LANTRONIX®

ION001-A
Single-Slot ION Chassis
Install Guide

Intellectual Property

Warranty

For details on the Lantronix warranty policy, go to http://www.lantronix.com/support/warranty.

Contacts

Lantronix Corporate Headquarters

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Technical Support
Online: https://www.lantronix.com/technical-support/

Sales Offices
For a current list of our domestic and international sales offices, go www.lantronix.com/about/contact.

Disclaimer

Revision History

Date	Rev	Notes
6/9/10	A	Initial release.
11/29/16	B	Update power supply PN, tie down, and contact information.
9/27/18	C	Update specifications.
2/26/20	D	Update MTBF.
3/11/22	E	Initial Lantronix rebrand.
10/4/23	F	Update contact information and DoC. Minor technical and editorial changes.

Contents

Product Description

The Lantronix ION001-A Single Slot chassis is designed for installing a single Lantronix ION slide-in card. The ION001-A is a 1-slot ION chassis that is design for network edge deployments, allowing a single ION card to be deployed as a stand-alone unit. This chassis provides a method of mounting one single-wide ION slide-in media converter module and includes an external AC power supply.

Ordering Information

Part Number	Description
ION001-A	1-Slot Chassis for the ION Platform, AC Powered. The Single-Slot ION chassis is intended for installing any 6W or less ION slide-in card.

Optional Accessories (sold separately)

Part Number	Description
SPS-2460-SA	External Power Supply 24-60 VDC and 24-42 VAC RMS. For use with all Lantronix stand-alone media converters and some chassis.
IONFP	ION Blank face plate
WMBP	Wall Mount Bracket: 5" [127 mm]
WMBD	DIN Rail Mount Bracket: 5" [127 mm]
SFP Modules	SFP and SFP+ modules supported on some slide-in cards; see the Lantronix SFP webpage.

Features

- Desktop installation
- Supports WMBP wall mount brackets
- Unmanaged Chassis
- Supports any ION slide-in card that requires 6 Watts or less of power (C4120-1048 is not supported)
- Fan-less design
- External AC power
- Supports IP addressable managed ION slide-in cards
- NDAA Compliant and TAA Compliant

Package Contents

The ION001-A package includes:

- ☐ One ION001-A Single Slot chassis
- ☐ One Power Supply
- ☐ One Power Cord
- ☐ Four rubber feet
- ☐ One user manual

Document Overview

The purpose of this manual is to provide the information needed to install the ION002-A1 to the point of operation. Note that there are separate manuals for the ION slide-in-cards. Note: Some Documentation may have Transition Networks named or pictured. Transition Networks was acquired by Lantronix in August 2021.

Related Manuals and Online Help

A printed documentation card is shipped with each ION002-AD device. A substantial set of technical documents, white papers, case studies, etc. are available on the Lantronix web site at https://www.lantronix.com/technical-support/. Note that this manual provides links to third party web sites for which Lantronix is not responsible. Other ION system and related device manuals are listed below.

1. Product Support Postcard, 33504
2. ION Management Module (IONMM) Install Guide, 33420 and User Guide, 33457
3. ION System NID User Guides (33432, 33457, 33472, 33493, 33494, 33495, 33496)
4. SPS-2460-xx User Guide, 33455
5. Release Notes (firmware version specific)

Note: Information in this document is subject to change without notice. All information was deemed accurate and complete at the time of publication. For the most current ION002-AD information, see the ION001-A product page.

Power Supply Included

To order the corresponding country specific power supply, add the extension from the list below to the end of the SKU; Ex: ION001-A-NA: -NA = North America, -LA = Latin America, -EU = Europe, -UK = United Kingdom, -SA = South Africa, -JP = Japan, -OZ = Australia; -BR = Brazil.

Installation

Installing a Slide-In Card

Caution: Wear a grounding device and observe electrostatic discharge precautions when installing the slide-in card, into the single-slot chassis. Failure to observe this caution could result in damage to the slide-in card. **Note**: The maximum power delivery capacity for the ION001-A Single Slot chassis is 6 Watts.

To install a slide-in-card into the single-slot chassis:

1. Refer to the user guide that came with the slide-in card to ensure that any DIP switches or jumpers on the module's circuit board are set correctly for the site installation.

