



NETWORK

BACNET AND LON I/O MODULE L-IOB SERIES

DESCRIPTION

The Loytec L-IOB I/O Module family of products consists of smart I/O devices featuring different I/O setups. Based on LOYTEC's 32-bit L-CORE platform the **L-IOB I/O Modules** provide first class performance and extensive resources. The **L-IOB I/O Modules** contain a 128x64 display with backlight. The display shows device and data point information. A jog dial is used for local operation by navigating through detailed information on the display and for operating and overriding of data points. The configuration of the **L-IOB I/O Modules** is done with the L-INX Configuration Tool which is free to download from **Loytec**.

FEATURES

- **Physical Inputs and Outputs**
- **Stackable I/O Modules supporting LIOB-Connect**
- **Models available for LonMark (TP/FT-10 and IP-852) and BACnet Networks (BACnet/IP)**
- **128x64 display with backlight**
- **Local access to information about device status and data points**
- **Manual operation using the jog dial**
- **Configuration through L-INX configuration tool**
- **Removable terminal with a clamping yoke connection to accomodate diameters from 0.2-2.5 mm² (26-12 AWG)**
- **Simple device replacement without software tool**



LIOB-150

SPECIFICATIONS

12

NETWORK

Supply Voltage	24 VAC ± 10 % # 2.7 VA, 24 VDC @ 113 mA	Operating Temperature	32° to 122°F (0° to 50°C)
Channels		Operating Humidity	10-90% RH @ 122°F (50°C) non-condensing
LIOB-1xx	1x LIOB-FT or LonMark TP/FT-10	Dimensions	4.21"W x 3.94"H x 2.95"D (10.7 x 10.0 x 7.5 cm)
LIOB-4xx	2x Ethernet (100Base-T) LIOB-IP or LonMark IP-852	Weight	0.71 lb (0.32 Kg)
LIOB-5xx	2x Ethernet (100Base-T) LIOB-IP or BACnet/IP, OPC XML-DA	Approvals	CE, FCC, LonMark 3.4. RoHs
Communication		Warranty	2 years
LIOB-1xx	Type LIOB-FT, CEA-709 (LON)		
LIOB-4xx	Type LIOB-IP, LonMark IP-852		
LIOB-5xx	Type LIOB-BIP, BACnet/IP, LIOB-IP, OPC XML-DA		

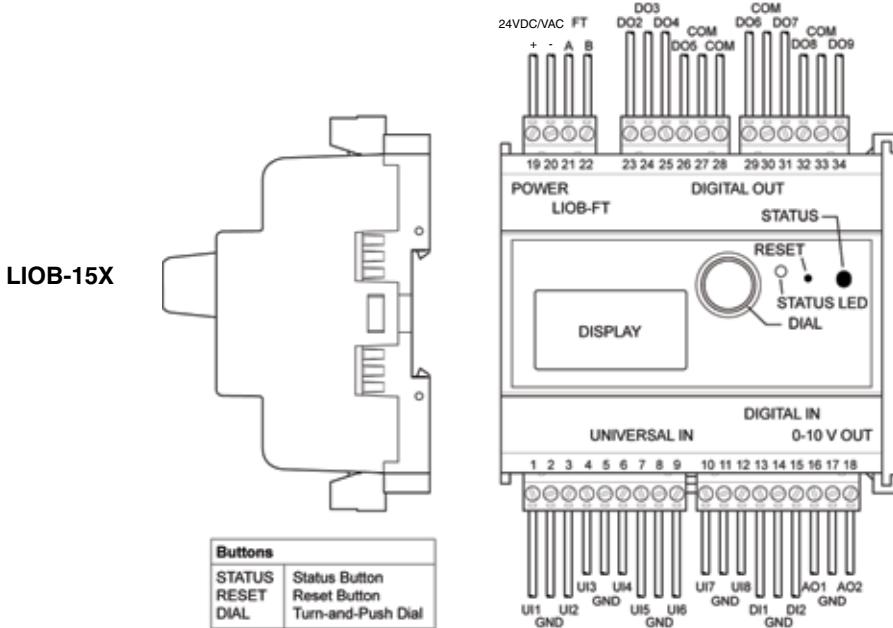
Note: See next page for wiring and terminals layout.

