ENVIROTRAK® V-L I/O PORT EXPANDERS
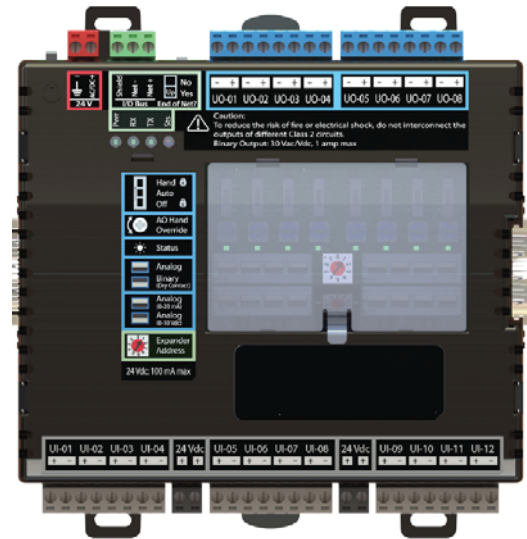
GENERAL DESCRIPTION

The ENV-V-LXP expanders are capable of controlling Laboratory equipment with high I/O point counts (up to 180) through expandable I/O boards. The I/O expanders deliver input and output capacity to the powerful ENV-V-LCPU controller. Up to nine I/O expanders can be added to an ENV-V-LCPU controller. I/O expanders are designed for flexible panel configurations. They are DIN rail or screw-tab mountable and can be mixed and matched to meet the I/O requirements of the equipment being controlled. The expanders can be mounted directly to the ENV-V-LCPU controller or remotely mounted up to 500 feet away.

ENV-V-LXP812u

Key Features and Benefits

Hardware Features

♦ Expands the ENV-V-LCPU processor to support up to 180 I/O points

♦ Backplane mounting via screw tab or DIN rail mounting

♦ Removable screw terminals for I/O connections

♦ Hand-Auto-Off switches on all output channels

♦ Software selectable input configuration - no jumper

♦ Color-coated I/O and easy to read labeling minimizes wiring errors

♦ LEDs for each output for easy identification of output status whether configured as an AO or DO

♦ LEDs for status indicators for Power, Run, Error, Xnet TX and Xnet Rx

Part#	ENV-V-LXP48u	ENV-V-LXP812u	ENV-V-LXP012u
Universal Outputs	4	8	0
Universal Inputs	8	12	12

Support for up to 9 I/O expanders (180 points)

Title:
ENVIROTRAK® V-L I/O PORT EXPANDERS

Model Number:
ENV-V-LXP

Drawing Number:	Date:	Rev.
ENV-V-LXP DS	7/28/21	A

Specifications:

Power
24 Vac ±10%, 50-60 Hz, 50 VA, 26 Vdc ±10%, 15 W, Single Class 2 source only, 100 VA or less

Operating Range
-40º to 158º F (-40º to 70º C); 10 to 95% relative humidity, non-condensing

Communication Ports
IO Bus port: Provides up to 2000 ft (610 m) communication for wired remote ENV-V-LXP expanders that are powered by external power supplies
IO Bus edge connector: 6-pin connector that provides communication and power to a directly connected ENV-V-LXP expander

Inputs
Inputs software configurable for 0-5 VDC, 0-10 VDC, 0-20 mA, thermistor (5k, 10k Type II), 1k RTD (Platinum, Nickel, or Balco), and Dry Contact. Inputs are 16 bit A/D and support up to 40 pulses per second (12.5 msec min. pulse).

ENV-V-LXP48u: 8 inputs
ENV-V-LXP812u: 12 inputs
ENV-V-LXP012u: 12 inputs

Outputs
Outputs can be set as analog or binary outputs. Analog outputs can be used for 0-10 VDC, 0-20 mA (12 bit D/A). Binary outputs have a built-in relay and can be used to switch external devices or relays up to 1A, 30Vac/Vdc HAO (hand/auto/off) switches are on each output, including potentiometers for manual adjustment of analog outputs.

ENV-V-LXP48u: 4 outputs
ENV-V-LXP812u: 8 outputs

Status Indicators
LEDs indicate status of communications, system state (running or errors), outputs, and power

Protection
Two fast acting, 5mm x 20mm glass fuses:
• A 2A fuse for the ENV-V-LCPU's power
• A 4A fuse for the I/O bus edge connector
The power and network ports comply with the EMC requirements EN5049-5-2

Compliance/Listing
United States of America: FCC compliant to Title CFR47, Chapter 1, Subchapter A, Part 15, Subpart B, Class A; UL Listed to UL 916, PAZX, Energy Management Equipment
Canada: Industry Canada Compliant, ICES-003, Class A cUL Listed UL 916, PAZX&, Energy Management Equipment
Europe: Mark EN50491-5-2:2009; Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment EN50491-3:2009, Part 3: Electrical safety requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) Low Voltage Directive: 2014/35/EU RoHS Compliant: 2011/65/EU
Australia and New Zealand: C-Tick Mark, AS/NZS 61000-6-3

Physical
DIN rail or Screw mounting. Minimum panel depth: 2.75 in. (7 cm)
Dimensions Overall: 7.1 in. (18.03 cm) x 6.95 in. (17.65 cm),
Depth: 2.09 in. (5.31 cm), **Weight:** 1.0 lb. (0.45 kg)

Screw Mounting: 6.45 in. (16.38.cm), 4.1 in. (10.4 cm)

I/O Expander Support
Support up to 9 expanders, ENV-V-LXP812u, ENV-V-LXP48u, ENV-V-LXP012u

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