

Specifications

IPL EXP I/O Series

Memory

SDRAM.....	512 MB
Flash.....	512 MB

Software

Configuration software	Global Configurator® Plus and Professional
Programming software.....	Global Scripter®
Control apps.....	Extron Control, iGVE
Resource management software....	GlobalViewer® Enterprise
Utilities	Toolbelt, embedded web page

Ethernet

Network interface controllers (NICs)	1
Connectors	1 female RJ-45 connector
Data rate.....	10/100Base-T, half/full duplex with autodetect
Protocols	DHCP, DNS, HTTP (redirect), HTTPS, ICMP (ping), IEEE 802.1X, NTP, SFTP, SNMP, SSH, TCP/IP, UDP/IP
Default settings	Link speed and duplex level = autodetected IP address = 192.168.254.250 Subnet mask = 255.255.255.0 Gateway = 0.0.0.0 DHCP = off DNS = 127.0.0.0

Serial – IPL EXP 200, IPL EXP S2, IPL EXP S5 only

Quantity/type	
IPL EXP 200, IPL EXP S2	2 bidirectional RS-232
IPL EXP S5.....	5 bidirectional RS-232
Connectors	
IPL EXP 200, IPL EXP S2	(2) 3.5 mm captive screw connectors, 3 pole
IPL EXP S5.....	(5) 3.5 mm captive screw connectors, 3 pole
Baud rate and protocol	300 to 115200 baud (9600 baud = default); 8 (default) or 7 data bits; 1 (default) or 2 stop bits; no parity (default), even, or odd parity

NOTE: These ports support software flow control. The default is no flow control.

Pin configuration	Pin 1 = Tx, 2 = Rx, 3 = Gnd
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IR/serial – IPL EXP 200 only

Quantity/type	1 programmable: unidirectional RS-232 (± 5 V), or TTL level (0 to 5 V) infrared (carrier and non-carrier) up to 300 kHz
Connectors.....	(1) 3.5 mm captive screw connectors, 2 pole
Baud rate and protocol (RS-232) ...	300 to 115200 baud (9600 baud = default); 8 (default) or 7 data bits; 1 (default) or 2 stop bits; no parity (default), even, or odd parity
Pin configurations	Pin 1 = signal, 2 = Gnd
IR output carrier frequency.....	30 kHz to 300 kHz

Specifications • IPL EXP I/O Series (Continued)

Digital I/O – IPL EXP 200, IPL EXP RIO8

Quantity/type	
IPL EXP 200	4 digital input/output (configurable)
IPL EXP RIO8	8 digital input/output (configurable)
Connectors	
IPL EXP 200	(1) 3.5 mm captive screw connector, 5 pole
IPL EXP RIO8	(4) 3.5 mm captive screw connectors, 5 pole
Digital inputs	
Input voltage range.....	0 to 24 VDC, clamped at +30 VDC
Input impedance	>10k ohms
Programmable pullup	1k ohms to +5 VDC
Threshold low to high	2.8 VDC
Threshold high to low	2.0 VDC
Digital outputs.....	250 mA sink from 24 VDC max.
12 VDC, 24 VDC outputs.....	Aggregate power output: 19 watts
Pin configurations	
IPL EXP 200	1, 2, 3, 4 = digital I/Os 1, 2, 3, 4; 5 = Gnd
IPL EXP RIO8	1, 2 = digital I/Os; 3 = 12 VDC; 4 = 24 VDC; 5 = Gnd

Relays – IPL EXP 200, IPL EXP RIO8

Quantity/type	
IPL EXP 200	2 normally open relays
IPL EXP RIO8	8 normally open relays
Relay control connectors	
IPL EXP 200	(1) 3.5 mm captive screw connectors, 3 pole
IPL EXP RIO8	(4) 3.5 mm captive screw connectors, 4 pole
Relay control contact rating.....	24 VDC, 1 A

eBUS – IPL EXP 200

eBUS control ports	(1) 3.5 mm captive screw connector, 5 pole (uses 4 poles)
eBUS pin configuration	+V = +12 VDC; +S = + signal; -S = - signal; G = ground
Recommended cable type.....	Extron STP20-2/1000 or STP20-2P/1000 cable
Maximum system cable length.....	1000 feet (305 meters) sum total for the eBUS system, regardless of topology. Power injection may be required depending on system cabling topology and primary power supply wattage. See the <i>eBUS Technology Reference Guide</i> for details.
eBUS power output	3 watts

Specifications • IPL EXP I/O Series (Continued)

General

Power supply	Not included
Power input requirements	
IPL EXP RIO8	Power over Ethernet Plus (PoE+) (complies with PoE 802.3af, class 4); 56 VDC (PoE), minimum 0.8 A
All other models.....	Power over Ethernet (PoE) (complies with PoE 802.3af, class 3); 48 VDC (PoE), minimum 0.35 A
Power consumption	
IPL EXP 200	
Device	4.9 watts, 48 VDC (PoE)
Device and PoE injector.....	7.2 watts, 100-240 VAC, 50-60 Hz
IPL EXP S2	
Device	1.3 watts, 48 VDC (PoE)
Device and PoE injector.....	3.5 watts, 100-240 VAC, 50-60 Hz
IPL EXP S5	
Device	1.3 watts, 48 VDC (PoE)
Device and PoE injector.....	3.4 watts, 100-240 VAC, 50-60 Hz
IPL EXP RIO8	
Device	26.9 watts, 56 VDC (PoE+)
Device and PoE injector.....	31.5 watts, 100-240 VAC, 50-60 Hz
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, no vents
Thermal dissipation	
IPL EXP 200	
Device	6.5 BTU/hr
Device and PoE injector.....	14.3 BTU/hr
IPL EXP S2	
Device	4.6 BTU/hr
Device and PoE injector.....	11.8 BTU/hr
IPL EXP S5	
Device	4.6 BTU/hr
Device and PoE injector.....	11.7 BTU/hr
IPL EXP RIO8	
Device	26.9 BTU/hr
Device and PoE injector.....	42.5 BTU/hr
Mounting	
IPL EXP RIO8	
Rack mount.....	Yes, with optional 1U rack shelf or back of the rack mounting kit
Furniture mount	Yes, with optional bracket kit
All other models	
Rack mount.....	Yes, with optional 1U rack shelf, with the included ZipClip® 200 mounting clip, or by securing to rack rails with tie wraps
Furniture mount	Yes, with the included ZipClip 200 mounting clip
Pole mount.....	Yes, using tie wraps
Enclosure type	
IPL EXP RIO8	Metal
All other models.....	High impact, high temperature plastic
Enclosure dimensions	
IPL EXP RIO8	1.7" H x 4.3" W x 6.0" D (1U high, quarter rack wide) (43 mm H x 109 mm W x 152 mm D)
All other models.....	1.7" H x 4.3" W x 4.5" D (1U high, quarter rack wide) (42 mm H x 109 mm W x 114 mm D)

Specifications • IPL EXP I/O Series (Continued)

Product weight

IPL EXP RIO8 0.75 lb (0.3 kg)

All other models..... 0.45 lbs (0.2 kg)

Regulatory compliance..... CE, C-Tick, c-UL, FCC Class A, ICES, UL, VCCI
Complies with the appropriate requirements of RoHS, WEEE

Warranty 3 years parts and labor

NOTE: All nominal levels are at $\pm 10\%$.

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at www.extron.com.

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