ORDERING INFORMATION

MODEL	DESCRIPTION
LIOB-150	LON TP/FT-10 I/O MODULES 8UI 2DI 2AO 8DO
LIOB-151	LON TP/FT-10 I/O MODULES 8UI 12DI
LIOB-152	LON TP/FT-10 I/O MODULES 6UI 6AO 8DO
LIOB-153	LON TP/FT-10 I/O MODULES 6UI 6AO 5DO
LIOB-450	LON IP-852 I/O MODULES 8UI 2DI 2AO 8DO
LIOB-451	LON IP-852 I/O MODULES 8UI 12DI
LIOB-452	LON IP-852 I/O MODULES 6UI 6AO 8DO
LIOB-453	LON IP-852 I/O MODULES 6UI 6AO 5DO
LIOB-550	BACNET/IP I/O MODULES 8UI 2DI 2AO 8DO
LIOB-551	BACNET/IP I/O MODULES 8UI 12DI
LIOB-552	BACNET/IP I/O MODULES 6UI 6AO 8DO
LIOB-553	BACNET/IP I/O MODULES 6UI 6AO 5DO



WIRING



LIOB-150

Connectors	
UNIVERSAL INPUT	1 Input UI1
	2 Input GND
	3 Input UI2
	4 Input UI3
	5 Input GND
	6 Input UI4
	7 Input UI5
	8 Input GND
	9 Input UI6
	10 Input UI7
	11 Input GND
	12 Input UI8
DIGITAL INPUT	13 Input DI1
	14 Input GND
	15 Input DI2
ANALOG OUTPUT 0-10 V	16 Output AO1
	17 Output GND
	18 Output AO2

Connectors	
POWER SUPPLY	19 Input 24 V PLUS or AC
	20 Input 24 V MINUS or AC
TP/FT-10 CEA-709	21 LIOB-FT Input A
	22 LIOB-FT Input B
DIGITAL OUTPUT	23 Output DO2
RELAY 6 A	24 Output DO3
	25 Output DO4
	26 Output DO5
	27 Output Common for DO2 to DO5
	28 Output Common for DO2 to DO5
DIGITAL INPUT	29 Output DO6
TRIAC 1 A	30 Output Common for DO6 & DO7
	31 Output DO7
	32 Output DO8
	33 Output Common for DO8 & DO9
	34 Output DO9

LIOB-151

Connectors	
UNIVERSAL INPUT	1 Input UI1
	2 Input GND
	3 Input UI2
	4 Input UI3
	5 Input GND
	6 Input UI4
	7 Input UI5
	8 Input GND
	9 Input UI6
DIGITAL INPUT	10 Input GND
	11 Input DI1
	12 Input DI2
ANALOG OUTPUT 0-10 V	13 Output AO1
	14 Output GND
	15 Output AO2

Connectors	
POWER SUPPLY	19 Input 24 V PLUS or AC
	20 Input 24 V MINUS or AC
TP/FT-10 CEA-709	⚠️ Do NOT ground Input 19 (+24V)
DIGITAL INPUT	21 LIOB FT Input A
	22 LIOB FT Input B
DIGITAL INPUT	23 Input DI5
	24 Input GND
	25 Input DI6
	26 Input DI7
	27 Input GND
	28 Input DI8
	29 Input DI9
	30 Input GND
	31 Input DI10
	32 Input DI11
	33 Input GND
	34 Input DI12

LIOB-152

Connectors	
UNIVERSAL INPUT	1 Input UI1
	2 Input GND
	3 Input UI2
	4 Input UI3
	5 Input GND
	6 Input UI4
	7 Input UI5
	8 Input GND
	9 Input UI6
ANALOG OUTPUT 0-10 V	10 Output AO1
	11 Output GND
	12 Output AO2
	13 Output AO3
	14 Output GND
	15 Output AO4
	16 Output AO5
	17 Output GND
	18 Output AO6

