Functions

L-WEB, L-STUDIO

L-ROC

L-INX

L-IOB

Gateways

LPAD-7, L-VIS, L-STAT

L-DALI

Routers, NIC

Interfaces

Accessories

LIOB-IP852 I/O Module

LIOB-450/451/452/453/454 V2
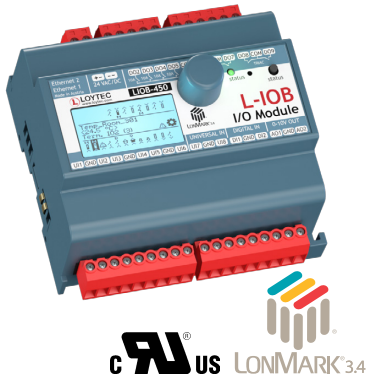
BACnet
✓ CEA-709
KNX

Modbus
M-Bus
OPC

Datasheet #89026924

The LIOB-45x Modules are LonMark certified and communicate over Ethernet/IP-852 in the LonMark System. They provide up to 512 address table entries (ECS mode) which eliminates all binding restrictions.

LonMark IP-852 Channel over Ethernet

The LIOB-45x I/O Modules are equipped with two Ethernet ports including a built-in Ethernet switch. This allows for building a daisy chained line topology of up to 20 devices, which reduces costs for network installation. Dual Ethernet port devices also allow the setup of a redundant Ethernet installation (ring topology), which increases reliability. The redundant Ethernet topology is enabled by the Rapid Spanning Tree Protocol (RSTP), which is supported by most managed switches.

The LIOB-45x Modules are equipped with a web interface to query the device status. The local display can be accessed via VNC.
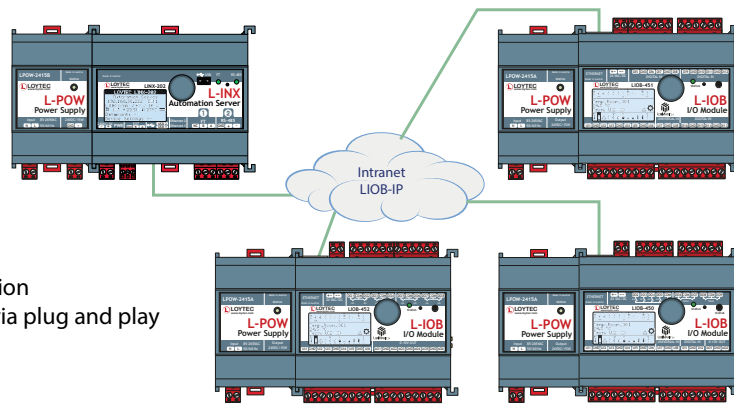
LIOB-IP Mode

The LIOB-45x Modules can be switched to LIOB-IP mode using manual local operation. In LIOB-IP mode, the LIOB-45x Modules extend L-INX Automation Servers, L-ROC Room Controllers, and L-IOB I/O Controllers with physical inputs and outputs via plug and play.

Local Operation and Override

All L-IOB I/O Modules are equipped with an LCD display (128x64) with backlight and jog dial for manual local operation. Device and data point information is displayed in text form and via graphical symbols.
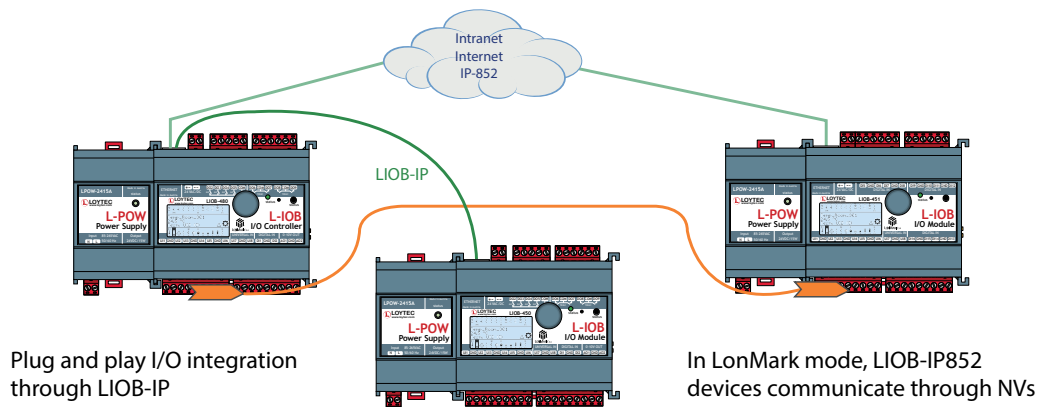

