24-1 ZL-RRL16F-24-1	
P3-16TD2		Feedthrough	ZL-RTB20 (-1)	
		Fuse	ZL-RFU20 [4]	
		Relay (sourcing)	ZL-RRL16-24-2 ZL-RRL16W-24-2 ZL-RRL16F-24-2	
P3-16TR		Feedthrough	ZL-RTB20 (-1)	
		Fuse	ZL-RFU20 [4]	
P3-08TRS-1 [3]		Feedthrough	ZL-RTB20 (-1)	
		Fuse	ZL-RFU20 [4]	
P3-32TD1	40	Feedthrough	ZL-RTB40 or ZL-RTB40-1	ZL-CBL40 ZL-CBL40-1 ZL-CBL40-2
		Fuse	ZL-RFU40 [4]	
P3-32TD2		Feedthrough	ZL-RTB40 or ZL-RTB40-1	
		Fuse	ZL-RFU40 [4]	
P3-64TD1 [1]		Feedthrough	ZL-RTB40 or ZL-RTB40-1	
		Fuse	ZL-RFU40 [4]	
P3-64TD2 [1]		Feedthrough	ZL-RTB40 or ZL-RTB40-1	
		Fuse	ZL-RFU40 [4]	
P3-16TD3P		Feedthrough	ZL-RTB40 or ZL-RTB40-1	

Tables Footnotes:

* Select the cable length: L = 0.5m, 1L = 1.0m, or 2L = 2.0m.

[1] The P3-64ND3, P3-64TD1 and P3-64TD2 modules have two 32-point connectors and require two *ZIP*Link cables and two *ZIP*Link connector modules.

[2] These modules are not supported by the *ZIP*Link wiring system.

[3] The P3-08TRS-1 output module is derated not to exceed 2A per point maximum when used with the *ZIP*Link wiring system.

[4] Fuses (5 x 20mm) are not included. See Edison Electronic Fuse section for (5 x 20mm) fuse. S500 and GMA electronic circuit protection for fast-acting maximum protection. S506 and GMC electronic circuit protection for time-delay performance. Ideal for inductive circuits.

To ensure proper operation, do not exceed the voltage and current rating of *ZIP*Link module. ZL-RFU20 = 2A per circuit; ZL-RFU40 = 400 mA per circuit.

ZIPLink Wiring Solutions

Wiring Solutions using the *ZIP*Link Wiring System

ZIPLinks eliminate the normally tedious process of wiring between devices by utilizing pre-wired cables and DIN rail mount connector modules. It's as simple as plugging in a cable connector at either end or terminating wires at only one end. Pre-wired cables keep installation clean and efficient, using half the space at a fraction of the cost of standard terminal blocks. There are several wiring solutions available when using the ***ZIP***Link System ranging from PLC I/O-to-***ZIP***Link Connector Modules that are ready for field termination, options for connecting to third party devices, GS, DuraPulse and SureServo Drives, as well as special relay, transorb and communications modules. Pre-printed I/O-specific adhesive label strips for quick marking of ***ZIP***Link modules are provided with ***ZIP***Link cables. See the following solutions to help determine the best ***ZIP***Link system for your application.

Solution 1: Do-more, DirectLOGIC, CLICK and Productivity Series I/O Modules to ZIPLink Connector Modules

When looking for quick and easy I/O-to-field termination, a ***ZIP***Link connector module used in conjunction with a prewired ***ZIP***Link cable, consisting of an I/O terminal block at one end and a multi-pin connector at the other end, is the best solution.

Using the PLC I/O Modules to ***ZIP***Link Connector Modules selector tables located in this section,

1. Locate your I/O module/PLC
2. Select a ***ZIP***Link Module
3. Select a corresponding ***ZIP***Link Cable.

Solution 2: Do-more, DirectLOGIC, CLICK and Productivity Series I/O Modules to 3rd Party Devices

When wanting to connect I/O to another device within proximity of the I/O modules, no extra terminal blocks are necessary when using the ***ZIP***Link Pigtail Cables. ***ZIP***Link Pigtail Cables are prewired to an I/O terminal block with color-coded pigtail with soldered-tip wires on the other end.

Using the I/O Modules to 3rd Party Devices selector tables located in this section,

1. Locate your PLC I/O module
2. Select a ***ZIP***Link Pigtail Cable that is compatible with your 3rd party device.

Solution 3: GS Series and DuraPulse Drives Communication Cables

Need to communicate via Modbus RTU to a drive or a network of drives?

