



8 pt. 24VDC Input Module

Delivery
Code
STK

Module Specifications	
Number of Inputs	8 (sink/source)
Input Voltage Range	10-28 VDC
Peak Voltage	40 VDC
Input Current	1.92 mA @ 12 VDC 4.0 mA @ 24 VDC
Maximum Input Current	5 mA @ 28 VDC
Input Impedance	5.6k @ 10-28 VDC
ON Voltage Level	> 10 VDC
OFF Voltage Level	< 2 VDC
Min. ON Current	1.5 mA
Min. OFF Current	0.2 mA
OFF to ON Response	2-4 ms, typical 3 ms
ON to OFF Response	2-4 ms, typical 3 ms
Status Indicators	Red LED for each input
Commons	2 points
Fuse	No Fuse
Base Power Required (3.3V)	Typical 15mA (all inputs on)
Optical Isolation	2500 Volt
Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG

Pinout Information	
Pin No.	EZIO-8DCI
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	COM
6	Input(5)
7	Input(6)
8	Input(7)
9	Input(8)
10	COM
11	Not Connected

Note: Pin 5 and Pin10 are the same point, electrically

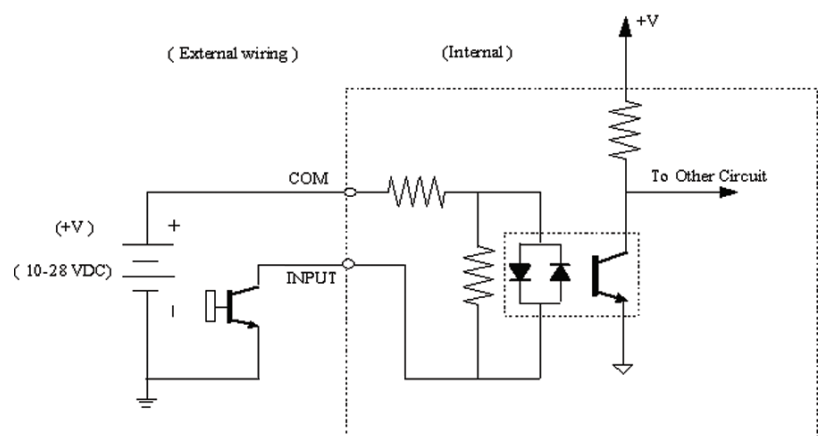
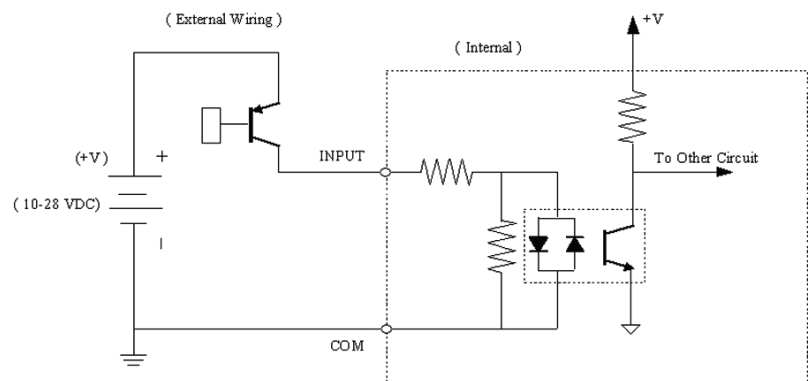
For EZ-LINK cables and Terminal boards look at page 4-5

EZIO-8DCI
\$29



Terminal Block
300 Volt/10
Amp/14AWG
UL Rating

EZIO-8DCI
Screw-down





8 pt. 24V DC Output Module (Source)

Delivery
Code
STK

Module Specifications	
Number of Outputs	8 sourcing
Peak Voltage	50.0 VDC
Maximum Steady State Output Current	0.5A per output, 1.0A max per module @ 50°C
Maximum Leakage Current	100µA @ 50 VDC @ 50°C
ON Voltage Drop	2 VDC @ 0.5A
Maximum Inrush Current	0.8A for 10ms
OFF to ON Response	< 2µs
ON to OFF Response	<10µs
Status Indicators	Red LED for each output
+V Terminals & Commons	One V+, 2 Common
Short Circuit Protection	1 Amp per module, turns off outputs upon short circuit detection
Base Power Required (3.3V)	40mA, all outputs on
Optical Isolation	2500 Volt
Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG

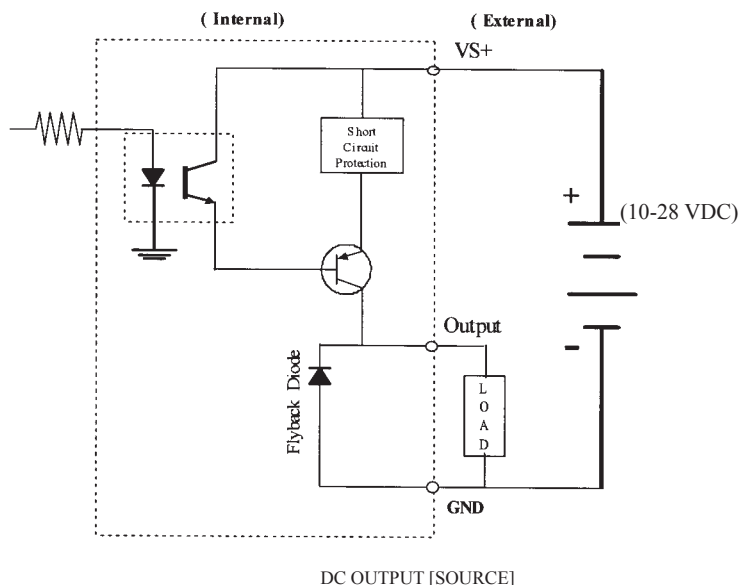


Terminal Block
300 Volt/10
Amp/14AWG UL
Rating

EZIOP-8DCOP
Screw-down

Pinout Information	
Pin No.	EZIO-8DCOP
1	Output(1)
2	Output(2)
3	Output(3)
4	Output(4)
5	GND
6	Output(5)
7	Output(6)
8	Output(7)
9	Output(8)
10	GND
11	Customer_Supply(+VS)

Note: Pin 5 and Pin10 are the same point, electrically



For EZ-LINK cables and Terminal boards look at page 4-5



8 pt. 24VDC Output Sinking Module

Delivery
Code
STK

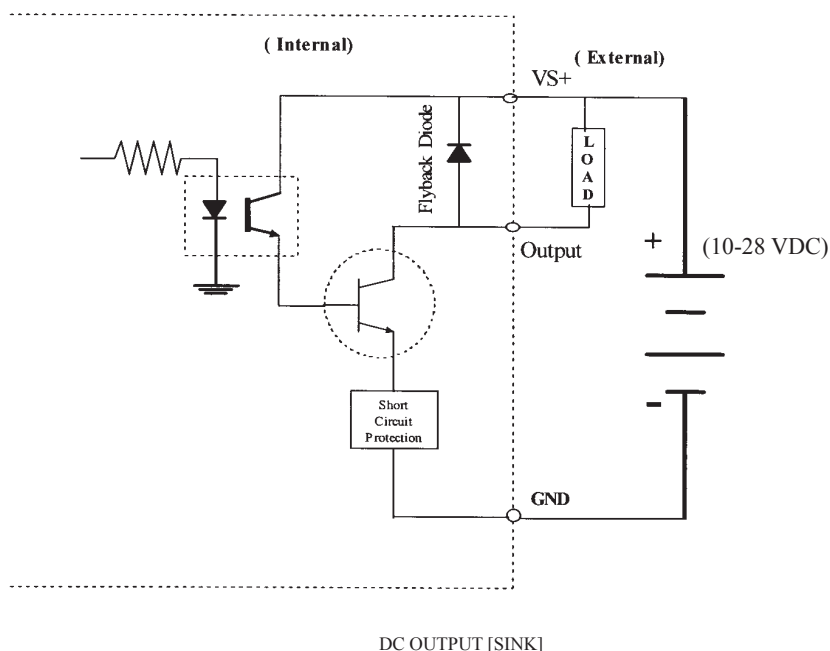
Module Specifications	
Number of Outputs	8 sinking
Peak Voltage	50.0 VDC
Maximum Steady State Output Current	0.5A per output, 1.4A max per module @ 50°C
Maximum Leakage Current	100µA @ 50 VDC @ 50°C
ON Voltage Drop	1.3 VDC @ 0.5A
Maximum Inrush Current	1.0A for 10ms
OFF to ON Response	< 2µs
ON to OFF Response	<10µs
Status Indicators	Red LED for each output
+V Terminals & Commons	One V+, 2 Common
Short Circuit Protection	1.4 Amp per module, turns off outputs upon short circuit detection
Base Power Required (3.3V)	40mA, all outputs on
Optical Isolation	2500 Volt
Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG



Terminal Block
300 Volt/10
Amp/14AWG UL Rat-
ing

Pinout Information	
Pin No.	EZIO-8DCON
1	Output(1)
2	Output(2)
3	Output(3)
4	Output(4)
5	GND
6	Output(5)
7	Output(6)
8	Output(7)
9	Output(8)
10	GND
11	Customer_Supply(+VS)

Note: Pin 5 and Pin10 are the same point, electrically



For EZ-LINK cables and Terminal boards look at page 4-5



8 pt. 24VDC High Speed Input Module

Delivery
Code
STK

Module Specifications	
Number of Inputs	8 (sink/source)
Input Voltage Range	10-28 VDC
Peak Voltage	40 VDC
Input Current	1.92 mA @ 12 VDC 4.0 mA @ 24 VDC
Maximum Input Current	5 mA @ 28 VDC
Input Impedance	5.6k @ 10-28 VDC
ON Voltage Level	> 10 VDC
OFF Voltage Level	< 2 VDC
Min. ON Current	1.5 mA
Min. OFF Current	0.2 mA
OFF to ON Response	0.2-0.4 ms, typical 0.3 ms
ON to OFF Response	0.2-0.4 ms, typical 0.3 ms
Status Indicators	Red LED for each output
Commons	2 points
Fuse	No Fuse
Base Power Required (3.3V)	Typical 15 mA (all inputs on)
Optical Isolation	2500 Volt
Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG

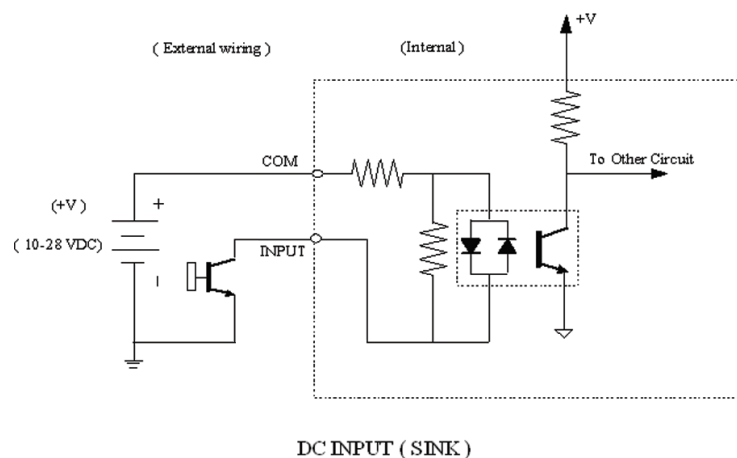
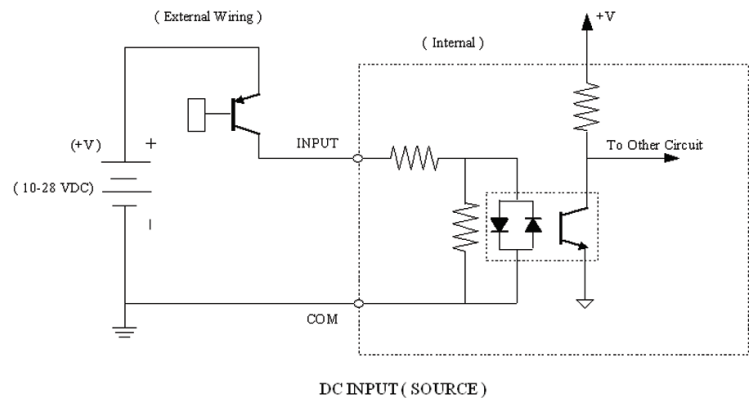


Terminal Block
300 Volt/10
Amp/14AWG UL Rat-
ing

Pinout Information	
Pin No.	EZIO-8HSDCI
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	COM
6	Input(5)
7	Input(6)
8	Input(7)
9	Input(8)
10	COM
11	Not Connected