Connectors	
POWER SUPPLY	19 Input 24 V PLUS or AC
	20 Input 24 V MINUS or AC
TP/FT-10 CEA-709	⚠️ Do NOT ground Input 19 (+24V)
DIGITAL OUTPUT	21 LIOB FT Input A
RELAY 6 A	22 LIOB FT Input B
DIGITAL OUTPUT	23 Output DO1
RELAY 6 A	24 Output Common for DO1 & DO2
	25 Output DO2
	26 Output DO3
	27 Output Common for DO3 & DO4
	28 Output DO4
	29 Output DO5
	30 Output Common for DO5 & DO6
	31 Output DO6
	32 Output DO7
	33 Output Common for DO7 & DO8
	34 Output DO8

LIOB-153

Connectors	
UNIVERSAL INPUT	1 Input UI1
	2 Input GND
	3 Input UI2
	4 Input UI3
	5 Input GND
	6 Input UI4
	7 Input UI5
	8 Input GND
	9 Input UI6
ANALOG OUTPUT 0-10 V	10 Output AO1
	11 Output GND
	12 Output AO2
	13 Output AO3
	14 Output GND
	15 Output AO4
	16 Output AO5
	17 Output GND
	18 Output AO6

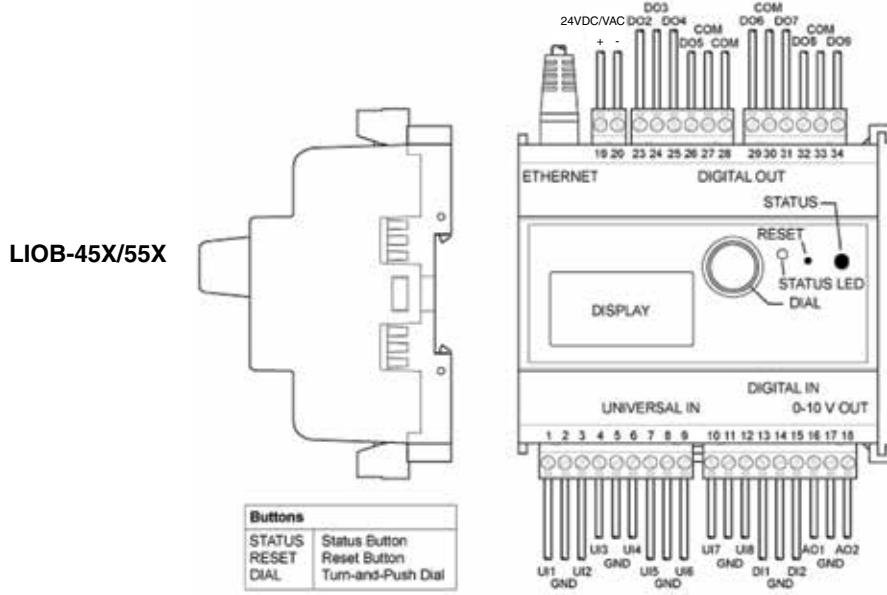
Connectors	
POWER SUPPLY	19 Input 24 V PLUS or AC
	20 Input 24 V MINUS or AC
TP/FT-10 CEA-709	⚠️ Do NOT ground Input 19 (+24V)
DIGITAL OUTPUT	21 LIOB FT Input A
RELAY 6 A	22 LIOB FT Input B
DIGITAL OUTPUT	23 Output DO1
RELAY 6 A	24 Output DO1
	25 Output DO2
	26 Output DO2
	27 Output DO3
	28 Output DO3
	29 Output DO4
	30 Output DO4
DIGITAL OUTPUT	31 Output DO5
RELAY 6 A	32 Output DO5