L-INX I/O integration
through LIOB-IP via plug and play

Features

- I/O module with physical inputs and outputs
- Dual Ethernet/IP interface
- SNVT-based interface for integration in the LonMark IP-852 channel
- LonMark certified
- Up to 512 address table entries (ECS mode)
- Manual operation using the jog dial or VNC client
- 128x64 graphic display with backlight
- Local access to information about device status and data points in clear text and symbols
- Connected to the L-INX Automation Server, L-ROC Room Controller, and L-IOB I/O Controller, via LIOB-IP

- Automatic integration into device configurations with L-INX, L-ROC, and L-IOB I/O Controller
- Easy device replacement without any additional software
- Integrated web server for device configuration
- LNS plug-in for device configuration in the LonMark System

LIOB-450/451/452/453/454 V2

Functions

L-WEB, L-STUDIO

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Plug and play I/O integration through LIOB-IP

In LonMark mode, LIOB-IP852 devices communicate through NVs

General Specifications	
Dimensions (mm)	107 x 100 x 75 (L x W x H), DIM018, DIM019, DIM020, DIM021, DIM022
Installation	DIN rail mounting following DIN 43880, top hat rail EN 50022
Operating conditions	0 °C to 50 °C, 10 – 90 % RH, noncondensing, degree of protection: IP40, IP20 (terminals)
Power supply	24 V DC / 24 V AC ±10 % via L-INX, L-ROC, L-POW or LIOB-A2/A4 via LIOB-Connect
Interface	2 x Ethernet (100Base-T): LIOB-IP, LonMark IP-852

Specifications LIOB-IP852 I/O Module (LIOB-45x)					
Type	**LIOB-450**	**LIOB-451**	**LIOB-452**	**LIOB-453**	**LIOB-454**
Power consumption	4.5 W (Relays on)	4.5 W	4.5 W (Relays on)	4.5 W (Relays on)	4.5 W (Relays on)
Universal Input (UI)	8	8	6	6	7
Digital Input (DI)	2	12	-	-	-
Analog Output (AO)	2	-	6	6	4
Digital Output (DO)	8 (4 x Relay 6 A, 4 x Triac 0.5 A)	-	8 (8 x Relay 6 A)	5 (4 x Relay 16 A, 1 x Relay 6 A)	7 (5 x Relay 6 A, 2 x Triac 0.5 A)
Digital Output specification	Please refer to the "General Input and Output Specification of LOYTEC devices" at the end of the L-IOB section for more details.				
Differential Pressure Sensor	-	-	-	-	±500 Pa

Resource limits	
Network variables (NVs)	Fixed static NV interface
Address table entries	512 (non-ECS mode: 15)

Order number	Product description
LIOB-450	LIOB-IP852 I/O Module: 8 UI, 2 DI, 2 AO, 8 DO (4 x Relay 6 A, 4 x Triac 0.5 A)
LIOB-451	LIOB-IP852 I/O Module: 8 UI, 12 DI
LIOB-452	LIOB-IP852 I/O Module: 6 UI, 6 AO, 8 DO (8 x Relay 6 A)
LIOB-453	LIOB-IP852 I/O Module: 6 UI, 6 AO, 5 DO (4 x Relay 16 A, 1 x Relay 6 A)
LIOB-454	LIOB-IP852 I/O Module: 7 UI, 4 AO, 7 DO (5 x Relay 6 A, 2 x Triac 0.5 A), 1 Pressure Sensor
LPOW-2415A	LIOB-Connect power supply unit, 24 V DC, 15 W
LPOW-2415B	Power supply unit with power connector 24 V DC, 15 W
L-TEMP2	External temperature sensor (NTC10K) for use with L-IOB Universal Inputs