2. Carefully align the slide-in card to the chassis installation guides and slide it fully into the installation slot, as shown below.

3. Ensure that the slide-in card is firmly seated inside the chassis.

4. Push in and rotate the attached panel fastener screw to secure the slide-in card to the single-chassis frame.
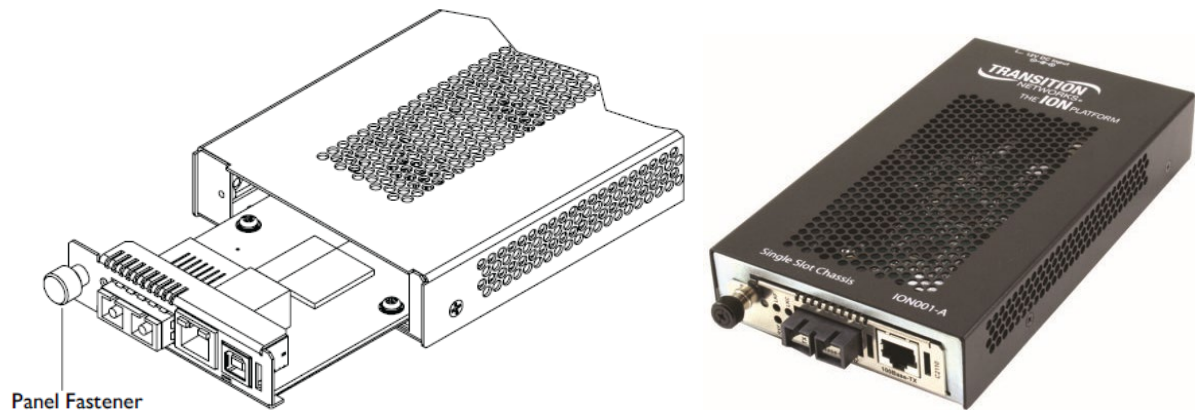
Powering the Chassis

To supply power to the single-slot chassis:

1. Connect the barrel connector on the power adapter to the ION001-A back panel Power port.

2. Connect the power adapter plug to AC power.

3. Use the cable tie down to secure the power supply cord and the barrel connector.

4. Verify that the single-slot chassis is powered by observing the lit LED(s) on the installed slide-in card. See the related slide-in card manual for LED and other details.
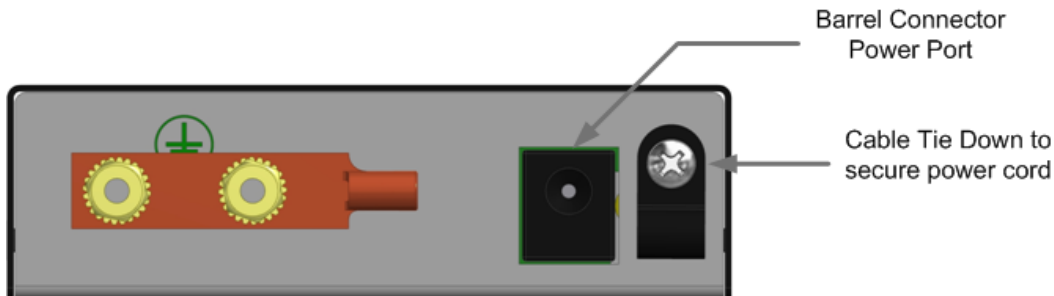
For an optional DC power source see the SPS-2460-SA *External Power Supply 24-60 VDC and 24-42 VAC rms* go to https://www.lantronix.com/products/sps-2460-sa/.

Grounding the Chassis

The single-slot chassis comes equipped with grounding lugs located on its back panel. They require a grounding conductor wire terminated with a two-hole, compression-type, grounding connector *(not provided)*. The grounding wire *(must be a copper conductor)* is not included with the chassis and must be provided by the customer/installer. The electrical-conducting path from the single-slot chassis must:

*   Flow via the grounding lugs to the common bonding network (CBN) for telecom installations, or to an alternative approved grounding system *(if required)* for non-telecom installations.
*   Be of sufficiently low impedance to conduct fault currents likely to be imposed on the converter.
*   Enable proper operation of any over-current protection devices.

