

SmartLink-III™ Series

SL-1952X-X 32 Discrete I/O Module

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Features and Functions

- SmartLink-III™ System Interface
- Lightweight, modular design
- 32 Programmable Discrete Channels
- Discrete channels can be configured as inputs or outputs
- Power-up state of discrete channels is configurable
- Firmware download capability
- Fully Programmable discrete control
- Redundancy design for high reliability



Description

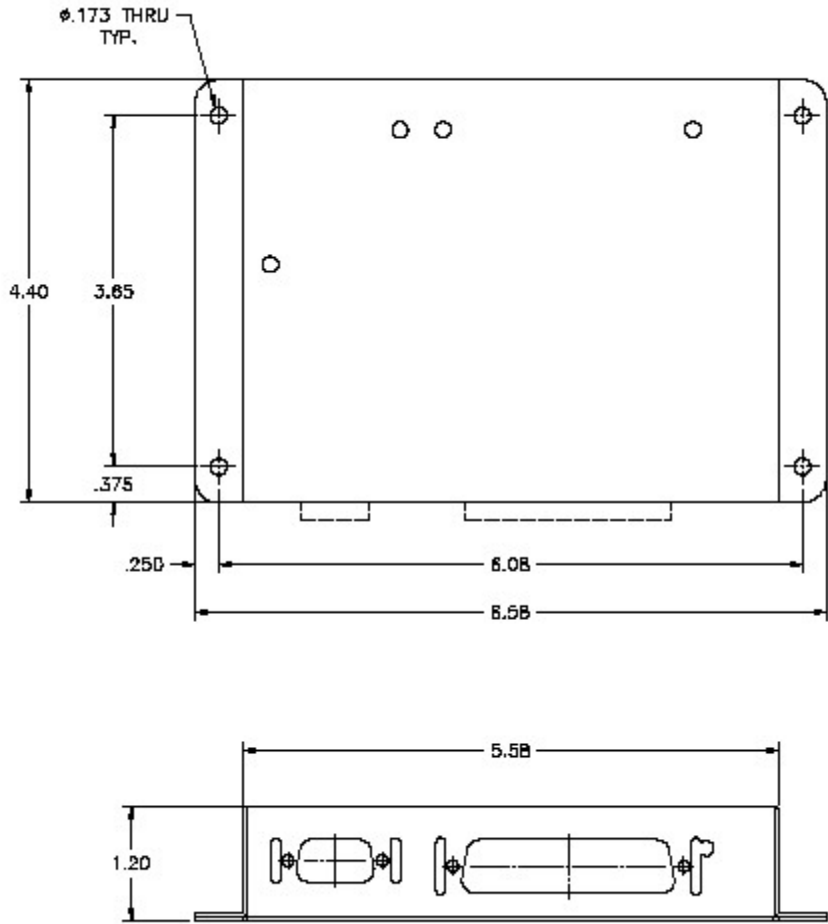
The SL-1952 module allows almost any type of device to be integrated and interfaced with our SmartLink-III™ Cabin Management System. Its 32 discrete channels can be configured as inputs or outputs, making uses for this module virtually limitless. Need an external door switch to turn on a group of lights inside your aircraft cabin? Need a special projection screen to unroll from the ceiling when you select for a particular video source? This module will do it. Do you have multiple Master or VIP panels that need to control the same discrete functions? Normally, duplicate wire runs to each Master Panel would be required. With our system, just tie each discrete into the SL-1952 module and let the “fly-by-wire” logic of the SmartLink-III™ handle the rest. No matter what your special or custom interfacing need is, this module can handle it. The module itself is very lightweight and compact, and can be easily installed within the tight confines of today’s corporate aircraft interiors. Only a minimum number of cable hook-ups are required to connect the module into the SmartLink-III™ wire bus. The large number of channels available with this module means it will easily handle all your custom aircraft switching needs and offer room to grow.

