

iConverter[®]

1-Module Industrial Power Chassis



User Manual

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Safety Warnings and Cautions



ATTENTION: Observe precautions for handling electrostatic discharge sensitive devices.



WARNING: Potential damage to equipment and personal injury.



WARNING: Risk of electrical shock.

Customer Support Information

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040-08270-001D 6/24

Product Overview

The iConverter 1-Module Industrial Power Chassis featuring a single or dual DC terminal power connection supporting 12 to 36VDC or 20 to 60VDC providing flexible installation options.



1-Module Industrial Power Chassis

Model Number	Description
8270-1-1	1-Module Chassis +/-12 to +/-36 VDC, Single Power Input
8270-1-2	1-Module Chassis +/-12 to +/-36 VDC, Dual Power Input
8270-2-1	1-Module Chassis +/-20 to +/-60 VDC, Single Power Input
8270-2-2	1-Module Chassis +/-20 to +/-60 VDC, Dual Power Input

Use the [Power Calculator](#) to verify the iConverter chassis power supplies will meet the requirements of the installation.

Dying Gasp Trap

The 1-Module Industrial Power Chassis feature Dying Gasp Trap which reports loss of power input or chassis power supply failure. This feature requires an iConverter management module be installed in the chassis (ie 10/100M2, GXTM2, GM3). When power failure occurs, the chassis reserves enough power to keep the installed module running in order to send a final SNMP alert to the management software.

Wall Mounting

The 1-Module chassis can be wall mounted by installing the optional Wall Mount Plate (8260-3). Refer to the Wall Mount Plate user manual (040-08260-301x) for the proper installation guidelines.

The wall mounting height of the module should be less than or equal to 2 meters (6.6 feet) from the floor. Use the four mounting holes on the module to secure the module to the wall. The module can accommodate #6 screws (not included).

Installation of the module should be such that the air flow in the front, back, side and top vents of the switch are not compromised or restricted.

The accessory cables should have their own strain relief and do not pull down on the module.

Rack Mounting

The 1-Module chassis can be rack mounted by installing the optional Wall Mount Plate (8260-3). Two 1-Module chassis can be rack mounted using the optional Rack Mount Shelf (8260-0). Refer to the Rack Mount Shelf user manual (040-08260-001x) for the proper installation guidelines.

Follow the same Wall Mounting guidelines when rack mounting the module.

DIN-Rail Mounting

The module can be DIN-Rail mounted using the attached DIN-Rail mounting bracket.

Installing Modules

Carefully slide the modules into an open slot in the chassis. Align the modules with the installation guides and ensure that the modules are firmly seated against the backplane. Secure the modules by fastening the front panel thumbscrew (push in and turn clockwise to tighten) to the chassis front.

Applying DC Power

Power source should be available within 5 ft. of the chassis. The over current protection for connection with centralized DC shall be provided in the building installation, and shall be a UL listed circuit breaker rated 20 Amps, and installed per the National Electrical Code, ANSI/NFPA-70.

The 1-Module Industrial Chassis supports two powering options. The 8270-1 requires 12 to 36VDC (1.5A @ 12VDC max rated power) and the 8270-2 requires 20 to 60VDC (0.8A @ 20VDC max rated power). See specification table for specific model requirements. Appropriate overloading protection should be provided on the DC power source outlets utilized.

WARNING: Only a DC power source that complies with safety extra low voltage (SELV) requirements can be connected to the DC-input power supply.

WARNING REGARDING EARTHING GROUND:

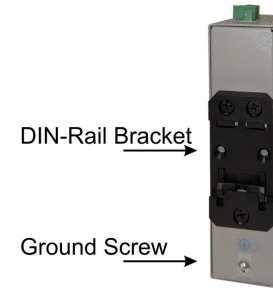
- This equipment shall be connected to the DC supply system earthing electrode conductor or to a bonding jumper from an earthing terminal bar or bus to which the DC supply system earthing electrode is connected.
- This equipment shall be located in the same immediate area (such as adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same DC supply circuit and the earthing conductor, and also the point of earthing of the DC system. The DC system shall not be earthed elsewhere.
- The DC supply source is to be located within the same premises as this equipment.
- There shall be no switching or disconnecting devices in the earthed circuit conductor between the DC source and the earthing electrode conductor.