Note: Pin 5 and Pin10 are the same point, electrically

For EZ-LINK cables and Terminal boards look at page 4-5





4 pt. 24VDC In/4 pt. 24VDC Out Sinking Module



EZ IOP-4DCI4DCON
\$29

Delivery
Code
STK

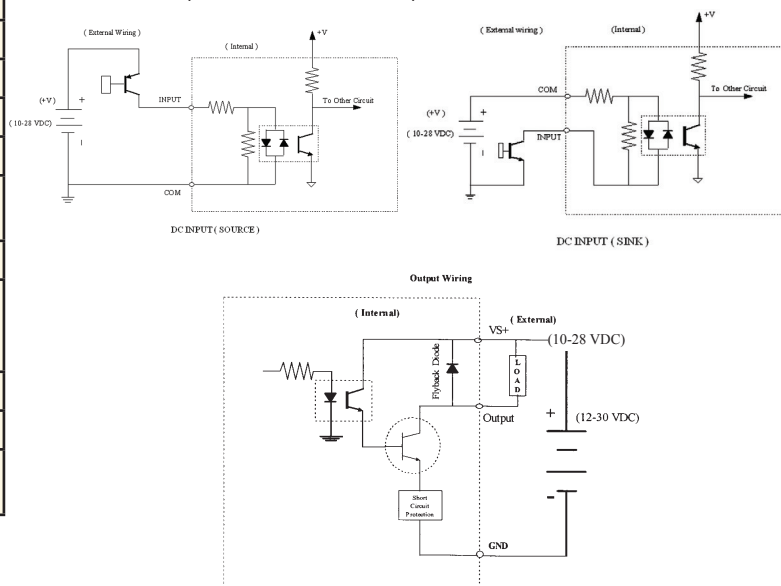
EZIOP-4DCI4DCON
Screw-down

Module Specifications		
DC Power Supply Specs	Voltage Range	
	Number of Inputs	4 (sink/source)
	Input Voltage Range	10-28 VDC
	Peak Voltage	40 VDC
	Input Current	1.92 mA @ 12 VDC 4.0 mA @ 24 VDC
	Maximum Input Current	5 mA @ 28 VDC
	Input Impedance	5.6k @ 10-28 VDC
	ON Voltage Level	> 10 VDC
	OFF Voltage Level	< 2 VDC
	Min. ON Current	1.5 mA
	Min. OFF Current	0.2 mA
	OFF to ON Response	2-4 ms, typical 3 ms
	ON to OFF Response	2-4 ms, typical 3 ms
	Status Indicators	Red LED for each output
	Commons	1 point
	Fuse	No Fuse
	Base Power Required (3.3V)	Typical 8 mA (all inputs on)
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
DC Input Specs	Number of Outputs	4 sinking
	Peak Voltage	50.0 VDC
	Maximum Steady State Output Current	0.5A per output, 1.4A max per module @ 50°C
	Maximum Leakage Current	100µA @ 50 VDC @ 50°C
	ON Voltage Drop	1.5 VDC @ 0.5A
	Maximum Inrush Current	1.0A for 10ms
	OFF to ON Response	< 2µs
	ON to OFF Response	<10µs
	Status Indicators	Red LED for each output
	+V Terminals & Commons	One V*, 1 Common
	Short Circuit Protection	1.4 Amp per module, turns off outputs upon short circuit detection
	Base Power Required (3.3V)	20mA, all outputs on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
DC Output Specs	Number of Outputs	4 sinking
	Peak Voltage	50.0 VDC
	Maximum Steady State Output Current	0.5A per output, 1.4A max per module @ 50°C
	Maximum Leakage Current	100µA @ 50 VDC @ 50°C
	ON Voltage Drop	1.5 VDC @ 0.5A
	Maximum Inrush Current	1.0A for 10ms
	OFF to ON Response	< 2µs
	ON to OFF Response	<10µs
	Status Indicators	Red LED for each output
	+V Terminals & Commons	One V*, 1 Common
	Short Circuit Protection	1.4 Amp per module, turns off outputs upon short circuit detection
	Base Power Required (3.3V)	20mA, all outputs on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG

Pinout Information	
Pin No.	EZIO-4DCI4DCON
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	COM
6	Output(1)
7	Output(2)
8	Output(3)
9	Output(4)
10	GND
11	Customer_Supply(+VS)

Terminal Block
300 Volt/10
Amp/14AWG UL Rat-
ing

Note: Pin 5 = Input common, Pin10 = Output common



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. 24VDC In/4 pt. 24VDC Fast Input Module with Interrupt

Module Specifications		
DC Power Supply Specs	Voltage Range	
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
DC Input Specs (Standard)	Number of Inputs	4 (sink/source)
	Input Voltage Range	10-28 VDC
	Peak Voltage	40 VDC
	Input Current	1.92 mA @ 12 VDC 4.0 mA @ 24 VDC
	Maximum Input Current	5 mA @ 28 VDC
	Input Impedance	5.6k @ 10-28 VDC
	ON Voltage Level	> 10 VDC
	OFF Voltage Level	< 2 VDC
	Min. ON Current	1.5 mA
	Min. OFF Current	0.2 mA
	OFF to ON Response	2-4 ms, typical 3 ms
	ON to OFF Response	2-4 ms, typical 3 ms
	Status Indicators	Red LED for each output
	Commons	1 point
	Base Power Required (3.3V)	Typical 3.5 mA (all inputs on)
DC Input Specs (Fast)	Number of Inputs	4 (sink/source)
	Input Voltage Range	10-28 VDC
	Peak Voltage	40 VDC
	Input Current	1.92 mA @ 12 VDC 4.0 mA @ 24 VDC
	Maximum Input Current	5 mA @ 28 VDC
	Input Impedance	5.6k @ 10-28 VDC
	ON Voltage Level	> 10 VDC
	OFF Voltage Level	< 2 VDC
	Min. ON Current	1.5 mA
	Min. OFF Current	0.2 mA
	OFF to ON Response	0.2-0.4 ms, typical 0.3 ms For Inputs 5,6 and 7
	ON to OFF Response	0.2-0.4 ms, typical 0.3 ms For Inputs 5,6 and 7
	Interrupt	Low pass filter of 20 μ s, 60 μ s typical response time from input interrupt, 1 rung of processing and output activation, For Input # 8
	Status Indicators	Red LED for each output
	Commons	1 point
	Fuse	No Fuse
	Base Power Required (3.3V)	Typical 3.5 mA (all inputs on)



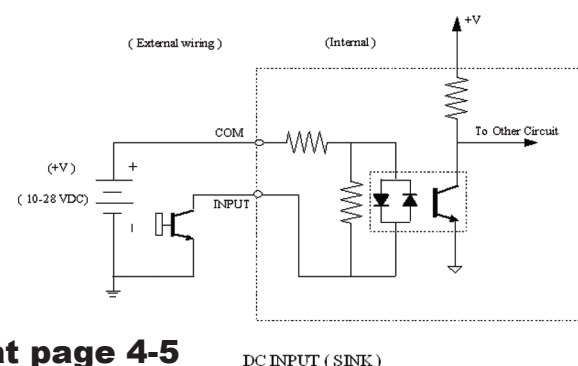
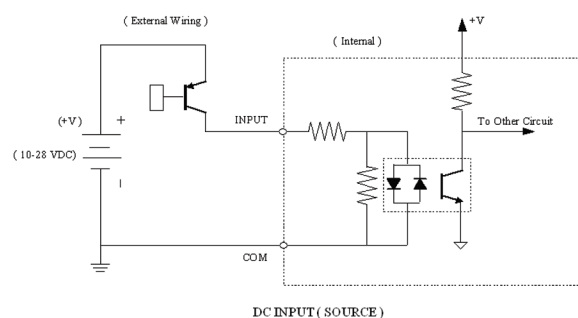
EZIOP-4DCI4DCIF
\$35

Delivery
Code
STK

EZIOP-4DCI4DCIF
Screw-down

Pinout Information	
Pin No.	EZIO-4DCI4DCIF
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	GND
6	Fast Input(5)
7	Fast Input(6)
8	Fast Input(7)
9	Fast Input(8) - Interrupt
10	GND
11	Not Connected

Terminal Block
300 Volt/10
Amp/14AWG
UL Rating



For EZ-LINK cables and Terminal boards look at page 4-5

EZ I/O™

4 pt. 24VDC In/ 4 pt. 24VDC Out Module (Source)

Module Specifications		
DC Power Supply Specs	Voltage Range	
DC Input Specs	Number of Inputs	4 (sink/source)
	Input Voltage Range	10-28 VDC
	Peak Voltage	40 VDC
	Input Current	1.92 mA @ 12 VDC 4.0 mA @ 24 VDC
	Maximum Input Current	5 mA @ 28 VDC
	Input Impedance	5.6k @ 10-28 VDC
	ON Voltage Level	> 10 VDC
	OFF Voltage Level	< 2 VDC
	Min. ON Current	1.5 mA
	Min. OFF Current	0.2 mA
	OFF to ON Response	2-4 ms, typical 3 ms
	ON to OFF Response	2-4 ms, typical 3 ms
	Status Indicators	Red LED for each output
	Commons	1 point
	Fuse	No Fuse
	Base Power Required (3.3V)	Typical 7.5 mA (all inputs on)
DC Output Specs	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
	Number of Outputs	4 (sourcing)
	Peak Voltage	50.0 VDC
	Maximum Steady State Output Current	0.5A per output, 1.0A max per module @ 50°C
	Maximum Leakage Current	100µA @ 50 VDC @ 50°C
	ON Voltage Drop	2 VDC @ 0.5A
	Maximum Inrush Current	0.8A for 10ms
	OFF to ON Response	< 2µs
	ON to OFF Response	<10µs
	Status Indicators	Red LED for each output
	+V Terminals & Commons	One V+, 1 Common
	Short Circuit Protection	1 Amp per module, turns off outputs upon short circuit detection
	Base Power Required (3.3V)	20mA, all outputs on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG



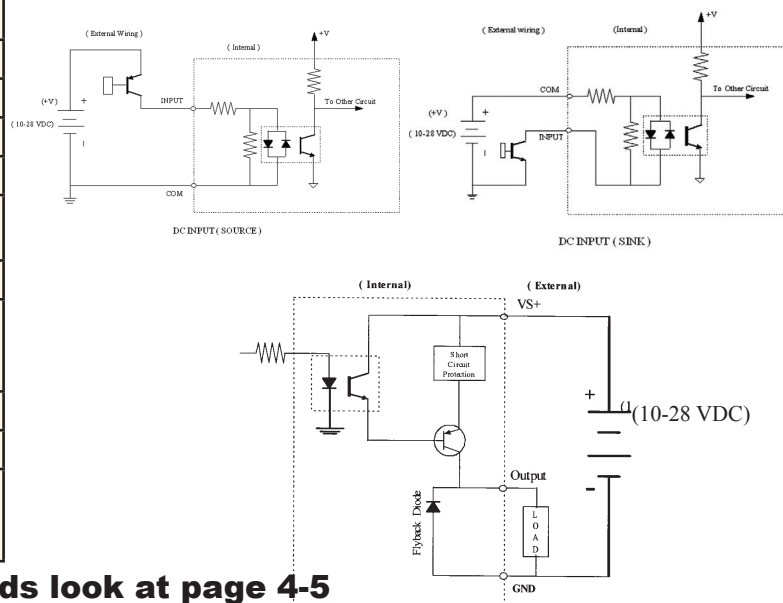
EZIOP-4DCI4DCOP
\$29

Delivery
Code
STK

EZIOP-4DCI4DCOP
Screw-down

Pinout Information	
Pin No.	EZIO-4DCI4DCOP
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	GND
6	Output(1)
7	Output(2)
8	Output(3)
9	Output(4)
10	GND
11	Customer_Supply(+VS)

Terminal Block
300 Volt/10
Amp/14AWG UL Rat-
ing



For EZ-LINK cables and Terminal boards look at page 4-5



EZIOP-8ACI
\$45

*Delivery
Code
STK*

EZIOP-8ACI
Screw-down

EZIOP-8ACI Screw-down

EZ I/C

www.EZAutomation.net



8 pt. 110VAC Output Module

Module Specifications	
Number of Output Points	8
Number of Commons	2
Output Voltage Range	20-132 VAC
Peak Voltage	180 Volt
ON Voltage Drop	1.2 V @ 1A
Maximum Current	1.2 A @ 25°C, 0.8A @ 50°C for each output
Maximum Leakage Current	1mA @ 132 VAC
Maximum Inrush Current	38Amps for 16.6ms
Minimum Load	15mA
OFF to ON Response	max 1/2 cycle
ON to OFF Response	max 1/2 cycle
Fuse	No fuse
Base Power Required (3.3V)	70mA for all 8 on
Optical Isolation	2500 Volt
Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG



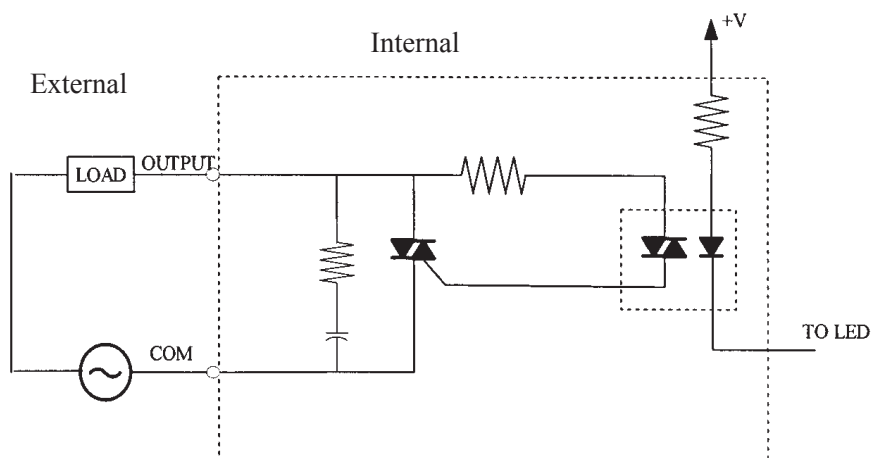
EZIOP-8ACO
\$45

Delivery
Code
STK

EZIOP-8ACO
Screw-down

Terminal Block
300 Volt/10 Amp/14AWG
UL Rating

Pinout Information	
Pin No.	EZIO-8ACO
1	Output(1)
2	Output(2)
3	Output(3)
4	Output(4)
5	AC_Common
6	Output(5)
7	Output(6)
8	Output(7)
9	Output(8)
10	AC_Common
11	Not Connected



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. 110VAC In , 4 pt. 110VAC Out Module

	Module Specifications	
AC Power Supply Specs	Voltage Range	
	Number of Inputs	4
AC Input Specs	Input Voltage Range	70-132 VAC
	AC Frequency	47-63 Hz
	Peak Voltage	180 Volt
	Input Current	0.5mA @ 110 VAC
	Maximum Input Current	0.6mA @ 132 VAC
	Input Impedance	200K
	ON Voltage Level	70 VAC
	OFF Voltage Level	40 VAC
	OFF to ON Response	< 10ms
	ON to OFF Response	< 10ms
	Status Indicators	Red LED for each input
	Commons	1 Common
	Fuse	No fuse
	Base Power Required (3.3V)	10mA for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
AC Output Specs	Number of Output Points	4
	Number of Commons	1
	Output Voltage Range	20-132 VAC
	Peak Voltage	180 Volt
	ON Voltage Drop	1.2 V @ 1A
	Maximum Current	1.2 A @ 25°C, 0.8A @ 50°C for each output
	Maximum Leakage Current	1mA @ 132 VAC
	Maximum Inrush Current	38Amps for 16.6ms
	Minimum Load	15mA
	OFF to ON Response	max 1/2 cycle
	ON to OFF Response	max 1/2 cycle
	Fuse	No fuse
	Base Power Required (3.3V)	35mA for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG



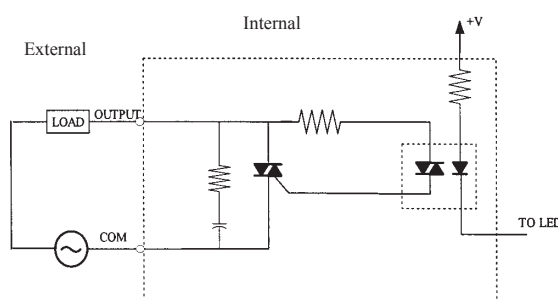
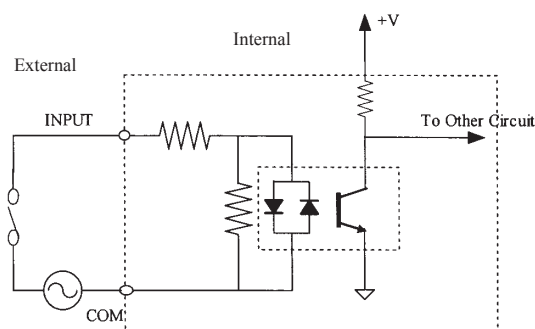
EZIOP-4ACI4ACO
\$45

Delivery
Code
STK

EZIOP-4ACI4ACO
Screw-down

Pinout Information	
Pin No.	EZIO-4ACI4ACO
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	AC_Common
6	Output(1)
7	Output(2)
8	Output(3)
9	Output(4)
10	AC_Common
11	Not Connected

**Terminal
Block**
**300 Volt/10
Amp/14AWG
UL Rating**



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. 24VDC Out (Source) , 4 pt. 110AC Out Module

Module Specifications		
AC/DC Power Supply Specs	Voltage Range	
	Number of Outputs	4 (sourcing)
	Peak Voltage	50.0 VDC
	Maximum Steady State Output Current	0.5A per output, 1.0A max per module @ 50°C
	Maximum Leakage Current	100µA @ 50 VDC @ 50°C
	ON Voltage Drop	2 VDC @ 0.5A
	Maximum Inrush Current	0.8A for 10ms
	OFF to ON Response	< 2µs
	ON to OFF Response	<10µs
	Status Indicators	Red LED for each output
	+V Terminals & Commons	One V ⁺ , 1 Common
	Short Circuit Protection	1 Amp per module, turns off outputs upon short circuit detection
	Base Power Required (3.3V)	20mA, for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
DC Output Specs	Number of Output Points	4
	Number of Commons	1
	Output Voltage Range	20-132 VAC
	Peak Voltage	180 Volt
	ON Voltage Drop	1.2 V @ 1A
	Maximum Current	1.2 A @ 25°C, 0.8A @ 50°C for each output
	Maximum Leakage Current	1mA @ 132 VAC
	Maximum Inrush Current	38Amps for 16.6ms
	Minimum Load	15mA
	OFF to ON Response	max 1/2 cycle
	ON to OFF Response	max 1/2 cycle
	Fuse	No fuse
	Base Power Required (3.3V)	35mA for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
AC Output Specs	Number of Output Points	4
	Number of Commons	1
	Output Voltage Range	20-132 VAC
	Peak Voltage	180 Volt
	ON Voltage Drop	1.2 V @ 1A
	Maximum Current	1.2 A @ 25°C, 0.8A @ 50°C for each output
	Maximum Leakage Current	1mA @ 132 VAC
	Maximum Inrush Current	38Amps for 16.6ms
	Minimum Load	15mA
	OFF to ON Response	max 1/2 cycle
	ON to OFF Response	max 1/2 cycle
	Fuse	No fuse
	Base Power Required (3.3V)	35mA for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG



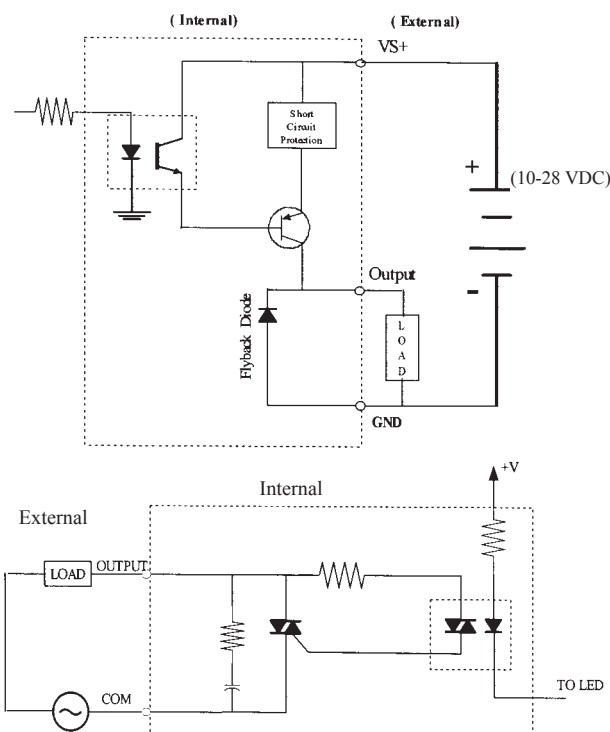
EZIO-4DCOP4ACO
\$49

Delivery
Code
STK

EZIO-4DCOP4ACO
Screw-down

Pinout Information	
Pin No.	EZIO-4DCOP4ACO
1	AC Output(1)
2	AC Output(2)
3	AC Output(3)
4	AC Output(4)
5	AC_Common
6	DC Output(5)
7	DC Output(6)
8	DC Output(7)
9	DC Output(8)
10	GND
11	Customer_Supply(+VS)

**Terminal
Block
300 Volt/10
Amp/14AWG
UL Rating**



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. 110VAC In/4 pt. 24V DC Out Module (Source)



EZIO-4ACI4DCOP
\$49

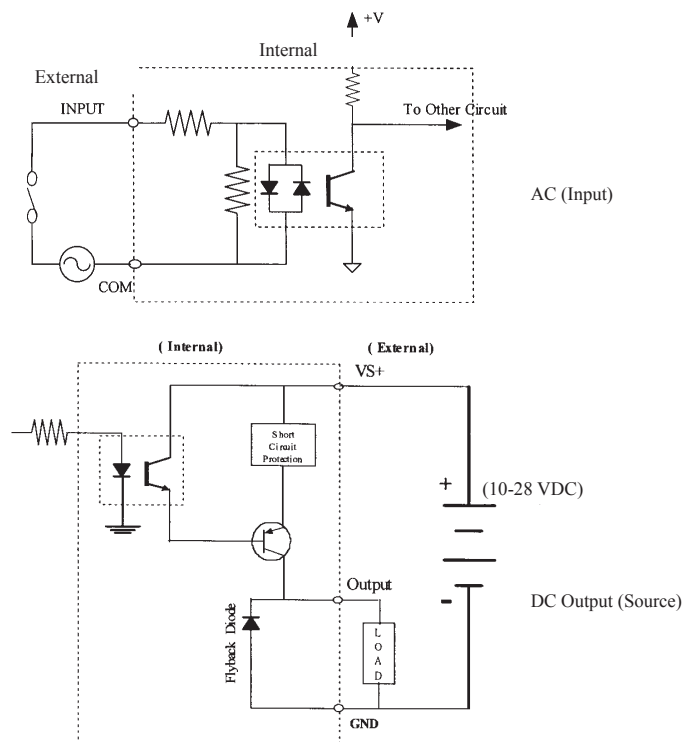
Delivery
Code
STK

EZIO-4ACI4DCOP
Screw-down

Module Specifications		
AC/DC Power Supply Specs	Voltage Range	
	Number of Inputs	4
	Input Voltage Range	70-132 VAC
	AC Frequency	47-63 Hz
	Peak Voltage	180 Volt
	Input Current	0.5mA @ 110 VAC
	Maximum Input Current	0.6mA @ 132 VAC
	Input Impedance	200K
	ON Voltage Level	70 VAC
	OFF Voltage Level	40 VAC
	OFF to ON Response	< 10ms
	ON to OFF Response	< 10ms
	Status Indicators	Red LED for each input
	Commons	1 Common
	Fuse	No fuse
AC Input Specs	Base Power Required (3.3V)	10mA for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
	Number of Outputs	4 (sourcing)
	Peak Voltage	50.0 VDC
	Maximum Steady State Output Current	0.5A per output, 1.0A max per module @ 50°C
	Maximum Leakage Current	100µA @ 50 VDC @ 50°C
	ON Voltage Drop	2 VDC @ 0.5A
	Maximum Inrush Current	0.8A for 10ms
	OFF to ON Response	< 2µs
	ON to OFF Response	<10µs
	Status Indicators	Red LED for each output
	+V Terminals & Commons	One V ⁺ , 1 Common
	Short Circuit Protection	1 Amp per module, turns off outputs upon short circuit detection
DC Output Specs	Base Power Required (3.3V)	24mA, for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG

Pinout Information	
Pin No.	EZIO-4ACI4DCOP
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	AC_Common
6	Output(1)
7	Output(2)
8	Output(3)
9	Output(4)
10	GND
11	Customer_Supply(+VS)

Terminal Block
300 Volt/10
Amp/14AWG UL Rat-
ing



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. 24VDC In/ 4 pt. 110VAC Out Module

Module Specifications		
AC/DC Power Supply Specs	Voltage Range	
DC Input Specs	Number of Inputs	4 (sink/source)
	Input Voltage Range	10-28 VDC
	Peak Voltage	40 VDC
	Input Current	1.92 mA @ 12 VDC 4.0 mA @ 24 VDC
	Maximum Input Current	5 mA @ 28 VDC
	Input Impedance	5.6k @ 10-28 VDC
	ON Voltage Level	> 10 VDC
	OFF Voltage Level	< 2 VDC
	Min. ON Current	1.5 mA
	Min. OFF Current	0.2 mA
	OFF to ON Response	2-4 ms, typical 3 ms
	ON to OFF Response	2-4 ms, typical 3 ms
	Status Indicators	Red LED for each output
	Commons	1 point
	Fuse	No Fuse
	Base Power Required (3.3V)	Typical 7.5 mA (all inputs on)
AC Output Specs	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
	Number of Output Points	4
	Number of Commons	1
	Output Voltage Range	20-132 VAC
	Peak Voltage	180 Volt
	ON Voltage Drop	1.2 V @ 1A
	Maximum Current	1.2 A @ 25°C, 0.8A @ 50°C for each output
	Maximum Leakage Current	1mA @ 132 VAC
	Maximum Inrush Current	38Amps for 16.6ms
	Minimum Load	15mA
	OFF to ON Response	max 1/2 cycle
	ON to OFF Response	max 1/2 cycle
	Fuse	No fuse
	Base Power Required (3.3V)	35mA for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG



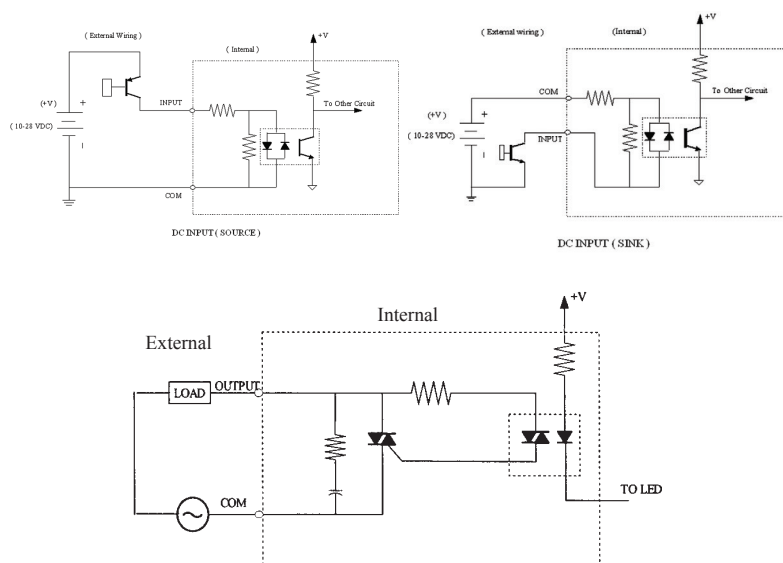
EZIOP-4DCI4ACO
\$49

Delivery
Code
STK

EZIOP-4DCI4ACO
Screw-down

Pinout Information	
Pin No.	EZIO-4DCI4ACO
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	GND
6	Output(1)
7	Output(2)
8	Output(3)
9	Output(4)
10	AC_Common
11	Not Connected

Terminal Block
300 Volt/10
Amp/14AWG UL Rating



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. Relay Out Module

with built-in Electromagnetic shield

Module Specifications	
Number of Outputs	4
Output Voltage Range	5-180 VDC or 20-132 VAC
Output Type	Relay 1 Form A (SPST)
Output Terminals Consumed	8
Peak Voltage	180 VDC/200 VAC
AC Frequency	47-63 Hz
Maximum Current (resist.)	1A/point
Maximum Leakage Current	0.5mA @ 130 VAC @ 60Hz
Maximum Switching Current	0.5A
Electromagnetic Shield	2 pF between contact and shield
Dielectric Strength	250V between contacts, 1500V between contacts and shield
OFF to ON Response	≤1ms (typical)
ON to OFF Response	≤1ms (typical)
Status Indicators	Red LEDs
Contacts	4 isolated
Base Power Required (3.3V)	50mA



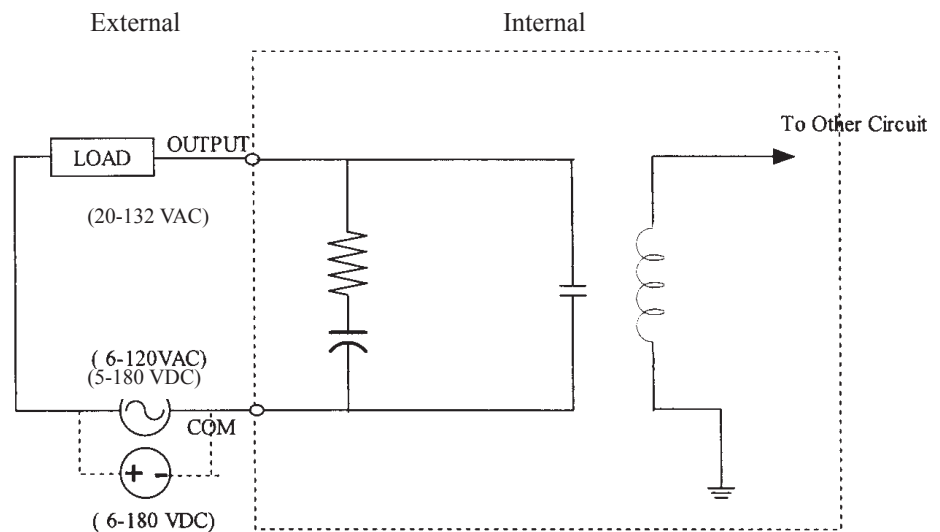
EZIOP-4RLO
\$55

Delivery
Code
STK

EZIOP-4RLO
Screw-down

Terminal Block
300 Volt/10 Amp/14AWG
UL Rating

Pinout Information	
Pin No.	EZIO-4RLO
1	Output(1)_Normally open
2	Output(1)_COM
3	Output(2)_Normally open
4	Output(2)_COM
5	Not Connected
6	Not Connected
7	Output(3)_Normally open
8	Output(3)_COM
9	Not Connected
10	Output(4)_Normally open
11	Output(4)_COM



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. 110 AC In/4 pt. Relay Out Module with built-in Electromagnetic shield

	Module Specifications	
AC Input Specs	Number of Inputs	4
	Input Voltage Range	70-132 VAC
	AC Frequency	47-63 Hz
	Peak Voltage	180 Volt
	Input Current	0.5mA @ 110 VAC
	Maximum Input Current	0.6mA @ 132 VAC
	Input Impedance	200K
	ON Voltage Level	70 VAC
	OFF Voltage Level	40 VAC
	OFF to ON Response	< 10ms
	ON to OFF Response	< 10ms
	Status Indicators	Red LED for each input
	Commons	1 Common
	Fuse	No fuse
Relay Output Specs	Base Power Required (3.3V)	10mA for all 4 on
	Optical Isolation	2500 Volt
	Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
	Number of Outputs	4
	Output Voltage Range	5-180 VDC or 20-132 VAC
	Output Type	Relay 1 Form A (SPST)
	Output Terminals Consumed	5
	Peak Voltage	180 VDC/200 VAC
	AC Frequency	47-63 Hz
	Maximum Current (resist.)	1A/point
	Maximum Leakage Current	0.5mA @ 130 VAC @ 60Hz
	ON Voltage Drop	1.5 V @ 1 Amp
	Maximum Switching Current	0.5A
	Electromagnetic Shield	2 pF between contact and shield
	Dielectric Strength	250V between contacts, 1500V between contacts and shield
	OFF to ON Response	≤1ms (typical)
	ON to OFF Response	≤1ms (typical)
	Status Indicators	Red LEDs
	Commons	1
	Base Power Required (3.3V)	25mA



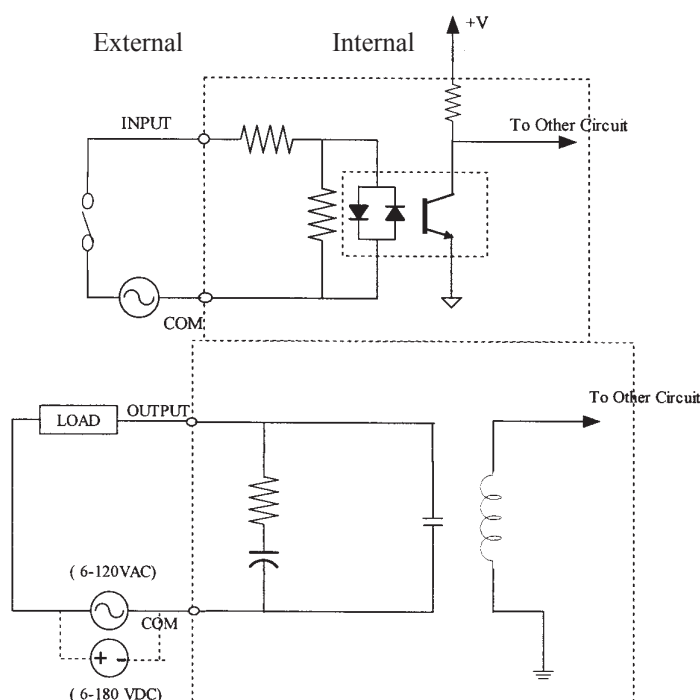
EZIO-4ACI4RLO
\$59

Delivery
Code
STK

EZIO-4ACI4RLO
Screw-down

Pinout Information	
Pin No.	EZIO-4ACI4RLO
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	Customer_COM (GND)
6	Output(1)_Normally open
7	Output(2)_Normally open
8	Output(3)_Normally open
9	Output(4)_Normally open
10	Customer_COM (GND)
11	Not Connected

Terminal Block
300 Volt/10
Amp/14AWG UL Rating



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. 24VDC In/4 pt. Relay Out Module with built-in Electromagnetic shield



EZIOP-4DCIP4RLO
\$59

Delivery
Code
STK

EZIOP-4DCIP4RLO
Screw-down

DC
Input
Specs

Module Specifications		
Number of Inputs	4 (sink/source)	
Input Voltage Range	10-28 VDC	
Peak Voltage	40 VDC	
Input Current	1.92 mA @ 12 VDC 4.0 mA @ 24 VDC	
Maximum Input Current	5 mA @ 28 VDC	
Input Impedance	5.6k @ 10-28 VDC	
ON Voltage Level	> 10 VDC	
OFF Voltage Level	< 2 VDC	
Min. ON Current	1.5 mA	
Min. OFF Current	0.2 mA	
OFF to ON Response	2-4 ms, typical 3 ms	
ON to OFF Response	2-4 ms, typical 3 ms	
Status Indicators	Red LED for each output	
Commons	2 points	
Fuse	No Fuse	
Base Power Required (3.3V)	Typical 7.5mA (all inputs on)	
Optical Isolation	2500 Volt	
Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG	

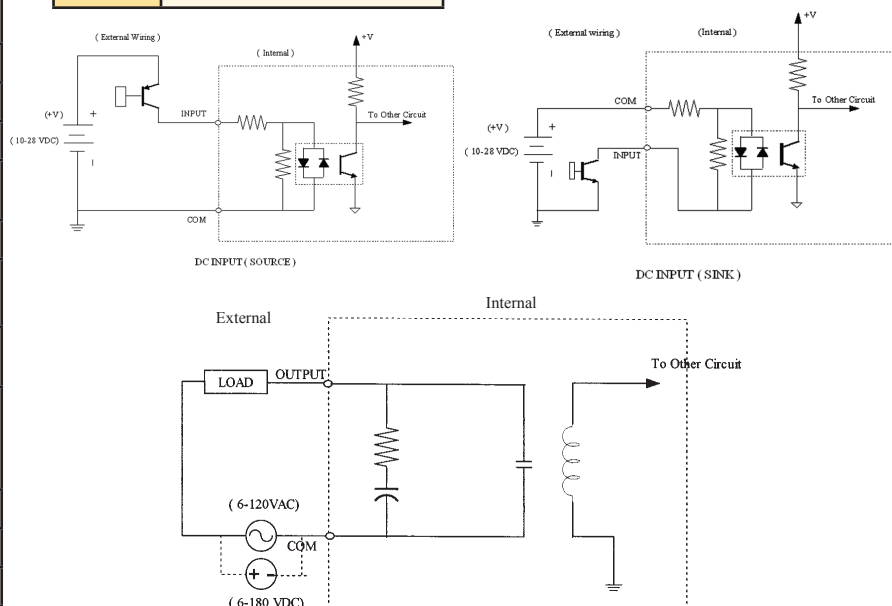
Relay
Output
Specs

Number of Outputs	4
Output Voltage Range	5-180 VDC or 20-132 VAC
Output Type	Relay 1 Form A (SPST)
Output Terminals Consumed	5
Peak Voltage	180 VDC/200 VAC
AC Frequency	47-63 Hz
Maximum Current (resist.)	1A/point
Maximum Leakage Current	0.5mA @ 130 VAC @ 60Hz
ON Voltage Drop	1.5 V @ 1 Amp
Maximum Switching Current	0.5A
Electromagnetic Shield	2 pF between contact and shield
Dielectric Strength	250V between contacts, 1500V between contacts and shield
OFF to ON Response	≤1ms (typical)
ON to OFF Response	≤1ms (typical)
Status Indicators	Red LEDs
Commons	1
Base Power Required (3.3V)	25mA

