

# ION001-A

## Single-Slot ION Chassis



### Install Guide

- 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

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### Introduction

The Transition Networks ION001-A Single Slot chassis is designed for installing a single Transition Networks 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 TN 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 TN <a href="#">SFP webpage</a> .

## Kit Contents

The ION001-A kit includes:

- One ION001-A Single Slot chassis
- One Power Supply
- One Power Cord
- Four rubber feet
- One documentation postcard

## Power Supply Included

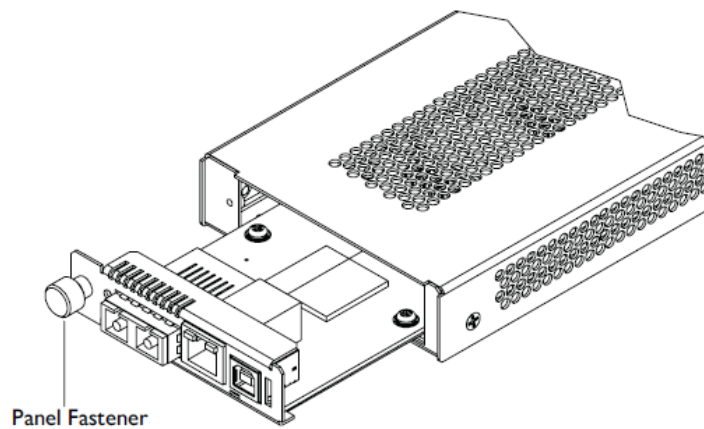
To order the corresponding country specific power supply, add the extension from the list below to the end of the SKU; Ex: ION001-A-NA: -NA = North America, -LA = Latin America, -EU = Europe, -UK = United Kingdom, -SA = South Africa, -JP = Japan, -OZ = Australia; -BR = Brazil.

## 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:

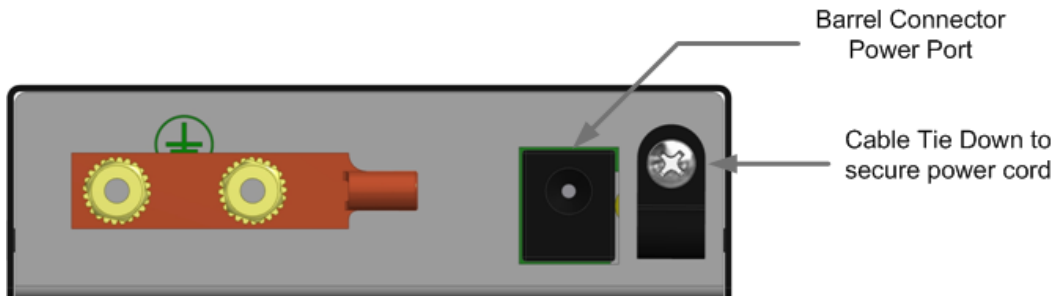
1. Refer to the user guide that came with the slide-in card to ensure that any DIP switches or jumpers on the module's circuit board are set correctly for the site installation.
2. Carefully align the slide-in card to the chassis installation guides and slide it fully into the installation slot, as shown 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.transition.com> and click Search then type **SPS-2460-SA** in the Search box.

## 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.

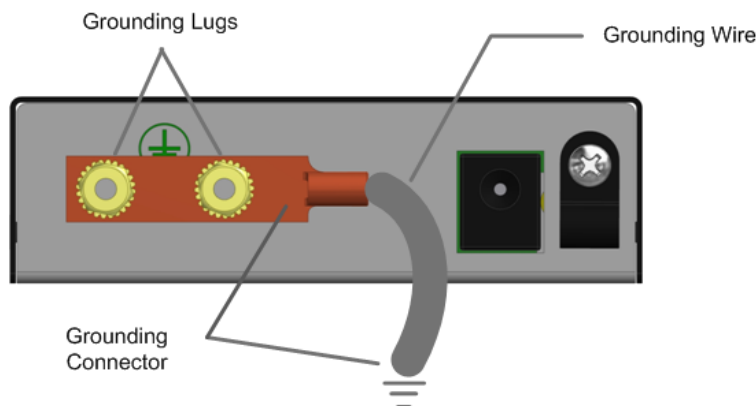
## Connecting the Ground Wire

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 Transition Networks 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]
Compliance	UL listed, EN55022, EN55024, CE Mark, FCC Class A, CISPR Class A
MTBF	<b>With Power Supply:</b> <ul style="list-style-type: none"> <li>• 191,800 hours (MIL-HDBK-217F)</li> <li>• 527,500 hours (Bellcore7 V5.0)</li> </ul> <b>Without Power Supply:</b> <ul style="list-style-type: none"> <li>• 5,600,000 hours (MIL-HDBK-217F)</li> <li>• 15,500,000 hours (Bellcore7 V5.0)</li> </ul>
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.

## 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. See [Contact Us](#) below.

YES

- Proceed to step 3.

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

- Power requirement must be 6 W or less.
- For additional assistance, see [Contact Us](#) below.

## Related Manuals and Help

A printed documentation card is shipped with each ION001-A chassis. For Transition Networks Manuals, Brochures, Data Sheets, White papers, etc. go to <https://www.transition.com/support/library/> (no registration required).

For Transition Networks Drivers, Firmware, Release Notes, Manuals (Install Guides, Quick Start Guides, User Guides) go to the Product Support webpage at <https://www.transition.com/support/product-support/> (login required).

Other ION system and related device manuals include.

1. Product Documentation 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, 33574)
4. SPS-2460-SA External Power Supply User's Guide, 33455
5. Focal Point™ 3.0 Management Application User Guide, 33293
6. Release Notes (firmware version specific)

**Note:** Information in this document is subject to change without notice.

## Contact Us

**Technical Support:** Technical support is available 24-hours a day

US and Canada: 1-800-260-1312

International: 00-1-952-941-7600

### Main Office

tel: +1.952.941.7600 | toll free: 1.800.526.9267 | fax: 952.941.2322

[sales@transition.com](mailto:sales@transition.com) | [techsupport@transition.com](mailto:techsupport@transition.com) | [customerservice@transition.com](mailto:customerservice@transition.com)

### Address

Transition Networks



10900 Red Circle Drive

Minnetonka, MN 55343, U.S.A.

**Web:** <https://www.transition.com>

## Compliance Information

### Declaration of Conformity

		<b>Declaration of Conformity</b>	
Name of Mfg:	<b>Transition Networks</b> 10900 Red Circle Drive, Minnetonka MN 55343 U.S.A.		
Model:	ION001-A Series Single-Slot Chassis		
Part Number:	ION001-A		
Purpose:	To declare that the ION001-A to which this declaration refers is in conformity with the following directive(s) standard(s): EMC Directive 2004/108/EC; EN 55022:2006+A1:2007 Class A; EN55024:1998+A1:2001+A2:2003; EN61000-3-2; EN61000-3-3; CFR Title 47 Part 15 Subpart B Class A; Low Voltage Directive: 2006/95/EC		
I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).			
 <hr/> Stephen Anderson, Vice-President of Engineering		June 2010 <hr/> Date	

## 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 öffentliches Telekommunikationsnetz in den EGMitgliedstaaten verstösst gegen die jeweiligen 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, Transition Networks 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.

## Record of Revisions

Rev	Date	Notes
A	6/9/10	Initial release.
B	11/29/16	Update power supply PN, tie down, and contact information.
C	9/27/18	Update specifications.
<b>D</b>	<b>2/26/20</b>	<b>Update MTBF.</b>

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