Ground Wire Size

The wire size of the Protective Earth *(ground)* conductor should be greater than or equal to the wire size of the power source conductors. The power-source conductor wire size is installation dependent and sized to accommodate acceptable IR losses between the power source and the device power terminal. The device terminal block accommodates #6 wire lugs. A #6 wire lug typically terminates #16 - #20 wire; with #18 most common.

Connecting the Ground Wire

The conductor must be fastened to the grounding lugs with the enclosed antirotation star-washers and lug-nut fasteners. The torque requirement for the connector lug-nut fastener is specified by the connector's manufacturer.

Grounding Method

The conductor must be fastened to the grounding lugs with the enclosed antirotation star-washers and lug-nut fasteners. The torque requirement for the connector lug-nut fasteners is specified by the connector's manufacturer. To properly ground the single-slot chassis:

1. Obtain one (1) two-hole, compression-type, grounding connector.

2. Attach the grounding conductor to the chassis by placing the two-hole connector onto the grounding lugs and fasten with the enclosed lock washers/lug-nuts at the proper torque (per the manufacturer's specification).

3. Attach the opposite end of the grounding conductor to the common-bonding network (CBN) for telecom, or to earth ground (if required) for non-telecom installations.
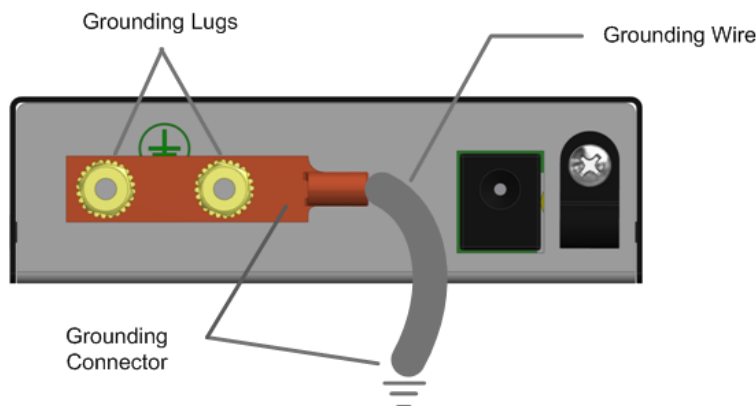
Specifications

For Lantronix Model ION001-A Single Slot chassis or equivalent. **Note:** The ION001-A Single Slot chassis is Class A compliant.

Status LEDs	None, Power indicator is on the slide-in card
Dimensions	Width: 4" [102 mm] W x 7.1" [180 mm] D x 1.2" [30.48 mm] (H)
Power Supply	External AC/DC power supply included, 120-240VAC input, 12VDC Output *(See selected Slide-In Card manual for power consumption data)*
Operating Temp.	0°C to 50°C
Storage Temp.	-40°C to +85°C
Humidity	5% to 95% (non-condensing)
Altitude	0 – 10,000 ft.
Weight	2 lbs. [0.9 kg]
Certifications	UL listed, EN55022, EN55024, CE Mark, FCC Class A, CISPR Class A
MTBF	With Power Supply: • 191,800 hours (MIL-HDBK-217F) • 527,500 hours (Bellcore7 V5.0) Without Power Supply: • 5,600,000 hours (MIL-HDBK-217F) • 15,500,000 hours (Bellcore7 V5.0)
Warranty	Lifetime

CAUTION: Copper based media ports, e.g., Twisted Pair (TP) Ethernet, USB, RS232, RS422, RS485, DS1, DS3, Video Coax, etc., are intended to be connected to intrabuilding *(inside plant)* link segments that are not subject to lightening transients or power faults. Copper based media ports, e.g., Twisted Pair (TP) Ethernet, USB, RS232, RS422, RS485, DS1, DS3, Video Coax, etc., are NOT to be connected to interbuilding *(outside plant)* link segments that are subject to lightening transients or power faults. Failure to observe this caution could result in damage to equipment.

