[Product Lineup]

●PCI

Name	Channels		Signal Level	Response Time	Isolation	Internal Power	Input	
	Input	Output					Circuit	Resistance
Opto-Isolated								
PI-32L(PCI)H	32	–	+12~24VDC	Max. 200µsec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PI-32L(PCI)	32	–	+12~24VDC	Max. 1msec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	3kΩ
PI-64L(PCI)H	64	–	+12~24VDC	Max. 200µsec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PI-64L(PCI)	64	–	+12~24VDC	Max. 1msec	Y	–	Opto-Isolated (for current source output) (Negative logic)	3kΩ
PI-128L(PCI)	128	–	+12~24VDC	Max. 200µsec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PO-32L(PCI)H	–	32	+12~24VDC	Max. 200µsec	Y	–	–	–
PO-32L(PCI)	–	32	+12~24VDC	Max. 1msec	Y	–	–	–
PO-64L(PCI)H	–	64	+12~24VDC	Max. 200µsec	Y	–	–	–
PO-64L(PCI)	–	64	+12~24VDC	Max. 1msec	Y	–	–	–
PO-128L(PCI)	–	128	+12~24VDC	Max. 200µsec	Y	–	–	–
PIO-16/16L(LPCI)H	16	16	+12~24VDC	Max. 200µsec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PIO-16/16L(PCI)H	16	16	+12~24VDC	Max. 200µsec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PIO-16/16L(PCI)	16	16	+12~24VDC	Max. 1msec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	3kΩ
PIO-32/32L(PCI)H	32	32	+12~24VDC	Max. 200µsec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PIO-32/32L(PCI)	32	32	+12~24VDC	Max. 1msec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	3kΩ
PIO-64/64L(PCI)	64	64	+12~24VDC	Max. 200µsec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
Opto-Isolated High-speed								
PIO-32/32F(PCI)	32	32	12~24VDC	Max. 5µsec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	2.2kΩ
Opto-Isolated with On-board 12V Power Supply								
PI-32B(PCI)H	32	–	12~24VDC	Max. 200µsec	Y	12VDC	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PI-32B(PCI)	32	–	12~24VDC	Max. 1msec	Y	12VDC	Opto-Isolated (for current source output) (Negative logic)	3kΩ
PO-32B(PCI)H	–	32	12~24VDC	Max. 200µsec	Y	12VDC	–	4.7kΩ
PO-32B(PCI)	–	32	12~24VDC	Max. 1msec	Y	12VDC	–	–
PIO-16/16B(LPCI)H	16	16	12~24VDC	Max. 200µsec	Y	12VDC	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PIO-16/16B(PCI)H	16	16	12~24VDC	Max. 200µsec	Y	12VDC	Opto-Isolated (for high sink current output) (Negative logic)	4.7kΩ
PIO-16/16B(PCI)	16	16	12~24VDC	Max. 1msec	Y	12VDC	Opto-Isolated (for current source output) (Negative logic)	3kΩ
PIO-32/32B(PCI)H	32	32	12~24VDC	Max. 1msec	Y	12VDC	Opto-Isolated (for high sink current output) (Negative logic)	3kΩ
PIO-16/16TB(PCI)	16	16	5VDC-TTL	Max. 1µsec	Y	+5VDC	Opto-Isolated TTL	1.1kΩ
Isolated High-voltage Non-polar								
PIO-16/16RY(PCI)	16	16	12~24VDC/ 24~48VDC	Input: Max. 200µsec Output:Max. 1.0µsec	Y	–	Opto-Isolated (for high sink current output / for current sourcing output)	3kΩ (12~24V) 6kΩ (24~48V)
Reed Relay Output								
RRY-16C(PCI)	–	16	~125VAC/~30VDC	Max. 7msec	Y	–	–	–
RRY-32(PCI)	–	32	~100VAC/VDC	Max. 1msec	Y	–	–	–
TTL-Level								
PIO-16/16T(LPCI)H	16	16	5VDC-TTL	Max. 200nsec	–	–	TTL level	10kΩ*1
PIO-16/16T(PCI)	16	16	5VDC-TTL	Max. 200nsec	–	–	TTL level	10kΩ*1
PIO-32/32T(PCI)	32	32	5VDC-TTL	Max. 200nsec	–	–	TTL level	10kΩ*1
Bi-Directional								
PIO-48D(PCI)	48		5VDC-TTL	Max. 200nsec	–	–	TTL level	10kΩ*1
PIO-32DM(PCI)	32		5VDC-TTL	Max. 50nsec	–	–	TTL level	10kΩ*1