ZIPLink cables are available in a wide range of configurations for connecting to PLCs and SureServo, SureStep, Stellar Soft Starter and AC drives. Add a ***ZIP***Link communications module to quickly and easily set up a multi-device network.

Using the Drives Communication selector tables located in this section,

1. Locate your Drive and type of communications
2. Select a ***ZIP***Link cable and other associated hardware.

ZIPLink Wiring Solutions

Solution 4: Serial Communications Cables

ZIPLink offers communications cables for use with DirectLOGIC, CLICK, and Productivity CPUs, that can also be used with other communications devices. Connections include a 6-pin RJ12 or 9-pin, 15-pin and 25-pin D-sub connectors which can be used in conjunction with the RJ12 or D-Sub feedthrough modules.

Using the Serial Communications Cables selector table located in this section,

1. Locate your connector type
2. Select a cable.

Solution 5: Specialty ZIPLink Modules

For additional application solutions, ***ZIP***Link modules are available in a variety of configurations including stand-alone relays, 24 VDC and 120 VAC transorb modules, D-sub, RJ12 and RJ45 feedthrough modules, communication port adapter and distribution modules, and SureServo 50-pin I/O interface connection.

Using the ***ZIP***Link Specialty Modules selector table located in this section,

1. Locate the type of application
2. Select a ***ZIP***Link module.

Solution 6: ZIPLink Connector Modules to 3rd Party Devices

If you need a way to connect your device to terminal blocks without all that wiring time, then our pigtail cables with color coded soldered tip wires are a good solution. Used in conjunction with any compatible ***ZIP***Link Connector Modules, a pigtail cable keeps wiring clean and easy and reduces troubleshooting time.

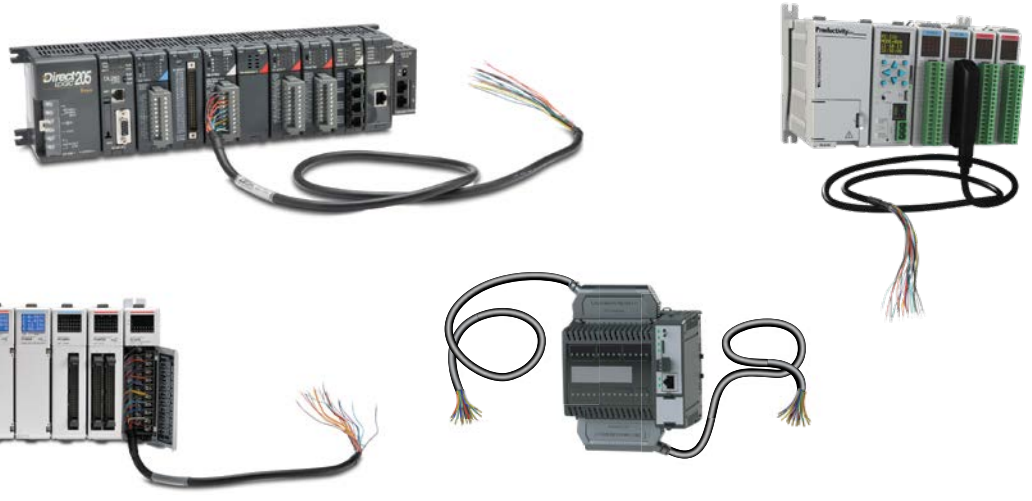
Using the Universal Connector Modules and Pigtail Cables table located in this section,