Product and Packaging Labels

The chassis and power supply packaging and product labels provide information helpful when contacting Technical Support.
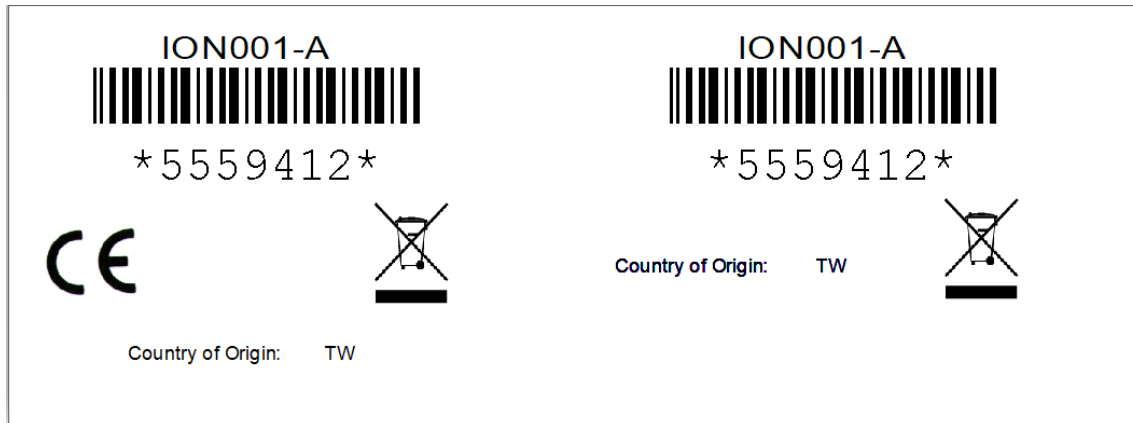
Troubleshooting

1. Is a media converter installed in the single-slot chassis?

NO

  • Install a slide-in card, media converter into the single-slot chassis. See the Installation section.

  • Proceed to step 2.

YES

  • Proceed to step 2.

2. Is the Power LED on the media converter lit?

NO

  • Is the power adapter the proper type and cycle frequency for the AC outlet? See the Specifications section.

  • Is the power adapter properly installed in the media converter and in the grounded AC outlet?

  • Contact Technical Support.

YES

  • Proceed to step 3.

3. Check the power requirement for the installed slide-in card:

  • Power requirement must be 6 W or less.

  • Contact Technical Support.

Compliance Information

Declaration of Conformity

Manufacture's Name: Lantronics, Inc.
Manufacture's Address: 48 Discovery, Suite 250, Irvine, California 92618 USA

Declares that the products: ION001-A Series Single-Slot Chassis ION-001A
Conforms to the following Product Regulations:
EMC Directive 2004/108/EC; EN 55022:2006+A1:2007 Class A;
EN55024:1998+A12001+A2:2003; EN61000-3-2; EN6100-3-3; CFR Title 47 Part 15 Subpart B Class A;
Low Voltage Directive: 2006/95/EC
With the technical construction on file at the above address, this product carries the CE Mark

I, the undersigned, hereby declare that the equipment specified above conforms to the above
Directive(s) and Standard(s).

Place: Irvine, California
Date: June 19, 2023
Signature: *Eric Bass*
Full Name: Eric Bass
Position: Vice President of Engineering

FCC Regulations

This equipment has been tested and found to comply with the limits for a Class A digital device,
pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against
harmful interference when the equipment is operated in a commercial environment. This equipment
generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance
with the instruction manual, may cause harmful interference to radio communications. Operation of this
equipment in a residential area is likely to cause harmful interference. In which case, the user will be
required to correct the interference at the user's own expense.

Canadian Regulations

This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

> **CAUTION**: RJ connectors are NOT INTENDED FOR CONNECTION TO THE PUBLIC TELEPHONE NETWORK. Failure to observe this caution could result in damage to the public telephone network.

Der Anschluss dieses Gerätes an ein öffentlickes Telekommunikationsnetz in den EGMitgliedstaaten verstösst gegen die jewelingen einzelstaatlichen Gesetze zur Anwendung der Richtlinie 91/263/EWG zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über Telekommunikationsendeinrichtungen einschliesslich der gegenseitigen Anerkennung ihrer Konformität.

In accordance with European Union Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003, Lantronix will accept post usage returns of this product for proper disposal. The contact information for this activity can be found in the 'Contact Us' portion of this document.

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