



PLC I/O Modules to ZIPLink Connector Modules - DL405

DL405 PLC Input Module ZIPLink Selector				
PLC	ZIPLink			
Input Module	# of Terms	Component	Module Part No.	Cable Part No.
<u>D4-08ND3S</u>	20	See Note 3		
<u>D4-16ND2</u>				
<u>D4-16ND2F</u>				
<u>D4-32ND3-1</u> ²	40	Feedthrough	<u>ZL-RTB40</u> (-1)	straight conn: <u>ZL-D24-CBL40</u> <u>ZL-D24-CBL40-1</u> <u>ZL-D24-CBL40-2</u>
		Sensor	<u>ZL-LTB32-24-1</u>	
<u>D4-64ND2</u> ^{1,2}		Feedthrough	<u>ZL-RTB40</u> (-1)	45 deg conn: <u>ZL-D24-CBL40-X</u> <u>ZL-D24-CBL40-1X</u>
		Sensor	<u>ZL-LTB32-24-1</u>	
<u>D4-08NA</u>	11	See Note 3		
<u>D4-16NA</u>	20			
<u>D4-16NA-1</u>				
<u>D4-16NE3</u>				
<u>F4-08NE3S</u>				

DL405 PLC Analog Module ZIPLink Selector				
PLC	ZIPLink			
Analog Module	# of Terms	Component	Module	Cable
F4-04AD	20	See Note 3		
F4-04ADS				
F4-08AD				
F4-16AD-1				
F4-16AD-2				
F4-04DA-1				
F4-04DA-2				
F4-08DA-1				
F4-16DA-1				
F4-08DA-2				
F4-16DA-2				
F4-04DAS-1				
F4-04DAS-2				
F4-08THM ³	T/C Wire Only	See Note 3		
F4-08THM-n ³				
F4-08RTD ³	Matched Only			

DL405 PLC Output Module ZIPLink Selector				
PLC	ZIPLink			
Output Module	# of Terms	Component	Module Part No.	Cable Part No.
<u>F4-08TD1S</u>	20	See Note 3		
<u>D4-16TD1</u>	20			
<u>D4-16TD2</u>				
<u>D4-32TD1</u> ²	40	Feedthrough	Feedthrough <u>ZL-RTB40</u> (-1)	straight conn: <u>ZL-D24-CBL40</u> <u>ZL-D24-CBL40-1</u> <u>ZL-D24-CBL40-2</u>
<u>D4-32TD1-1</u> ²		Fuse		
		Feedthrough		
<u>D4-32TD2</u> ²		Fuse		
		Feedthrough	Fused <u>ZL-RFU40</u> ⁴	45 deg conn: <u>ZL-D24-CBL40-X</u> <u>ZL-D24-CBL40-1X</u>
<u>D4-64TD1</u> ^{1,2}		Fuse		
<u>D4-08TA</u>	11	See Note 3		
<u>D4-16TA</u>	20			
<u>D4-08TR</u>	11			
<u>F4-08TRS-1</u>	20			
<u>F4-08TRS-2</u>				
<u>D4-16TR</u>				

Tables Footnotes:

1 The [D4-64ND2](#) and [D4-64TD1](#) modules have two 32-point connectors and require two ZIPLink cables and two ZIPLink connector modules.

2 To make a custom cable for the 32 or 64-point modules, use: Solder-style 180° connector [ZL-D24-CON](#) or Solder-style 45° connector [ZL-D24-CON-X](#)

3 These modules are not supported by the ZIPLink wiring system.

4 Note: Fuses (5 x 20 mm) are not included. See Edison Electronic Fuse section for (5 x 20 mm) 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 ZIPLink module. [ZL-RFU20](#) = 2A per circuit; [ZL-RFU40](#) = 400mA per circuit.



Note: ZIPLink Connector Module specifications follow the Compatibility Matrix tables. ZIPLink Cables specifications are at the end of this ZIPLink section.



Wiring Solutions

Wiring Solutions using the ZIPLink 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 **ZIPLink** System ranging from PLC I/O-to-**ZIPLink** 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 **ZIPLink** modules are provided with **ZIPLink** cables. See the following solutions to help determine the best **ZIPLink** 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 **ZIPLink** connector module used in conjunction with a prewired **ZIPLink** 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 **ZIPLink** Connector Modules selector tables located in this section,

1. Locate your I/O module/PLC
2. Select a **ZIPLink** Module
3. Select a corresponding **ZIPLink** 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 **ZIPLink** Pigtail Cables. **ZIPLink** 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 **ZIPLink** 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 **ZIPLink** 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 **ZIPLink** cable and other associated hardware.



ZIP LINK[®] Wiring Solutions

AUTOMATIONDIRECT[®]

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, **ZIPLink** modules are available in a variety of configurations including stand-alone relays, 24VDC and 120VAC 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 **ZIPLink** Specialty Modules selector table located in this section,

1. Locate the type of application
2. Select a **ZIPLink** 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 **ZIPLink** 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 ZIPLink 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





Motor Controller Communication

Drive / Motor Controller (GS/DuraPulse/SureServo/SureStep/Stellar) ZIPLink 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	RS-485, 4-Pin					
			P2-SCM						
			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	GS-RJ12-CBL-2	RJ12 to RJ12			
			P3-SCM	Ports 1 to 4					
			CLICK PLCs	Port 2 (RJ12)					
			DL05 PLCs						
			DL06 PLCs						
			D2-262 CPU	Port 2 (HD15)					FA-15HD
			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	GS-485HD15-CBL-2	RJ12 to HD15			
			P3-SCM						
			DL06 PLCs	Port 2 (HD15)			GS-EDRV-CBL-2	RJ12 to RJ12	
			D2-262 CPU						
			GS-EDRV100	RJ12	GS-485RJ12-CBL-2				
			ZL-CDM-RJ12Xxx *	RJ12					
			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	SR44-485RJ45-CBL-2	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.									