1. Select module type
2. Select the number of pins
3. Select cable.

PLC I/O to 3rd Party Devices

PLC I/O to 3rd Party Devices *ZIP*Link Cable Selector				
PLC		***ZIPLink***		
PLC Family	***# of Terms***	***Number of Wires***	***Pigtail Cable Part No. †***	***Length***
BRX MPUs	15	18	ZL-BX-CBL15-1P or -2P	"-1P" = 1 meter, "-2P" = 2 meters
	20	24	ZL-BX-CBL20-1P or -2P	
BRX Expansion Modules	10	24	ZL-BXEM-CBL10-1P or -2P	
	15	18	ZL-BXEM-CBL15-1P or -2P	
	20	24	ZL-BXEM-CBL20-1P or -2P	
CLICK I/O Modules	11	11	ZL-C0-CBL11-1P	
	20	20	ZL-C0-CBL20-1P	
DL05 PLC Fixed I/O	22	22	ZL-D05-CBL22-1P	
DL06 PLC Fixed I/O	24	24	ZL-D06-CBL24-1P	
DL05 & DL06 I/O Modules	8	8	ZL-D0-CBL8-1P	
	10	10	ZL-D0-CBL10-1P	
	13	13	ZL-D0-CBL13-1P	
	24	24	ZL-D0-CBL24-1P or -2P	
DL205 I/O Modules †	10	10	ZL-D0-CBL10-1P or -2P	
	19	19	ZL-D2-CBL19-1P or -2P	
	40	40	ZL-D24-CBL40-1P or -2P	
			ZL-D24-CBL40-1XP or -2XP	
DL405 I/O Modules †	40	40	ZL-D24-CBL40-1XP or -2XP	
			ZL-D24-CBL40-1P or -2P	
Productivity®1000 I/O Modules	10	20	ZL-P1-CBL10-1P or -2P	
	18	20	ZL-P1-CBL18-1P or -2P	
Productivity®2000 I/O Modules	20	20	ZL-P2-CBL18-1P or -2P	
	24	24	ZL-P2-CBL24-1P or -2P	
	40	40	ZL-P3-CBL40-1P or -2P	
Productivity3000® I/O Modules	20	20	ZL-P3-CBL20-1P or -2P	
	40	40	ZL-P3-CBL40-1P or -2P	

† X = 45° cable connector, all other cables have 180° cable connector



ZIPLink Motor Controller Communication

Drive / Motor Controller (GS/DuraPulse/SureServo/SureStep/Stellar) *ZIP*Link Selector							
Drive / Motor Controller		***Communications***			***ZIPLink Cable***		
Controller	***Comm Port Type***	***Network/Protocol***	***Connects to***	***Comm Port Type***	***Cable (2 meter length)***	***Cable Connectors***	***Other Hardware Required***
GS1	RJ12	RS-485 Modbus RTU	BRX MPUs	RS-485, 3-Pin	ZL-RJ12-CBL-2P	RJ12 to pigtail	N/A
			P2-550				
			P3-530				
			P3-550				
			P3-550E				
			P2-SCM	RS-485, 4-Pin			
			P3-SCM				
			DL06 PLCs	Port 2 (HD15)	GS-485HD15-CBL-2	RJ12 to HD15	
			D2-262 CPU				
			GS-EDRV100	RJ12	GS-EDRV-CBL-2	RJ12 to RJ12	
			ZL-CDM-RJ12Xxx *	RJ12	GS-485RJ12-CBL-2		
			FA-ISOCON	5-pin Connector	GS-ISOCON-CBL-2	RJ12 to 5-pin plug	
GS2	RJ12	RS-232 Modbus RTU	BRX MPUs	RS-232/485, 3-Pin	ZL-RJ12-CBL-2P	RJ12 to pigtail	N/A
			P2-550	RS-485, 4-Pin			
			P3-530				
			P3-550				
			P3-550E				
			P2-SCM	Ports 1, 2 & 3			
			P3-SCM	Ports 1 to 4			
			CLICK PLCs	Port 2 (RJ12)	GS-RJ12-CBL-2	RJ12 to RJ12	
			DL05 PLCs				
			DL06 PLCs	Port 2 (HD15)			FA-15HD
			D2-262 CPU				
			D4-454 CPU	Port 3 (25-pin)			FA-CABKIT
		RS-485 Modbus RTU	BRX MPUs	RS-232/485, 3-Pin	ZL-RJ12-CBL-2P	RJ12 to pigtail	N/A
			P2-550	RS-485, 3-Pin			
			P3-530				
			P3-550				
			P3-550E				
			P2-SCM	RS-485, 4-Pin			
			P3-SCM				
			DL06 PLCs	Port 2 (HD15)	GS-485HD15-CBL-2	RJ12 to HD15	
			D2-262 CPU				
			GS-EDRV100	RJ12	GS-EDRV-CBL-2	RJ12 to RJ12	
			ZL-CDM-RJ12Xxx *	RJ12	GS-485RJ12-CBL-2		
			FA-ISOCON	5-pin Connector	GS-ISOCON-CBL-2	RJ12 to 5-pin plug	
Stellar (Soft Starter) SR44 Series	RJ45 * *	RS-485 Modbus RTU	DL06 PLCs	Port 2 (HD15)	SR44-485HD15-CBL-2	RJ45 to HD15	SR44-RS485
			D2-262 CPU				
			ZL-CDM-RJ12Xxx *	RJ12	N/A	RJ45 to RJ12	