●Compact PCI

Name	Channels		Signal Level	Response Time	Isolation	Internal Power	Input	
	Input	Output					Circuit	Resistance
Opto-Isolated								
PI-64L(CPCI)	64	–	12~24VDC	Max. 1msec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	3kΩ
PO-64L(CPCI)	–	64	12~24VDC	Max. 1msec	Y	–	–	–
PIO-32/32L(CPCI)	32	32	12~24VDC	Max. 1msec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	3kΩ

●PC Card

Name	Channels		Signal Level	Response Time	Isolation	Internal Power	Input	
	Input	Output					Input Circuit	Input Resistance
Opto-Isolated								
PIO-16/16L(PM)	16	16	12~24VDC	Max. 1msec	Y	–	Opto-Isolated (for high sink current output) (Negative logic)	3kΩ
Bi-Directional TTL								
PIO-24W(PM)	24		5VDC-TTL	Max. 200nsec	–	–	TTL level	3kΩ
TTL-Level								
PIO-32D(PM)	32		5VDC-TTL	Max. 200nsec	–	–	TTL level	100kΩ*1

●USB

Name	Channels		Signal Level	Response Time	Isolation	Internal Power	Input	
	Input	Output					Circuit	Resistance
Opto-Isolated								
DI-16(USB)GY	16	–	12~24VDC	1msec	Y	–	Opto-Isolated (for high sink current output / for current sourcing output)	3kΩ
DO-16(USB)GY	–	16	12~24VDC	1msec	Y	–	–	–
DIO-8/8(USB)GY	8	8	12~24VDC	1msec	Y	–	Opto-Isolated (for high sink current output / for current sourcing output)	3kΩ

●For ISA product line-up, please see pages B-22, 23

*1: Pull up resistors
*2: 16 channels share a positive common in external power supply.