* 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.



Motor Controller Communication

Drive / Motor Controller (GS/DuraPulse/SureServo/SureStep/Stellar) ZIPLink 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	GS-485HD15-CBL-2	RJ12 to HD15					
			P3-SCM								
			DL06 PLCs	Port 2 (HD15)				GS-EDRV100	RJ12	GS-EDRV-CBL-2	RJ12 to RJ12
			D2-262 CPU								
			ZL-CDM-RJ12Xxx *	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)	SVC-232RJ12-CBL-2	6-pin IEEE to RJ12	N/A				
			DL05 PLCs								
			DL06 PLCs	Port 2 (HD15)			SVC-232RJ12-CBL-2	6-pin IEEE to RJ12	FA-15HD		
			D2-262 CPU								
			P2-550	RS232							
			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		SVC-485RJ12-CBL-2	6-pin IEEE to RJ12					
			ZL-CDM-RJ12Xxx *	RJ12	SVC-485CFG-CBL-2	6-pin IEEE to RJ45					
			USB-485M	RJ45							
		SureStep	RJ12	RS-232 ASCII	BRX MPUs	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				STP-232HD15-CBL-2	HD15-pin to RJ12					
P3-SCM											
DL06 PLCs	Port 2 (HD15)						STP-232RJ12-CBL-2	RJ12 to RJ12			
D2-262 CPU (Port2)											
DL05 PLCs	RJ12										
CLICK PLCs											

* 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-RJ12X4or](#) [ZL-CDM-RJ12X10](#))

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

* 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-RJ12X4or ZL-CDM-RJ12X10)

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

ZIP^{LINK} Serial Communication

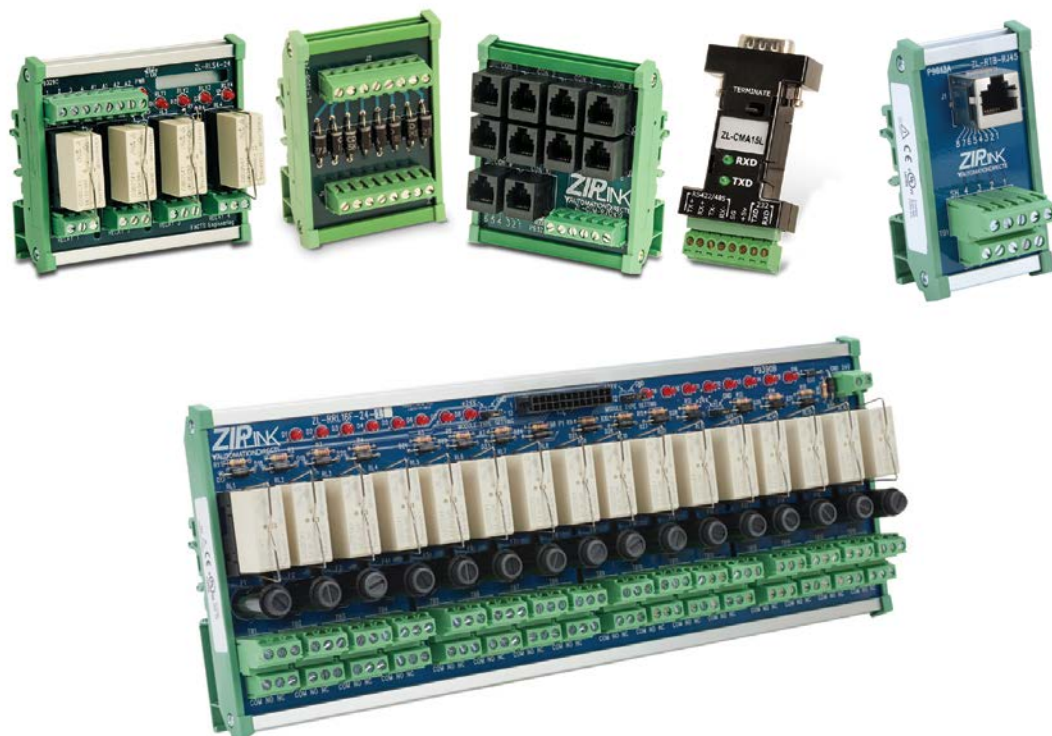
ZIPLink Serial Communication Cable Selector					
PLC			ZIPLink		
PLCs and Comm Modules	Port No.	Comm Port Type	Cable Connector Type	Cable Part No. (2 meter length)	D-Sub and RJ12 Feedthrough Module Part No. (optional)
BRX MPUs	RS232	POM (RJ12)	6-pin RJ12 to RJ12 Crossover	ZL-RJ12-CBL-2	ZL-RTB-RJ12
CLICK (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

ZIPLink Specialty Modules Selector			
ZIPLink			
Module	Type	Module Part No.	Cable Part No. (optional)
24VDC Stand-Alone Relay	Single-Socket Relay	ZL-RLS1-24	N/A
	Four Socket-Relay	ZL-RLS4-24	
120VAC 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	
24VDC Transorb	8-Channel	ZL-TSD8-24	
120VAC 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

ZIPLink 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 ZL-CBL50-2P
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
24VDC 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 Feedthrough	9-pin D-Sub to Terminal Block	ZL-RTB-DB09	ZL-DB9F-CBL-2P
			ZL-DB9F-CBL-5P