**** When using the ZL-CDM-RJ12Xxx ZIPLink Communication Distribution Module, replace the lowercase xx with the number of RJ12 ports, i.e. 4 for four ports or 10 for ten ports. (ex: ZL-CDM-RJ12X4 or ZL-CDM-RJ12X10)***

**** * The SR44-RS485 Communications Adapter must be installed for RS-485 communications with the Stellar soft starters.***

ZIPLINK AUTOMATIONDIRECT Motor Controller Communication

Drive / Motor Controller (GS/DuraPulse/SureServo/SureStep/Stellar) *ZIP*Link Selector							
Drive / Motor Controller		***Communications***			***ZIPLink Cable***		
Controller	***Comm Port Type***	***Network/Protocol***	***Connects to***	***Comm Port Type***	***Cable (2 meter length)***	***Cable Connectors***	***Other Hardware Required***
DuraPulse (GS3)	RJ12	RS-485 Modbus RTU	BRX MPUs	RS-485, 3-Pin	ZL-RJ12-CBL-2P	RJ12 to pigtail	N/A
			P2-550	RS-485, 3-Pin			
			P3-530				
			P3-550				
			P3-550E				
			P2-SCM	RS-485, 4-Pin			
			P3-SCM				
			DL06 PLCs	Port 2 (HD15)	GS-485HD15-CBL-2	RJ12 to HD15	
			D2-262 CPU				
			GS-EDRV100	RJ12	GS-EDRV-CBL-2	RJ12 to RJ12	
			ZL-CDM-RJ12Xx *	RJ12	GS-485RJ12-CBL-2		
			FA-ISOCON	5-pin Connector	GS-ISOCON-CBL-2	RJ12 to 5-pin plug	
SureServo	IEEE1394 (CN3)	RS-232 Modbus RTU	CLICK PLCs	Port 2 (RJ12)	Retired No Replacement SVC-232RJ12-CBL-2	6-pin IEEE to RJ12	N/A
			DL05 PLCs				
			DL06 PLCs	Port 2 (HD15)			FA-15HD
			D2-262 CPU				
			P2-550	RS232	Retired No Replacement SVC-232RJ12-CBL-2	6-pin IEEE to RJ12	N/A
			P3-530				
			P3-550				
			P3-550E				
			P2-SCM	Ports 1, 2 & 3			
			P3-SCM				
		RS-485 Modbus RTU	DL06 PLCs	Port 2 (HD15)	SVC-485HD15-CBL-2	6-pin IEEE to HD15	
			D2-262 CPU				
			ZL-CDM-RJ12Xx *	RJ12	SVC-485RJ12-CBL-2	6-pin IEEE to RJ12	
			USB-485M	RJ45	SVC-485CFG-CBL-2	6-pin IEEE to RJ45	
SureStep	RJ12	RS-232 ASCII	BRX MPUs	3-Pin	ZL-RJ12-CBL-2P	RJ12 to pigtail	
			P2-550	RS-485, 3-Pin			
			P3-530				
			P3-550				
			P3-550E				
			P2-SCM	RS-485, 4-Pin			
			P3-SCM				
			DL06 PLCs	Port 2 (HD15)	STP-232HD15-CBL-2	HD15-pin to RJ12	
			D2-262 CPU (Port2)				
			DL05 PLCs	RJ12	STP-232RJ12-CBL-2	RJ12 to RJ12	
			CLICK PLCs				

**** When using the ZL-CDM-RJ12Xx ZIPLink Communication Distribution Module, replace the lowercase xx with the number of RJ12 ports, i.e. 4 for four ports or 10 for ten ports. (ex: ZL-CDM-RJ12X4or ZL-CDM-RJ12X10)***

**** * The SR44-RS485 Communications Adapter must be installed for RS-485 communications with the Stellar soft starters.***