Pinout Information

Pin No.	EZIO-4DCIP4RLO
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	Customer_COM (GND)
6	Output(1)_Normally open
7	Output(2)_Normally open
8	Output(3)_Normally open
9	Output(4)_Normally open
10	Customer_COM (GND)
11	Not Connected

Terminal Block
300 Volt/10
Amp/14AWG UL Rat-
ing



For EZ-LINK cables and Terminal boards look at page 4-5



8 pt. Analog In Module (Voltage)

Module Specifications	
Number of Channels	8 single ended
Input Range	0-5, 0-10V DIP switch selectable
Resolution	12 bit (1-4096)
Step Response	200μs to 95% of FS
Crosstalk	1/2 count max, -80db
Input Impedance	>20KΩ
Absolute Max Ratings	± 15V
Converter Type	successive approximation
Linearity Error (end to end)	± 2 count
Input Stability	± 2 count
Gain Error	± 2 counts
Offset Calibration Error	± 5 counts
Max Inaccuracy	± 0.2% at 25°C, ± 0.4% at 0-60°C
Accuracy vs. Temperature	± 50 ppm/°C typical



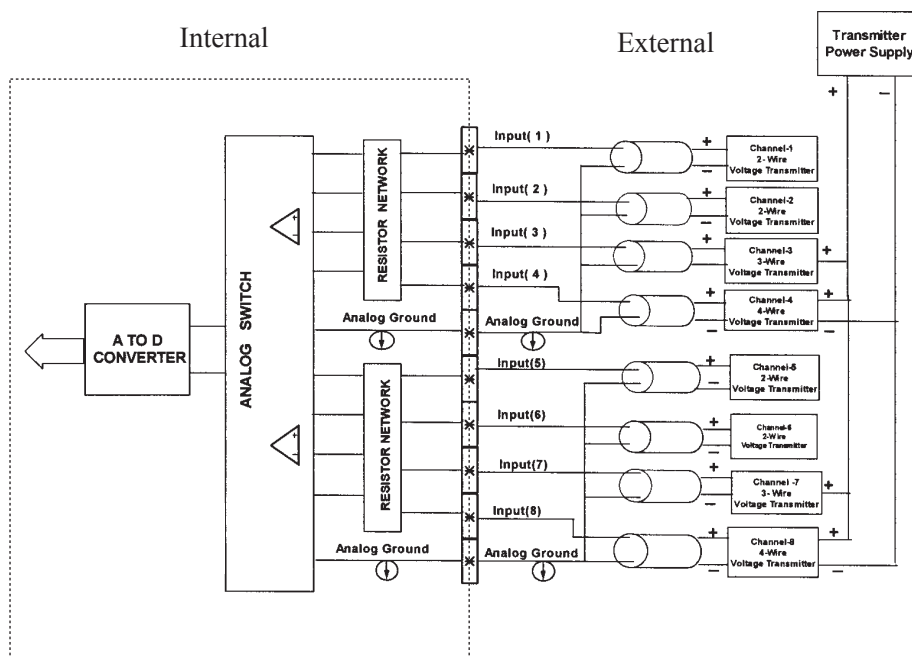
EZIOP-8ANIV
\$139

Delivery
Code
STK

EZIOP-8ANIV
Screw-down

Terminal Block
300 Volt/10 Amp/14AWG
UL Rating

Pinout Information	
Pin No.	EZIO-8ANIV
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	Customer_COM (Analog GND)
6	Input(5)
7	Input(6)
8	Input(7)
9	Input(8)
10	Customer_COM (Analog GND)
11	Not Connected



For EZ-LINK cables and Terminal boards look at page 4-5



8 pt. Analog In Module (Current)

Module Specifications	
Number of Channels	8 Single Ended
Input Range	0-20mA or 4-20 mA DIP switch selectable
Resolution	12 bit (1-4096)
Step Response	200 μ s for 95% FS
Crosstalk	1/2 count max, -80db
Input Impedance	62.5 Ω $\pm$ 0.1%
Absolute Max Ratings	-30mA to 30mA
Converter Type	Successive Approximation
Linearity Error (end to end)	$\pm$ 2 counts
Input Stability	$\pm$ 1 count
Full-scale Calibration Error	$\pm$ 10 counts @ 20mA
Offset Calibration Error	$\pm$ 5 counts
Max Inaccuracy	$\pm$ 0.3% @ 25°C, $\pm$ 0.6% @ 60°C
Accuracy vs. Temperature	$\pm$ 50 ppm/°C typical
Recommended Fuse	.032 Amp, series 217 fast acting



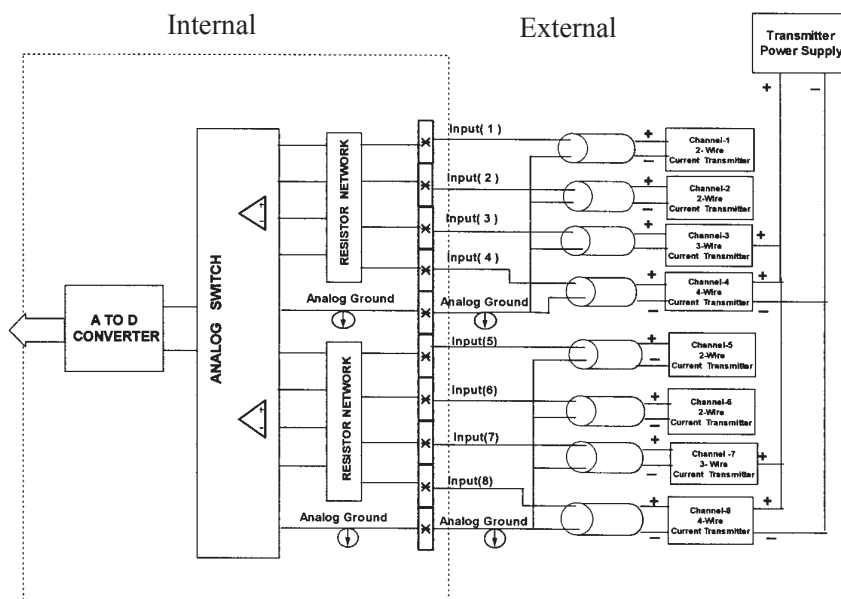
EZIOP-8ANIC
\$139

Delivery
Code
STK

EZIOP-8ANIC
Screw-down

Terminal Block
300 Volt/10 Amp/
14AWG UL Rating
Dip switches on back

Pinout Information	
Pin No.	EZIO-8ANIC
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	Customer_COM (Analog GND)
6	Input(5)
7	Input(6)
8	Input(7)
9	Input(8)
10	Customer_COM (Analog GND)
11	Not Connected



For EZ-LINK cables and Terminal boards look at page 4-5



8 pt. Analog In Module (Current) Isolated

Module Specifications	
Number of Channels	8 Single Ended
Input Range	0-20mA or 4-20 mA DIP switch selectable
Resolution	12 bit (1-4096)
Step Response	200µs for 95% FS
Crosstalk	1/2 count max, -80db
Input Impedance	62.5Ω ± 0.1%
Absolute Max Ratings	-30mA to 30mA
Converter Type	Successive Approximation
Linearity Error (end to end)	± 2 counts
Input Stability	± 1 count
Full-scale Calibration Error	± 10 counts @ 20mA
Offset Calibration Error	± 5 counts
Max Inaccuracy	± 0.3% @ 25°C, ± 0.6% @ 60°C
Accuracy vs. Temperature	± 50 ppm/°C typical
Recommended Fuse	.032 Amp, series 217 fast acting

EZIOP-8ANICI
Screw-down

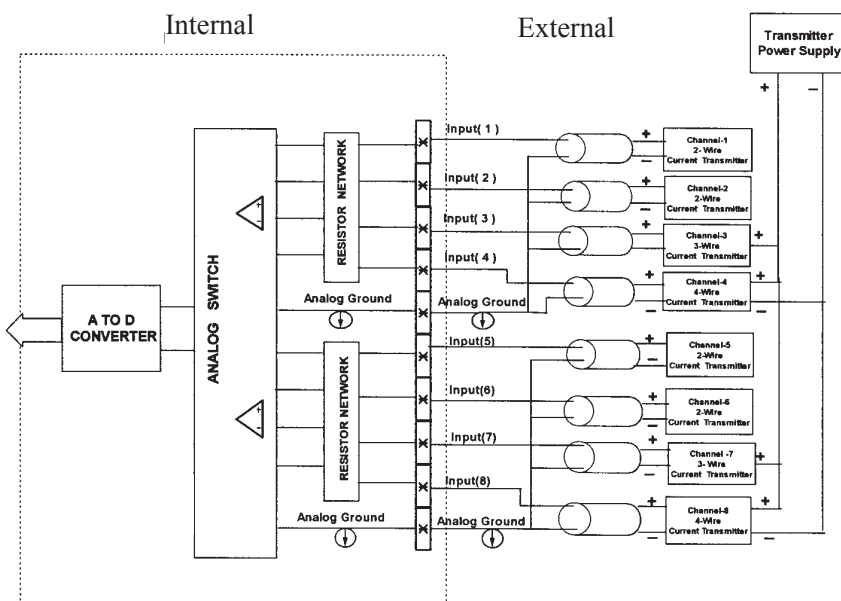


EZIOP-8ANICI
\$229

Delivery
Code
STK

Terminal Block
300 Volt/10 Amp/
14AWG UL Rating
Dip switches on back

Pinout Information	
Pin No.	EZIOP-8ANICI
1	Input(1)
2	Input(2)
3	Input(3)
4	Input(4)
5	Customer_COM (Analog GND)
6	Input(5)
7	Input(6)
8	Input(7)
9	Input(8)
10	Customer_COM (Analog GND)
11	Not Connected



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. Analog In/4 pt. Analog Out Module (Voltage)

Module Specifications		
Analog Voltage Input Specs	Number of Channels	4 single ended
	Input Range	0-5, 0-10V DIP switch selectable
	Resolution	12 bit (1-4096)
	Step Response	200µs to 95% of FS
	Crosstalk	1/2 count max, -80db
	Input Impedance	>20KΩ
	Absolute Max Ratings	± 15V
	Converter Type	successive approximation
	Linearity Error (end to end)	± 2 count
	Input Stability	± 2 count
	Gain Error	± 2 counts
	Offset Calibration Error	± 5 counts
	Max Inaccuracy	± 0.2% at 25°C, ± 0.4% at 0-60°C
	Accuracy vs. Temperature	± 50 ppm/°C typical
Analog Voltage Output Specs	Number of Channels	4 single ended (1 common)
	Output Range	0-5 VDC, 0-10 VDC (DIP switch selectable)
	Resolution	12 bits (1 in 4096)
	Conversion Setting Time	100 µs for FS
	Crosstalk	1/2 count max, -80db
	Peak Output Voltage	± 18 VDC
	Offset Error	± 0.15% of range
	Gain Error	± 0.3% of range
	Linearity Error (end to end)	± 1 count
	Output Stability	± 2 counts
	Load Impedance	2k Ω min.
	Load Capacitance	.01 microF max
	Accuracy vs. Temperature	± 50 ppm/C typical



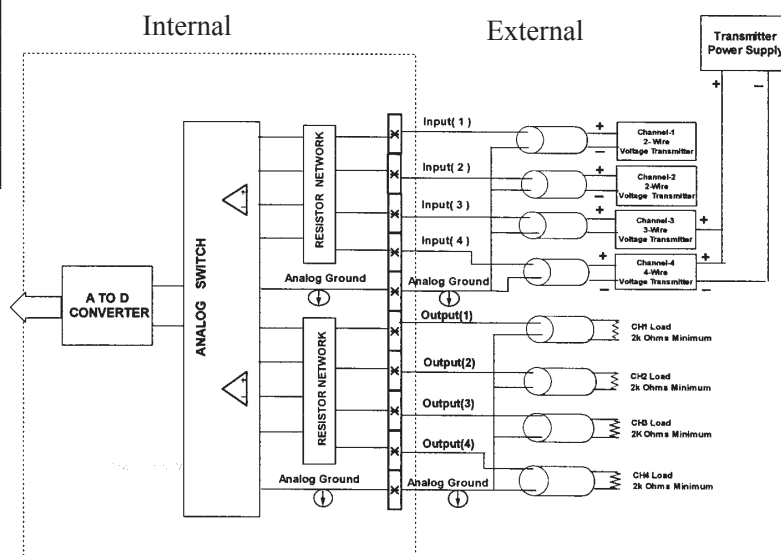
EZIO-4ANI4ANOV
\$139

Delivery
Code
STK

EZIO-4ANI4ANOV
Screw-down

Pinout Information	
Pin No.	EZIO-4ANI4ANOV
1	Output(1)
2	Output(2)
3	Output(3)
4	Output(4)
5	Customer_COM (Analog GND)
6	Input(1)
7	Input(2)
8	Input(3)
9	Input(4)
10	Customer_COM (Analog GND)
11	Not Connected