Output		Common	Interrupt	Connector	Software		Page	Name
Type	Rating				ACX-PAC(W32)	API-PAC(W32)		
–	–	16	32 signals, 1 request	37-pin D-type	Y	Included	B-05	PI-32L(PCI)H
–	–	16	4 signals, 1 request	37-pin D-type	Y	Included	B-05	PI-32L(PCI)
–	–	16	32 signals, 1 request	96-pin Half Pitch	Y	Included	B-05	PI-64L(PCI)H
–	–	16	4 signals, 1 request	96-pin Half Pitch	Y	Included	B-05	PI-65L(PCI)
–	–	16	16 signals, 1 request	100-pin x2	Y	Included	B-06	PI-128L(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	–	37-pin D-type	Y	Included	B-07	PO-32L(PCI)H
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	–	37-pin D-type	Y	Included	B-07	PO-32L(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	–	96-pin Half Pitch	Y	Included	B-07	PO-64L(PCI)H
Opto-Isolated Open Collector (sinking type)	35VDC 150mA	16	–	96-pin Half Pitch	Y	Included	B-07	PO-65L(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	–	100-pin x2	Y	Included	B-08	PO-128L(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	16 signals, 1 request	50-pin Heade	Y	Included	B-09	PIO-16/16L(PCI)H
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	16 signals, 1 request	37-pin D-type	Y	Included	B-09	PIO-16/16L(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	4 signals, 1 request	37-pin D-type	Y	Included	B-09	PIO-16/16L(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	32 signals, 1 request	96-pin Half Pitch	Y	Included	B-09	PIO-32/32L(PCI)H
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	4 signals, 1 request	96-pin Half Pitch	Y	Included	B-09	PIO-32/32L(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	16 signals, 1 request	100-pin x2	Y	Included	B-10	PIO-64/64L(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 50mA	16	4 signals, 1 request	96-pin Half Pitch	Y	Included	B-10	PIO-32/32F(PCI)
–	–	16	32 signals, 1 request	37-pin D-type	Y	Included	B-06	PI-32B(PCI)
–	–	All channels share one common *2	4 signals, 1 request	37-pin D-type	Y	Included	B-06	PI-32B(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	–	37-pin D-type	Y	Included	B-08	PO-32B(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	All channels share one common *2	–	37-pin D-type	Y	Included	B-08	PO-32B(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	16 signals, 1 request	50-pin Heade	Y	Included	B-10	PIO-16/16B(LPCI)H
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	16 signals, 1 request	37-pin D-type	Y	Included	B-10	PIO-16/16B(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	All channels share one common *2	4 signals, 1 request	37-pin D-type	Y	Included	B-10	PIO-16/16B(PCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	All channels share one common *2	4 signals, 1 request	96-pin Half Pitch	Y	Included	B-10	PIO-32/32B(PCI)H
Opto-Isolated TTL	5VDC 6.4mA	All channels share one common *2	4 signals, 1 request	37-pin D-type	Y	Included	B-11	PIO-16/16TB(PCI)
Semiconductor Relay	120VAC/VDC 100mA	16	16 signals, 1 request	37-pin D-type	Y	Included	B-11	PIO-16/16RY(PCI)
Reed Relay	125VAC/30VDC 2mA	All channels independent	–	37-pin D-type	Y	Included	B-11	RRY-16C(PCI)
Reed Relay	100VAC/VDC 0.5mA	8	–	37-pin D-type	Y	Included	B-11	RRY-32(PCI)
Open Collector	30VDC 40mA	16	16 signals, 1 request	50-pin Heade	Y	Included	B-12	PIO-16/16T(LPCI)H
Open Collector	30VDC 40mA	All channels share one common *2	4 signals, 1 request	37-pin D-type	Y	Included	B-12	PIO-16/16T(PCI)
Open Collector	30VDC 40mA	All channels share one common *2	4 signals, 1 request	96-pin Half Pitch	Y	Included	B-12	PIO-32/32T(PCI)
TTL level	5VDC 24mA	All channels share one common *2	48 signals, 1 request	96-pin Half Pitch	Y	Included	B-12	PIO-48D(PCI)
TTL level	5VDC 24mA	All channels share one common *2	Errors & various factors, 1 request	96-pin Half Pitch	–	Included	B-13	PIO-32DM(PCI)

Output		Common	Interrupt	Connector	Software		Page	Name
Type	Rating				ACX-PAC(W32)	API-PAC(W32)		
–	–	16	4 signals, 1 request	96-pin Half Pitch	Y	Included	B-14	PI-64L(CPCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	–	96-pin Half Pitch	Y	Included	B-14	PO-64L(CPCI)
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	4 signals, 1 request	96-pin Half Pitch	Y	Included	B-14	PIO-32/32L(CPCI)

Output		Common	Interrupt	Connector	Software		Page	Name
Type	Rating				ACX-PAC(W32)	API-PAC(W32)		
Opto-Isolated Open Collector (sinking type)	35VDC 100mA	16	16 signals, 1 request	37-pin D-type	Y	Included	B-15	PIO-16/16L(PM)
TTL level	5VDC 1mA	All channels share one common *2	2 signals, 1 request	37-pin D-type	Y	Included	B-15	PIO-24W(PM)
TTL level	5VDC 1$_{OL}$6mA, 1$_{OH}$=-2mA	All channels share one common *2	32 signals, 1 request	37-pin D-type	Y	Included	B-15	PIO-32D(PM)

Output		Common	Interrupt	Connector	Software		Page	Name
Type	Rating				ACX-PAC(W32)	API-PAC(W32)		
–	–	8	–	x2 9-pin Screwless Connectors	Y	Included	B-16	DI-16(USB)GY
Opto-Isolated Open Collector (sinking type)	24VDC 150mA	8	–	x2 10-pin Screwless Connectors	Y	Included	B-16	DO-16(USB)GY
Opto-Isolated Open Collector (sinking type)	24VDC 150mA	8	–	x2 11-pin Screwless Connectors	Y	Included	B-16	DIO-8/8(USB)GY