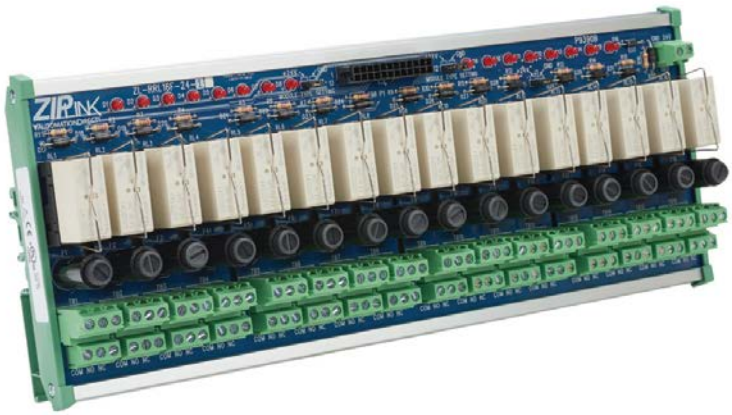
ZIPLink Serial Communication

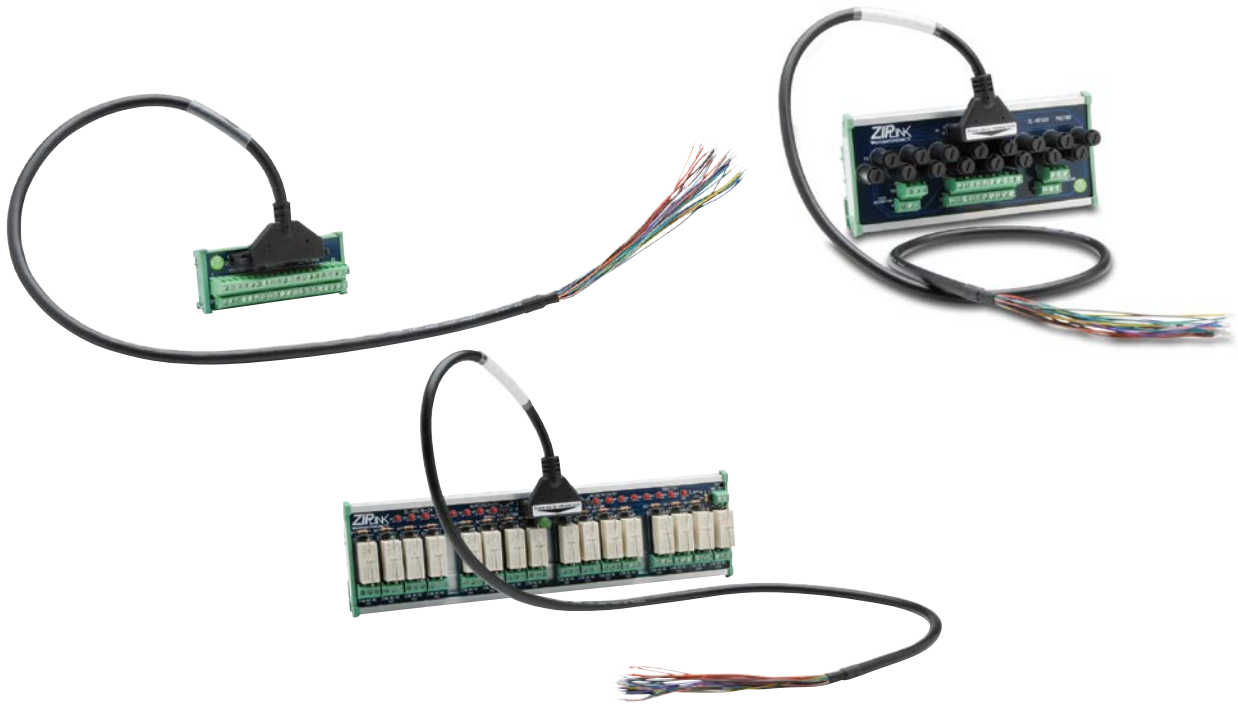
ZIPLink Serial Communication Cable Selector					
PLC			ZIPLink		
PLCs and Comm Modules	Port No.	Comm Port Type	Cable Connector Type	Cable Part No. (2 meter length)	D-Sub and RJ12 Feedthrough Module Part No. (optional)
BRX MPUs	RS232	POM (RJ12)	6-pin RJ12 to RJ12 Crossover	ZL-RJ12-CBL-2	ZL-RTB-RJ12
CLICK (Basic, Standard and Analog)	1	RJ12			
	2				
CLICK Ethernet (Basic, Standard)	2				
DL05	1				
	2				
DL06	1				
D0-DCM	1				
D2-262	1				
D2-DCM	1	25-pin D-sub, Female	25-pin Male D-sub to Female D-sub	ZL-DB25-CBL-2	ZL-RTB-DB25
D3-DCM	1	25-pin D-sub, Female	25-pin Male D-sub to Female D-sub	ZL-DB25-CBL-2	ZL-RTB-DB25
D4-454	0	15-pin D-sub, Female	15-pin Male D-sub to Female D-sub	ZL-DB15-CBL-2	ZL-RTB-DB15
	1 & 3	25-pin D-sub, Female	25-pin Male D-sub to Female D-sub	ZL-DB25-CBL-2	ZL-RTB-DB25
	2	RJ12	6-pin RJ12 to RJ12 Crossover	ZL-RJ12-CBL-2	ZL-RTB-RJ12
D4-DCM	1	25-pin D-sub, Female	25-pin Male D-sub to Female D-sub	ZL-DB25-CBL-2	ZL-RTB-DB25
P1-540	RS232	RJ12	6-pin RJ12 to RJ12 Crossover	ZL-RJ12-CBL-2	ZL-RTB-RJ12
P2-550					
P3-530					
P3-550					