Terminal Block
300 Volt/10
Amp/14AWG UL Rat-
ing



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. Analog In/4 pt. Analog Out Module (Voltage) Isolated

Module Specifications		
Analog Voltage Input Specs	Number of Channels	4 single ended
	Input Range	0-5, 0-10V DIP switch selectable
	Resolution	12 bit (1-4096)
	Step Response	200µs to 95% of FS
	Crosstalk	1/2 count max, -80db
	Input Impedance	>20KΩ
	Absolute Max Ratings	± 15V
	Converter Type	successive approximation
	Linearity Error (end to end)	± 2 count
	Input Stability	± 2 count
	Gain Error	± 2 counts
	Offset Calibration Error	± 5 counts
	Max Inaccuracy	± 0.2% at 25°C, ± 0.4% at 0-60°C
	Accuracy vs. Temperature	± 50 ppm/°C typical
Analog Voltage Output Specs	Number of Channels	4 single ended (1 common)
	Output Range	0-5 VDC, 0-10 VDC (DIP switch selectable)
	Resolution	12 bits (1 in 4096)
	Conversion Setting Time	100 µs for FS
	Crosstalk	1/2 count max, -80db
	Peak Output Voltage	± 18 VDC
	Offset Error	± 0.15% of range
	Gain Error	± 0.3% of range
	Linearity Error (end to end)	± 1 count
	Output Stability	± 2 counts
	Load Impedance	2k Ω min.
	Load Capacitance	.01 microF max
	Accuracy vs. Temperature	± 50 ppm/C typical

EZIOP-4ANI4ANOV1
Screw-down

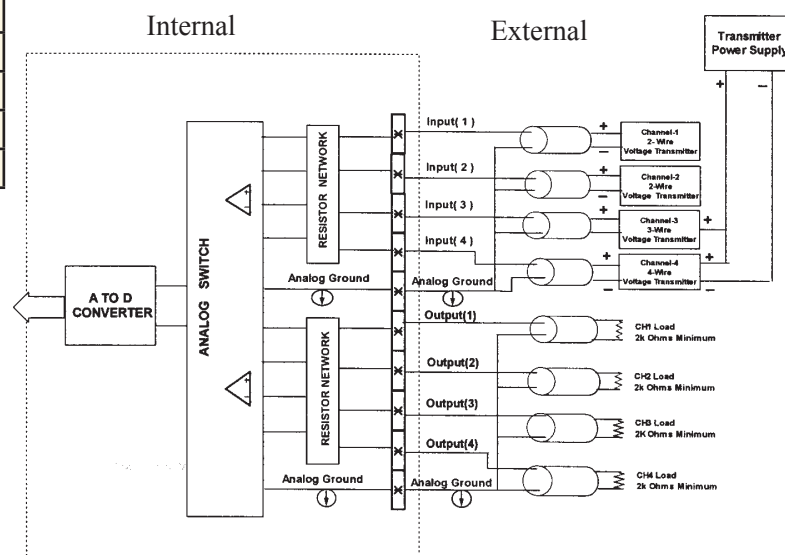


EZIOP-4ANI4ANOV1
\$239

Delivery
Code
STK

Pinout Information	
Pin No.	EZIOP-4ANI4ANOV1
1	Output(1)
2	Output(2)
3	Output(3)
4	Output(4)
5	Customer_COM (Analog GND)
6	Input(1)
7	Input(2)
8	Input(3)
9	Input(4)
10	Customer_COM (Analog GND)
11	Not Connected

Terminal Block
300 Volt/10 Amp/14AWG
UL Rating

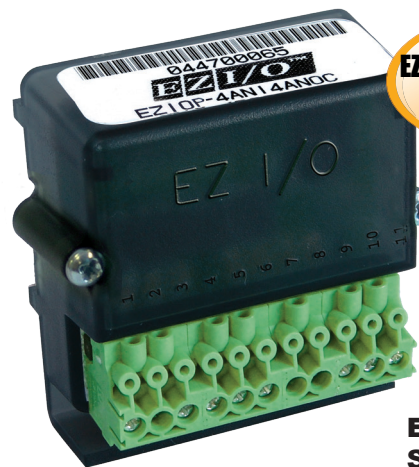


For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. Analog In/4 pt. Analog Out Module (Current)

Module Specifications		
Analog Current Input Specs	Number of Channels	4 Single Ended
	Input Range	0-20mA or 4-20 mA DIP switch selectable
	Resolution	12 bit (1-4096)
	Step Response	1ms for 95% FS
	Crosstalk	1/2 count max, -80db
	Input Impedance	62.5Ω ± 0.1%
	Absolute Max Ratings	-30mA to 30mA
	Converter Type	Successive Approximation
	Linearity Error (end to end)	± 2 counts
	Input Stability	± 1 count
	Full-scale Calibration Error	± 10 counts @ 20mA
	Offset Calibration Error	± 5 counts
	Max Inaccuracy	± 0.3% @ 25°C, ± 0.6% @ 60°C
	Accuracy vs. Temperature	± 50 ppm/°C typical
Analog Current Output Specs	Recommended Fuse	.032 Amp, series 217 fast acting
	Number of Channels	4 single ended
	Output Range	0-20mA, 4-20mA (DIP switch selectable)
	Output Type	Current Sourcing
	Resolution	12 bit (1-4096)
	Max. Loop Voltage	6 VDC
	Load/loop	0-300Ω
	Linearity Error (end to end)	± 2 counts
	Conversion Setting Time	100μs for FS
	Full-scale Calibration Error	± 12 counts
	Offset Calibration Error	± 6 counts
	Max. Full-scale Inaccuracy (all errors included)	± 0.3%



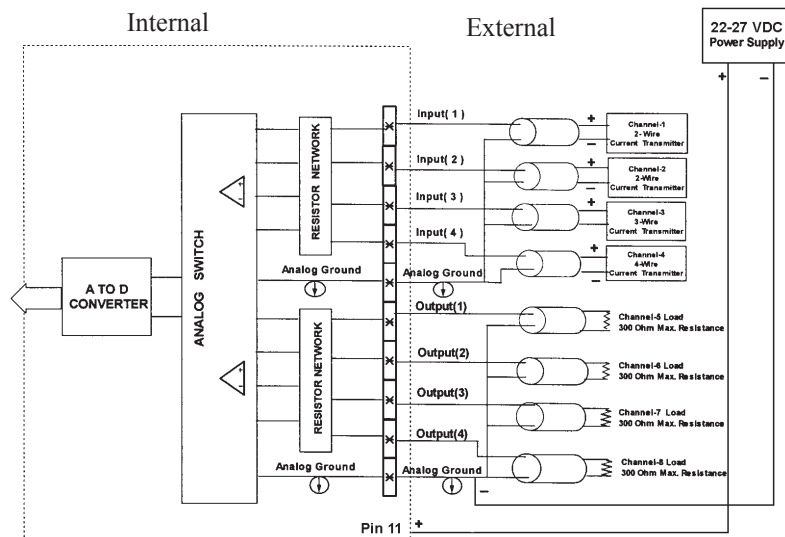
EZIO-4ANI4ANOC
\$139

Delivery
Code
3DAY

EZIO-4ANI4ANOC
Screw-down

Pinout Information	
Pin No.	EZIO-4ANI4ANOC
1	Output(1)
2	Output(2)
3	Output(3)
4	Output(4)
5	Customer_COM (Analog GND)
6	Input(1)
7	Input(2)
8	Input(3)
9	Input(4)
10	Customer_COM (Analog GND)
11	22-27 VDC

Terminal Block
300 Volt/10
Amp/14AWG UL Rating



For EZ-LINK cables and Terminal boards look at page 4-5



4 pt. Analog In/4 pt. Analog Out Module (Current) Isolated

Delivery
Code
3DAY

Module Specifications		
Analog Current Input Specs	Number of Channels	4 Single Ended
	Input Range	0-20mA or 4-20 mA DIP switch selectable
	Resolution	12 bit (1-4096)
	Step Response	1ms for 95% FS
	Crosstalk	1/2 count max, -80db
	Input Impedance	62.5Ω ± 0.1%
	Absolute Max Ratings	-30mA to 30mA
	Converter Type	Successive Approximation
	Linearity Error (end to end)	± 2 counts
	Input Stability	± 1 count
	Full-scale Calibration Error	± 10 counts @ 20mA
	Offset Calibration Error	± 5 counts
	Max Inaccuracy	± 0.3% @ 25°C, ± 0.6% @ 60°C
Analog Current Output Specs	Accuracy vs. Temperature	± 50 ppm/°C typical
	Recommended Fuse	.032 Amp, series 217 fast acting
	Number of Channels	4 single ended
	Output Range	0-20mA, 4-20mA (DIP switch selectable)
	Output Type	Current Sourcing
	Resolution	12 bit (1-4096)
	Max. Loop Voltage	6 VDC
	Load/loop	0-300Ω
	Linearity Error (end to end)	± 2 counts
	Conversion Setting Time	100μs for FS
	Full-scale Calibration Error	± 12 counts
	Offset Calibration Error	± 6 counts
	Max. Full-scale Inaccuracy (all errors included)	± 0.3%

EZIOP-4ANI4ANOCI
Screw-down

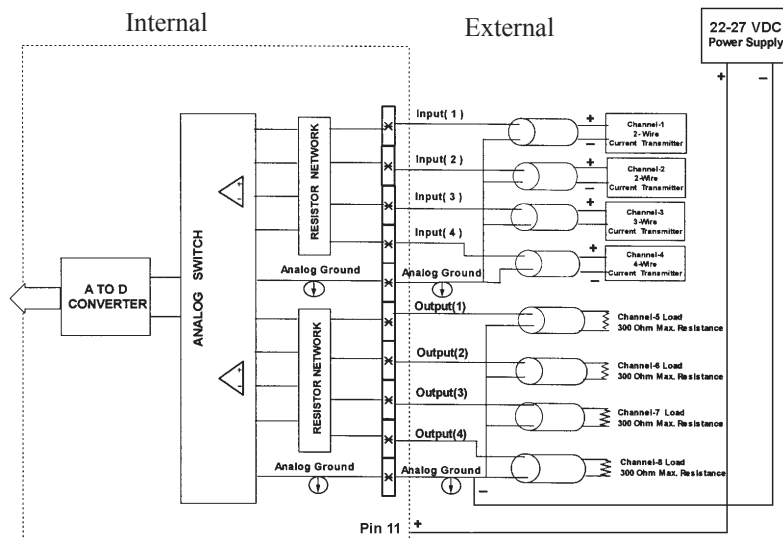
EZIOP-4ANI4ANOCI
\$239



Pinout Information	
Pin No.	EZIOP-4ANI4ANOCI
1	Output(1)
2	Output(2)
3	Output(3)
4	Output(4)
5	Customer_COM (Analog GND)
6	Input(1)
7	Input(2)
8	Input(3)
9	Input(4)
10	Customer_COM (Analog GND)
11	22-27 VDC

Terminal Block
300 Volt/10
Amp/14AWG UL Rat-
ing

**For EZ-LINK cables and Terminal
boards look at page 4-5**

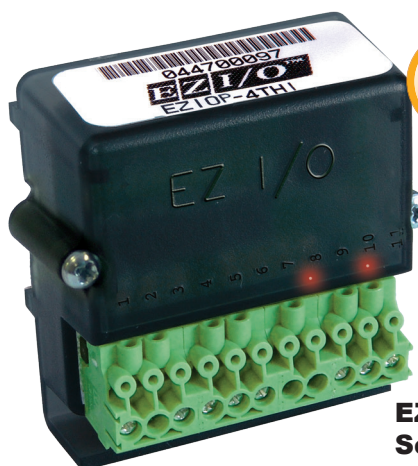




Thermocouple Input Module

with broken wire detection

Module Specifications	
Number of Channels	4, differential
Common Mode Range	-1.5 VDC to +4.0 VDC
Common Mode Rejection	100dB min. @ VDC 50/60Hz
Input Impedance	5M Ω
Absolute Maximum Ratings	Fault-protected inputs to ± 50 VDC
Accuracy vs. Temperature	± 15 ppm/ $^{\circ}$ C max. 0-1.25V ± 35 ppm/ $^{\circ}$ C max. (including max. offset change)
PLC Update Rate	4 channels per scan
Base Power Required	10mA @ 3.3 VDC supplied by base
Operating Temperature	32 $^{\circ}$ to 140 $^{\circ}$ F (0 $^{\circ}$ to 60 $^{\circ}$ C)
Storage Temperature	-4 $^{\circ}$ to 158 $^{\circ}$ F (-20 $^{\circ}$ to 70 $^{\circ}$ C)
Relative Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	MIL STD 810C 514.2
Shock	MIL STD 810C 516.2
Noise Immunity	NEMA ICS3-304
Replacement Terminal Block	EZIO-TERM11CJC (comes with CJC)