NETWORK

BACNET AND LON I/O MODULE L-IOB SERIES

WIRING



LIOB-450/550

Connectors	
UNIVERSAL INPUT	1 Input UI1 2 Input GND 3 Input UI2 4 Input UI3 5 Input GND 6 Input UI4 7 Input UI5 8 Input GND 9 Input UI6 10 Input UI7 11 Input GND 12 Input UI8
DIGITAL INPUT	13 Input DI1 14 Input GND 15 Input DI2
ANALOG OUTPUT 0-10 V	16 Output AO1 17 Output GND 18 Output AO2

Connectors	
POWER SUPPLY	19 Input 24 V PLUS or AC 20 Input 24 V MINUS or AC
DIGITAL OUTPUT	23 Output DO2 24 Output DO3
RELAY 6 A	25 Output DO4 26 Output DO5 27 Output Common for DO2 to DO5 28 Output Common for DO2 to DO5
DIGITAL OUTPUT TRIAC 1 A	29 Output DO6 30 Output Common for DO6 & DO7 31 Output DO7 32 Output DO8 33 Output Common for DO8 & DO9 34 Output DO9

LIOB-451/551

Connectors	
UNIVERSAL INPUT	1 Input UI1 2 Input GND 3 Input UI2 4 Input UI3 5 Input GND 6 Input UI4 7 Input UI5 8 Input GND 9 Input UI6 10 Input UI7 11 Input GND 12 Input UI8
DIGITAL INPUT	13 Input DI16 14 Input GND 15 Input DI15 16 Input DI14 17 Input GND 18 Input DI13

Connectors	
POWER SUPPLY	19 Input 24 V PLUS or AC 20 Input 24 V MINUS or AC ⚠ Do NOT ground Input 19 (+24V)
DIGITAL INPUT	23 Input DI5 24 Input GND 25 Input DI6 26 Input DI7 27 Input GND 28 Input DI8 29 Input DI9 30 Input GND 31 Input DI10 32 Input DI11 33 Input GND 34 Input DI12

LIOB-452/552

Connectors	
UNIVERSAL INPUT	1 Input UI1 2 Input GND 3 Input UI2 4 Input UI3 5 Input GND 6 Input UI4 7 Input UI5 8 Input GND 9 Input UI6
ANALOG OUTPUT 0-10 V	10 Output AO1 11 Output GND 12 Output AO2 13 Output AO3 14 Output GND 15 Output AO4 16 Output AO5 17 Output GND 18 Output AO6

Connectors	
POWER SUPPLY	19 Input 24 V PLUS or AC 20 Input 24 V MINUS or AC ⚠ Do NOT ground Input 19 (+24V)
DIGITAL OUTPUT RELAY 6 A	23 Output DO1 24 Output Common for DO1 & DO2 25 Output DO2 26 Output DO3 27 Output Common for DO3 & DO4 28 Output DO4 29 Output DO5 30 Output Common for DO5 & DO6 31 Output DO6 32 Output DO7 33 Output Common for DO7 & DO8 34 Output DO8

LIOB-453/553

Connectors	
UNIVERSAL INPUT	1 Input UI1 2 Input GND 3 Input UI2 4 Input UI3 5 Input GND 6 Input UI4 7 Input UI5 8 Input GND 9 Input UI6
ANALOG OUTPUT 0-10 V	10 Output AO1 11 Output GND 12 Output AO2 13 Output AO3 14 Output GND 15 Output AO4 16 Output AO5 17 Output GND 18 Output AO6

Connectors	
POWER SUPPLY	19 Input 24 V PLUS or AC 20 Input 24 V MINUS or AC ⚠ Do NOT ground Input 19 (+24V)
DIGITAL OUTPUT RELAY 6 A	23 Output DO1 24 Output DO1 25 Output DO2 26 Output DO2 27 Output DO3 28 Output DO3 29 Output DO4 30 Output DO4
DIGITAL OUTPUT RELAY 6 A	31 Output DO5 32 Output DO5