Specialty Modules

*ZIP*Link Specialty Modules Selector			
ZIPLink			
Module	***Type***	***Module Part No.***	***Cable Part No. (optional)***
24 VDC Stand-Alone Relay	Single-Socket Relay	ZL-RLS1-24	N/A
	Four Socket-Relay	ZL-RLS4-24	
120 VAC Stand-Alone Relay	Single-Socket Relay	ZL-RLS1-120	
	Four-Socket Relay	ZL-RLS4-120	
250V AC/DC Max.	16-point, Fused Block	ZL-FUSE-16	
24 VDC Transorb	8-Channel	ZL-TSD8-24	
120 VAC Transorb	8-Channel	ZL-TSD8-120	
240V AC/DC Max.	40-Point Power/Common	ZL-RTB-COM	
D-Sub Feedthrough	9-pin Male & Female D-Subs to Terminal Blocks	ZL-RTB-DB09	ZL-DB9-CBL-2
	15-pin Male & Female D-Subs to Terminal Blocks	ZL-RTB-DB15	ZL-DB15-CBL-2
	25-pin Male & Female D-Subs to Terminal Blocks	ZL-RTB-DB25	ZL-DB25-CBL-2
RJ12 Feedthrough	6-pin RJ12 to Terminal Block	ZL-RTB-RJ12	ZL-RJ12-CBL-2
RJ45 Feedthrough	8-pin RJ45 to Terminal Block	ZL-RTB-RJ45	N/A
Comm Port Adapters	15-pin HD D-Sub to Terminal Block	ZL-CMA15	
	15-pin HD D-Sub to Terminal Block with LED Indicators	ZL-CMA15L	
Comm Distribution	4-Port RJ12 to Terminal Block	ZL-CDM-RJ12X4	
	10-Port RJ12 to Terminal Block	ZL-CDM-RJ12X10	
Feedthrough Module (SureServo I/O)	50-pin to Terminal Blocks	ZL-RTB50	ZL-SVC-50CBL *

*** Select the cable length by replacing the * with: Blank = 0.5m, -1 = 1.0m, or -2 = 2.0m**



Connector Modules to 3rd Party Devices

*ZIP*Link Connector Modules to 3rd Party Devices Selector			
ZIPLink			
Module	***Type***	***Module Part No.***	***Pigtail Cable Part No. (optional)***
Feedthrough Connector	24-pin to Terminal Blocks	ZL-RTB20 ZL-RTB20-1	ZL-CBL24-1P ZL-CBL24-2P
	40-pin to Terminal Blocks	ZL-RTB40 ZL-RTB40-1	ZL-CBL40-1P ZL-CBL40-2P
	50-pin to Terminal Blocks	ZL-RTB50	ZL-CBL50-1P
Fuse	16-Fuse, 24-pin	ZL-RFU20	ZL-CBL24-1P ZL-CBL24-2P
	32-Fuse, 40-pin	ZL-RFU40	ZL-CBL40-1P ZL-CBL40-2P
24 VDC Powered Relay	16-Relay, Sinking, 24-pin	ZL-RRL16-24-1 ZL-RRL16F-24-1 ZL-RRL16W-24-1	ZL-CBL24-1P ZL-CBL24-2P
	16-Relay, Sourcing, 24-pin	ZL-RRL16-24-2 ZL-RRL16F-24-2 ZL-RRL16W-24-2	ZL-CBL24-1P ZL-CBL24-2P
Sensor Input	16-Point with LEDs	ZL-LTB16-24-1	ZL-CBL24-1P ZL-CBL24-2P
	32-Point with LEDs	ZL-LTB32-24-1	ZL-CBL40-1P ZL-CBL40-2P
D-Sub Feedhrough	9-pin D-Sub to Terminal Block	ZL-RTB-DB09	ZL-DB9F-CBL-2P
			ZL-DB9F-CBL-5P