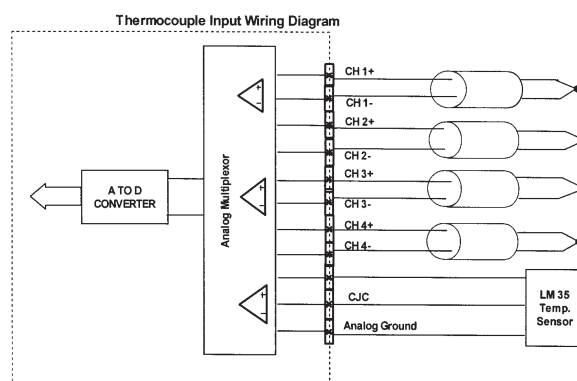
EZIOP-4THIE
\$179

Delivery
Code
3DAY

EZIOP-4THIE
Screw-down

Pinout Information	
Pin No.	4 Thermocouple Input
1	CHAN1 + (Input)
2	CHAN1 - (Input)
3	CHAN2 + (Input)
4	CHAN2 - (Input)
5	CHAN3 + (Input)
6	CHAN3 - (Input)
7	CHAN4 + (Input)
8	CHAN4 - (Input)
9	+ 5 VDC
10	Vout (Temp. Sensor)
11	Analog GND

Terminal Block
300 Volt/10 Amp/14AWG
UL Rating



Thermocouple Specifications	
Input Ranges in C	Type J -40 to 340 $^{\circ}$ C Type K -80 to 450 $^{\circ}$ C Type S 25 to 720 $^{\circ}$ C Type T -180 to 330 $^{\circ}$ C
Display Resolution	Type J,K,T $\pm 0.1^{\circ}$ C; Type S $\pm 1^{\circ}$ C
Cold Junction Compensation	Automatic
Conversion Time	1ms per channel
Warm-Up Time	30 minutes typically $\pm 1^{\circ}$ C repeatability
Linearity Error (End to End)	$\pm 1^{\circ}$ C max. $\pm 0.5^{\circ}$ C typical
Maximum Inaccuracy	$\pm 3^{\circ}$ C (excluding thermocouple error)

* IMPORTANT

This module requires an EZPLC with Firmware Revision **B.0** or Later.

To check the firmware revision of your EZPLC:

Using the EZPLC Editor Software access the menu item **EZPLC > INFORMATION...** a window will open displaying the current **EXEC Software** and **BOOT Software** revisions.

To upgrade the firmware:

Download firmware at www.EZAutomation.net (downloads section). Once downloaded, use EZPLC editor and select **Setup>Upgrade Firmware** menu item.

For EZ-LINK cables and Terminal boards look at page 4-5



High Speed Counter Modules with PLS Outputs

Delivery
Code
3DAY

EZI/O System supports two High Speed 24 bit Counter Modules with PLS outputs that accept quadrature encoder inputs. The PLS outputs compare the counter value to two on/off presets and turn on outputs within 100µs of position change. Presets can be loaded into the counter modules from EZPLC. All inputs and outputs are optically isolated. In addition, PLS outputs are 0.5A short circuit proof DC outputs.

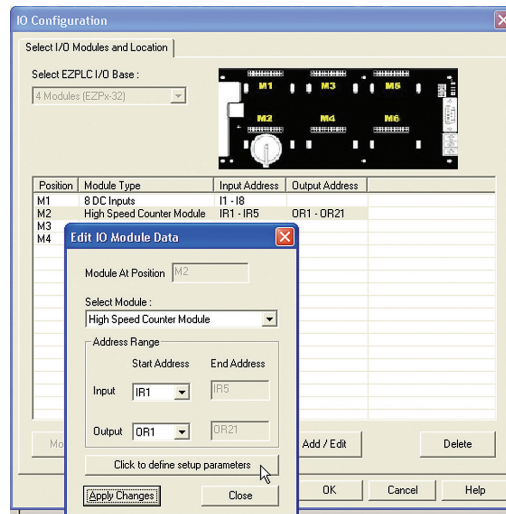
The counters have various preset/reset and inhibit modes as shown on the following page.



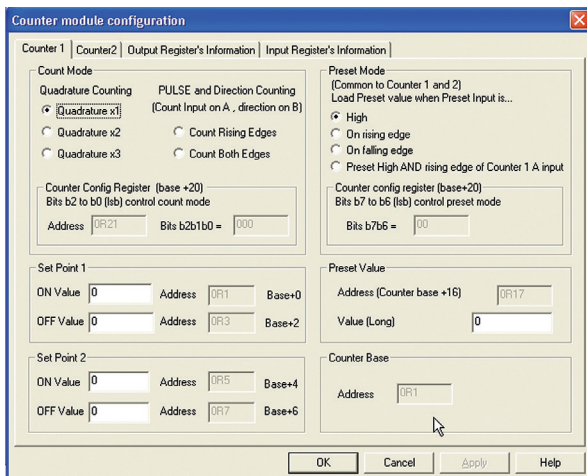
**EZIO-HSCM1
EZIO-HSCM2
Screw-down**

Configuring your High Speed Counter Module is EZier than Ever!

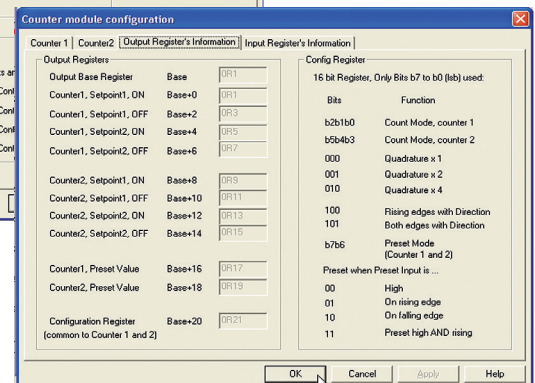
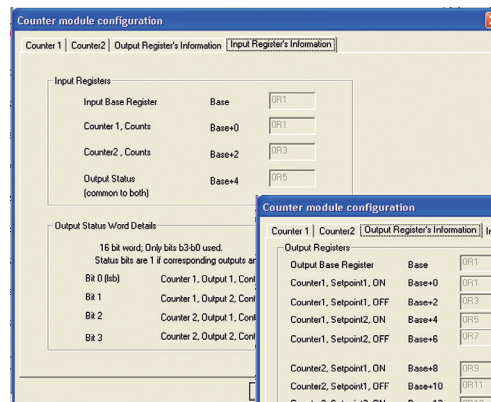
1 In EZPLC's I/O configuration specify the range of registers to be used for input and output.



2 Configure pulse, direction, quadrature counting, set points, preset values and preset mode



3 Detailed information for input and output registers



2 Counter Pin Out	
Pin No.	EZIO-HSCM1 (dual counter)
1	Quad A encoder 1
2	Quad B encoder 1
3	Quad A encoder 2
4	Quad B encoder 2
5	Common
6	Preset
7	Counter 1 Output 1
8	Counter 1 Output 2
9	Counter 2 Output 1
10	Counter 2 Output 2
11	Vs+

1 Counter Pin Out	
Pin No.	EZIO-HSCM2 (single counter)
1	Quad A encoder 1
2	Quad B encoder 1
3	Inhibit
4	Reset
5	Common
6	Preset
7	Counter 1 Output 1
8	Counter 1 Output 2
9	Counter 1 Output 3
10	Counter 1 Output 4
11	Vs+



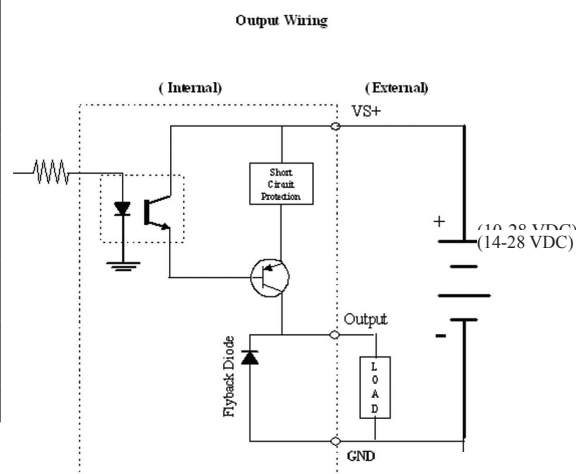
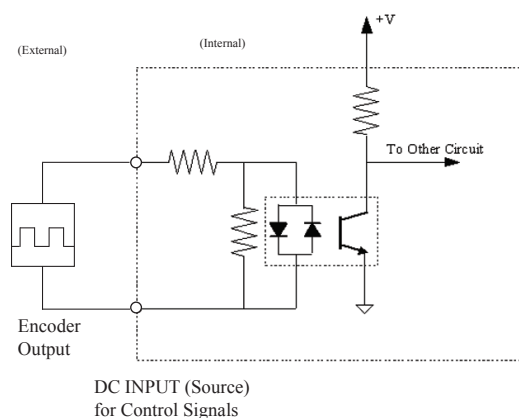
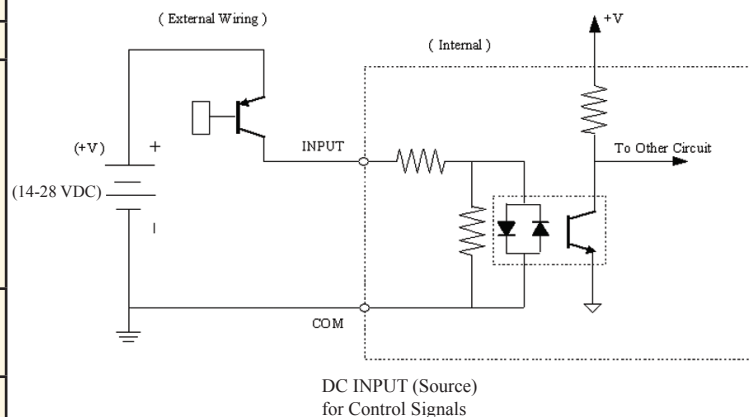
High Speed Counter Module Specifications

Module Specifications		
Feature	EZIO-HSCM1 (dual)	EZIO-HSCM2 (single)
Module Type	Intelligent High Speed Dual Counter Module	Intelligent High Speed Single Counter Module
Maximum Input Frequency	100KHz after 1X, 2X or 4X Multiplication	60KHz after 1X, 2X or 4X Multiplication
Minimum Pulse Width	5 μ s	
Resource Options	1X, 2X, or 4X Quadrature, Up or Down Counter, Reset	
Counter Range	16 million (24 bits)	
Preset Modes	1. This mode will preset the counter to the preset value while preset is held high. While the preset signal is high, no new count signals will be counted. 2. This mode will create an interrupt on the rising edge of the reset signal to set the counter to the preset value. 3. This mode will create an interrupt on the falling edge of the preset signal to set the counter to the preset value. 4. This mode will create a preset pulse every time that there is a rising edge of signal A and the preset signal is high.	
Reset Modes/Input	None	Same as Preset except the reset input sets the counter value to zero
Inhibit Input	None	Inhibits the counter from counting when high

PLS Output Specifications		
Feature	EZIO-HSCM1 (dual counter)	EZIO-HSCM2 (single counter)
Number of Outputs	2 Source outputs for each counter	4 Source outputs
Response Time	100 μ s	
PLS Setpoints	1 on/off pair for each output	
Peak Voltage	50.0 VDC	
Maximum Steady State Output Current	0.5A per output, 1.0A max per module @ 50°C	
Maximum Leakage Current	100 μ A @ 50 VDC @ 50°C	
ON Voltage Drop	2 VDC @ 0.5A	
Maximum Inrush Current	0.8A for 10ms	
OFF to ON Response	< 2 μ s	
ON to OFF Response	<10 μ s	
Status Indicators	Red LED for each output	
+V Terminals & Commons	One V*, 1 Common	
Short Circuit Protection	1 Amp per module, turns off outputs upon short circuit detection	
Optical Isolation	2500 Volt	

Counter Input Specifications		
Feature	EZIO-HSCM1 (dual counter)	EZIO-HSCM2 (single counter)
Number of Inputs	5	
Input Voltage Range	14-28 VDC	
Peak Voltage	40 VDC	
Input Current	2.5 mA @ 14 VDC 5.0 mA @ 28 VDC	
Maximum Input Current	5 mA @ 28 VDC	
Input Impedance	5.6K Ω min. @ 14-28 VDC	
ON Voltage Level	> 14 VDC	
OFF Voltage Level	< 2 VDC	
Min. ON Current	2.5 mA	
Min. OFF Current	0.2 mA	
OFF to ON Response	< 2 μ s	
ON to OFF Response	< 3 μ s	
Status Indicators	Red LED for each input	
Commons	1 point	

General Specifications	
Optical Isolation	2500 Volt
Wires	1 of 14 AWG, 2 of 18 AWG, 4 of 22 AWG
Operating Environment	0-60°C, Humidity non-condensing 5-95%