Application

- Virtually any piece of equipment that requires interfacing with our *SmartLink-III™* cabin management system

Mechanical Specification

- All dimensions are in Inch
- Material 5052-H32 Aluminum
- Chem-Film Finish
- Weight 10 OZ

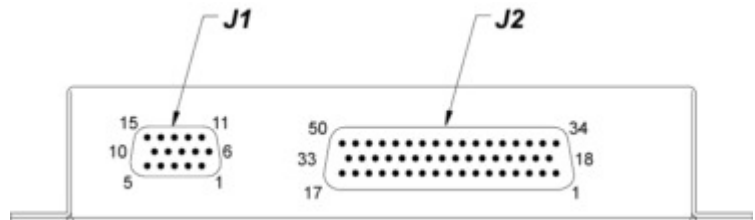


Electrical Specification

- **Operating Voltage:** 17 ~ 32 VDC
- **Operating Current:** 0.2 ~ 0.8 Amps
- **Operating Temperature:** -10 ~ +55 °C
- **System Interface:** SmartLink-III Compliant Firmware Upload Re-configurable
- **Connector:** D-Sub Series with #4-40 Jackscrew ('P' suffix with Positronic's V3 Tab)
- **Discrete I/O:** 32
- **Discrete Input:** Ground Activate, 1mA Source, 2.5VDC Threshold
- **Discrete Output:** Open-Collector Drive, 300mA Max. Sink Current

System Interconnect Connector

Label	Description	Connector Type
J1	SmartLink System Interface	High Density D-Sub 15 pin Plug (Male)
J2	Input /Output Interface	D-Sub 50 pin Plug (Male)



Connector Pinouts

	J1 D-Sub High Density 15 pin Plug (Male)
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PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
1	Frame Ground	6	Device ID (HEX bit 0)	11	Device ID (HEX bit 3)
2	Power Input +28VDC	7	Device ID (HEX bit 1)	12	Device ID (HEX bit 4)
3	Power Return (GND)	8	Device ID Return (GND)	13	Device ID (HEX bit 5)
4	SmartLink Data bus – HI	9	SmartLink – Shield (GND)	14	Device ID (HEX bit 6)
5	SmartLink Data bus – LO	10	Device ID (HEX bit 2)	15	Device ID (HEX bit 7)

J2 D-Sub 50 pin Plug (Male)					
PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
1	DISCRETE I/O A0	18	DISCRETE I/O A1	34	DISCRETE I/O RETURN (GND)
2	DISCRETE I/O A2	19	DISCRETE I/O A3	35	DISCRETE I/O RETURN (GND)
3	DISCRETE I/O A4	20	DISCRETE I/O A5	36	DISCRETE I/O RETURN (GND)
4	DISCRETE I/O A6	21	DISCRETE I/O A7	37	DISCRETE I/O RETURN (GND)
5	DISCRETE I/O B0	22	DISCRETE I/O B1	38	DISCRETE I/O RETURN (GND)
6	DISCRETE I/O B2	23	DISCRETE I/O B3	39	DISCRETE I/O RETURN (GND)
7	DISCRETE I/O B4	24	DISCRETE I/O B5	40	DISCRETE I/O RETURN (GND)
8	DISCRETE I/O B6	25	DISCRETE I/O B7	41	DISCRETE I/O RETURN (GND)
9	DISCRETE I/O C0	26	DISCRETE I/O C1	42	DISCRETE I/O RETURN (GND)
10	DISCRETE I/O C2	27	DISCRETE I/O C3	43	DISCRETE I/O RETURN (GND)
11	DISCRETE I/O C4	28	DISCRETE I/O C5	44	DISCRETE I/O RETURN (GND)
12	DISCRETE I/O C6	29	DISCRETE I/O C7	45	DISCRETE I/O RETURN (GND)
13	DISCRETE I/O D0	30	DISCRETE I/O D1	46	DISCRETE I/O RETURN (GND)
14	DISCRETE I/O D2	31	DISCRETE I/O D3	47	DISCRETE I/O RETURN (GND)
15	DISCRETE I/O D4	32	DISCRETE I/O D5	48	DISCRETE I/O RETURN (GND)
16	DISCRETE I/O D6	33	DISCRETE I/O D7	49	DISCRETE I/O RETURN (GND)
17	RESERVED	–	–	50	RESERVED

Installation Notes:

- **FRAME GROUND:** Chassis Ground connection using 20AWG hookup wire minimum.
- **POWER INPUT AND POWER RETURN:** Power Pins
- **SL3 – HI/LO/SHLD:** SmartLink-III™ bus connection, using 22AWG (minimum) Shielded Twisted Pair cable with single ended shield terminated to SHLD pin.



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