Locate the DC circuit breaker of the external power source, and switch the circuit breaker to the OFF position.

Prepare a power cable using a three conductor insulated wire (not supplied) with a 14 AWG gauge minimum. Cut the power cable to the length required.

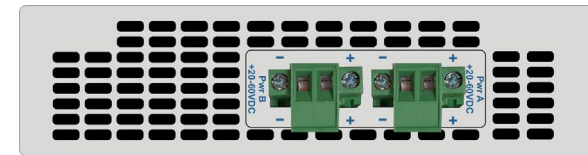
Strip approximately 3/8 of an inch of insulation from the power cable wires.

Connect the ground wire to the grounding screws on the back of the module.



Ground Screw Location

Connect the power cables to the module by fastening the stripped ends to the DC power connector.



Top View with DC Power Connector

WARNING: Note the wire colors used in making the positive, negative and ground connections. Use the same color assignment for the connection at the circuit breaker.

Connect the power wires to the circuit breaker and switch the circuit breaker ON. The chassis power LEDs (Pwr A and Pwr B) will indicate the presence of power. If any module is installed, the module Power LED will be illuminated.

Installation of the equipment should be such that the air flow in the front, back, side and top vents of the chassis are not compromised or restricted.

WARNING!!!

NEVER ATTEMPT TO OPEN THE CHASSIS OR SERVICE THE POWER SUPPLY. OPENING THE CHASSIS MAY CAUSE SERIOUS INJURY OR DEATH. THERE ARE NO USER REPLACEABLE OR SERVICEABLE PARTS IN THIS UNIT.

Supported Modules

The following table indicates the supported modules for the 1-Module Industrial chassis over the specific operating temperature ranges.

Speed	Module Name / Base Model #	Commercial Temp 0 to 50°C	Wide Temp -40 to 60°C	Extended Temp -40 to 75°C
100Mbps	10/100 / 838x-x	x	x	x
1000Mbps	4GT / 8482-4	x	x	x
	2GXT / 8484-4	x	x	x
	GX/T2 / 85xxN-x	x	x	x
1000Mbps	GX/X / 854x-xx	x	x	x
100 and 1000Mbps	GX/F / 856x-xx	x	x	x
9.8Gbps to 11.32Gbps	XG / 8599P-xx	x		
	XG+ / 8599R-xx	x	x	x
1Mbps to 8.5Gbps	xFF / 8699-x	x	x	x
Serial	RS232 / 876x-x	x	x	x
	RS422/485 / 878x-x	x	x	x
Managed 100Mbps	10/100M2 / 890xN-x	x	x	x
	2FXM2 / 8959N-0	x	x	x
Managed 1000Mbps	GX/TM2 / 892xN-x	x		
	GM3 / 892xP-x	x	x	x

LED Indicators

Verify the module is operational by viewing the Power LED indicators.

Power LED Indicators		
Legend	Indicator	Description
Pwr A	OFF	Unit not powered
	Green - ON	Unit powered by power supply input A
Pwr B	OFF	Unit not powered
	Green - ON	Unit powered by power supply input B

Specifications

Model Number	8270-1	8270-2
Description	1-Module DC 12 to 36 VDC	1-Module DC 20 to 60 VDC
Regulatory Compliances	Safety: UL, cUL, CE, NEBS Level 3, UKCA EMI: FCC Class A ACT: TAA, BAA, NDAA	
Environmental	RoHS, WEEE, REACH	
Input Power Requirements (typical)	+/-12 to +/-36 VDC 1.5A Max @ 12VDC	+/-20 to +/-60 VDC 0.8A Max @ 20VDC
Output Power	10.0 watts 3.0A @ 3.3VDC	
Power Connector	2 Position Terminal	
Dimensions W x D x H	1.5" x 5.5" x 5.5" (38.1 mm x 139.7 mm x 139.7 mm)	
Weight	1.5 lbs. (0.68 kg)	
Temperature	Commercial: 0 to 50°C Wide: -40 to 60°C Extended: -40 to 75°C Storage: -40 to 80°C	
Humidity	5 to 95% (non-condensing)	
Altitude	- 100m to 4,000m	
MTBF (hrs)	517,000	
Warranty	Lifetime warranty with 24/7/365 free Technical Support	