For EZ-LINK cables and Terminal boards look at page 4-5



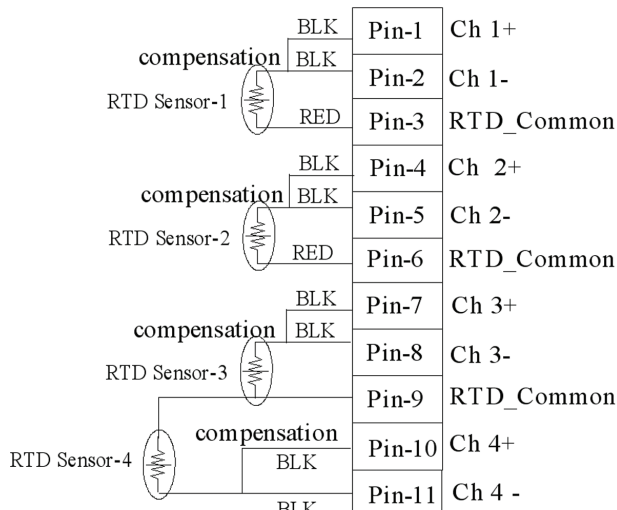
Resistance Temperature Detector

Pinout Information	
1	CHAN1 +
2	CHAN1 -
2	RTD_COMMON
4	CHAN2 +
5	CHAN2 -
6	RTD_COMMON
7	CHAN3 +
8	CHAN3 -
9	RTD_COMMON
10	CHAN4 +
11	CHAN4 -



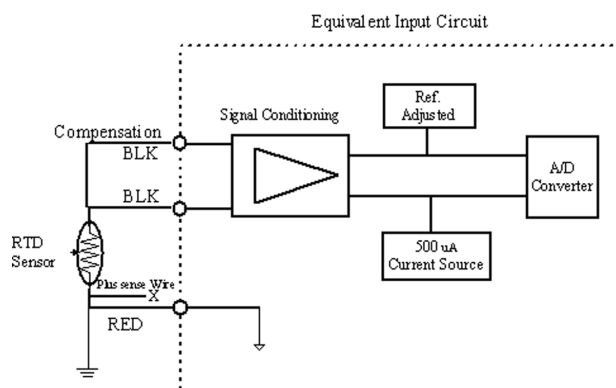
EZIOP-RTD
Screw-down

RTD Input Specifications	
Number of Channels	4
Common Mode Range	0-3.3 VDC
Converter Type	12-bit
Update Rate	All Channels per scan
Input Words Required	4 IR Words
Temperature Drift	50 ppm / °C (max)
Maximum Inaccuracy	+ / - 3 °C
RTD Excitation Current	500 uA
Operating Temperature	0 °C to 60 °C
Storage Temperature	-20 °C to 70 °C
Relative Humidity	5 to 95 %
Terminal Block	300 Volt/10 Amp/ 14 AWG UL Rating
Optical Isolation	2500 Volt



RTD Input Ranges			
RTD Input Ranges	Temperature Coefficient of Resistance (TCR) ($\Omega/\Omega^{\circ}\text{C}$)	Temperature Ranges	Resolution
Pt100	0.00385	-200 °C to + 850 °C	0.29
120 Ni	0.00672	-80 °C to 260 °C	0.22
10 Cu	0.00427	-200 °C to 260 °C	2.64

For EZ-LINK cables and Terminal boards look at page 4-5



EZ I/O™ P/N type Pulse Width/Pulse Train Module

The EZIO-PM module is an intelligent module for use with the EZSeries PLCs and provide either Pulse Train Output (PTO) or Pulse Width Modulator (PWM) outputs. The module offers 2 channels of outputs. Each channel can be independently programmed to be either PTO or PWM. “P” type or sourcing outputs are provided for EZIO-PM-P model and Differential outputs are provided for EZIO-PM-D model. Please note that the “D” differential model has only one output.

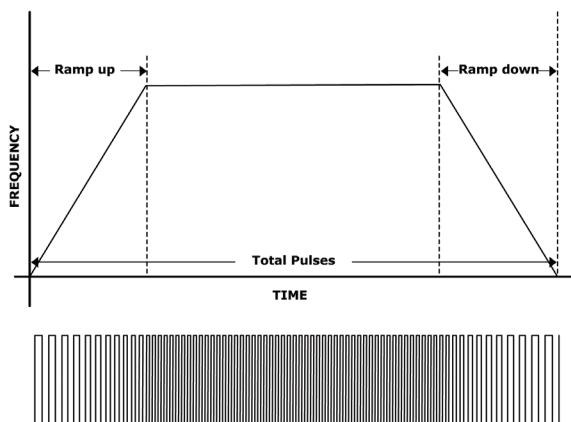


**EZIO-PM-P
EZIO-PM-N
\$199**

**EZIO-PM-P
EZIO-PM-N
Screw-down**

Pulse train Output (PTO) Function

In PTO mode, user specifies Ramp-up and Ramp-down time, total number of pulses to output (includes those generated during ramp up and down), and the frequency at run time. The module generates a pulse train output that ramps up from a minimum frequency (approx 40 Hz) to the user programmed maximum frequency within the ramp-up time. The module would ramp down at such a time so that the total number of pulses generated equals programmed number of pulses. In addition to the PTO output, the module provides a user controlled Direction output for each channel.



Pulse Train Output

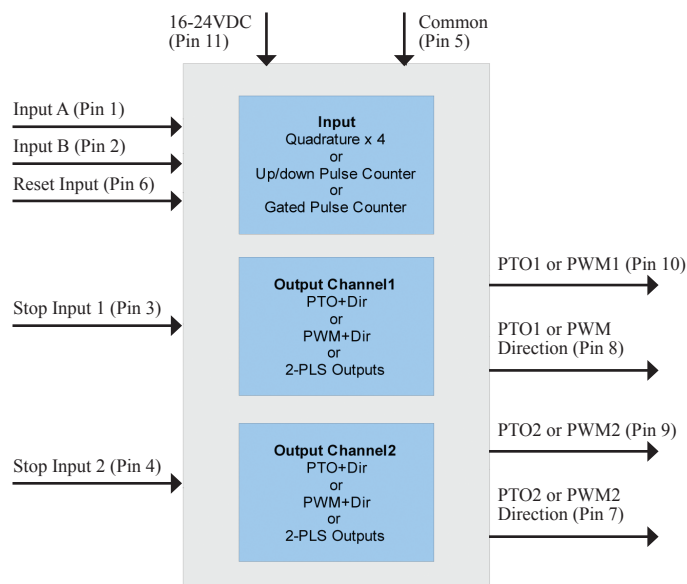
Quadrature Encoder Input

The module also accepts a quadrature input upto a frequency of 100KHz. the count can be multiplied by 2 or 4. 2^{32} number of counts are allowed. The module allows internal start or stop functions for PTO or PWM function based upon count value.

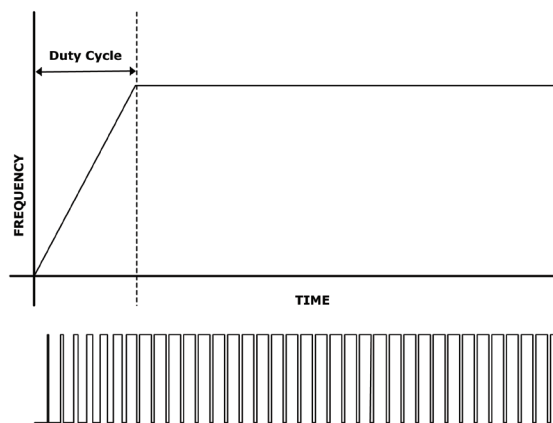
Pulse Width Modulation (PWM) Function

In PWM mode, the module generates a Pulse output with varying duty cycle. The Ramp-up time, frequency and duty cycle is specified by the user, and the module generates a pulse outputs waveform with the specified parameters. The duty cycle goes from 0 to the programmed value within the ramp up time. User also has control over Direction output for each channel.

Functional Block Diagram



* Differential output module has only one output
 * Outputs use ET727 10-30V output chips with 20mA drive and short circuit protection
 * Pins 10 & 8 become positive and Pins 9 & 7 become negative terminals in case of differential outputs.



Pulse Width Modulation

For complete details and specifications of this module log on to <http://www.ezautomation.net/pwm>

EZI/O™ D type Pulse Width/Pulse Train Module

The EZIO-PM module is an intelligent module for use with the EZSeries PLCs and provide either Pulse Train Output (PTO) or Pulse Width Modulator (PWM) outputs. The module offers 2 channels of outputs. Each channel can be independently programmed to be either PTO or PWM. “P” type or sourcing outputs are provided for EZIO-PM-P model and Differential outputs are provided for EZIO-PM-D model. Please note that the “D” differential model has only one output.

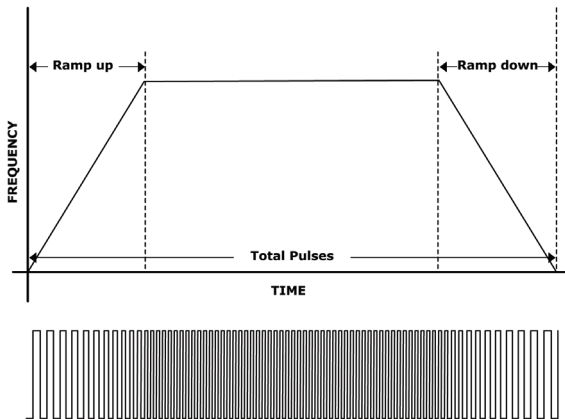


EZIO-PM-D
\$199

EZIO-PM-D
Screw-down

Pulse train Output (PTO) Function

In PTO mode, user specifies Ramp-up and Ramp-down time, total number of pulses to output (includes those generated during ramp up and down), and the frequency at run time. The module generates a pulse train output that ramps up from a minimum frequency (approx 40 Hz) to the user programmed maximum frequency within the ramp-up time. The module would ramp down at such a time so that the total number of pulses generated equals programmed number of pulses. In addition to the PTO output, the module provides a user controlled Direction output for each channel.



Pulse Train Output

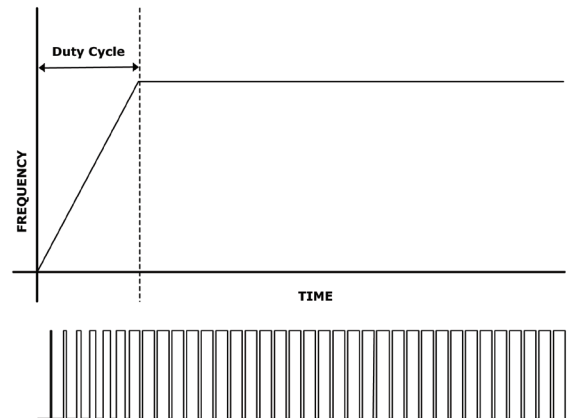
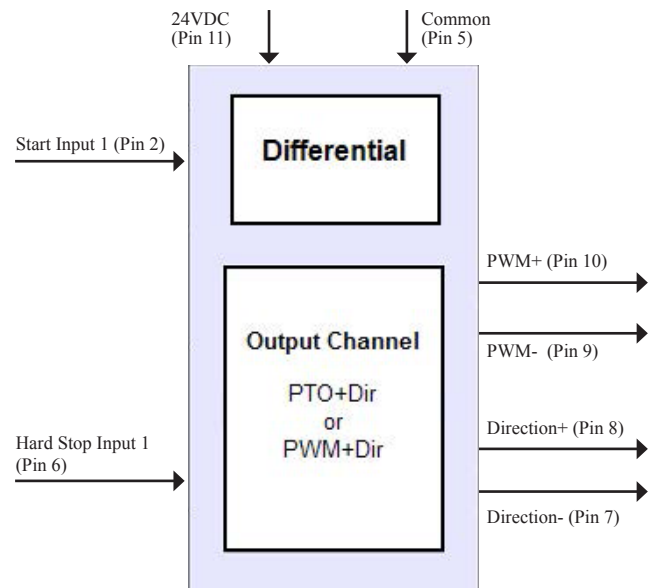
Quadrature Encoder Input

The module also accepts a quadrature input upto a frequency of 100KHz. the count can be multiplied by 2 or 4. 2^{32} number of counts are allowed. The module allows internal start or stop functions for PTO or PWM function based upon count value.

Pulse Width Modulation (PWM) Function

In PWM mode, the module generates a Pulse output with varying duty cycle. The Ramp-up time, frequency and duty cycle is specified by the user, and the module generates a pulse outputs waveform with the specified parameters. The duty cycle goes from 0 to the programmed value within the ramp up time. User also has control over Direction output for each channel.

Functional Block Diagram



Pulse Width Modulation

For complete details and specifications of this module log on to <http://www.ezautomation.net/pwm>