ME-10-T Series
Quick Installation Guide

1-slot chassis

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Technical Support Contact Information
www.moxa.com/support

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Introduction

Overview

Moxa's NRack System includes the ME-10-T, which is a 1-slot chassis for selected Moxa media converter slide-in modules. The ME-10-T allows network administrators to connect various copper and fiber-optic network media over different protocols. The ME-10-T provides installation space for up to 1-slot media converter slide-in modules at the front of the unit.

Package Checklist

The Moxa ME-10-T products are shipped with the following items:

Standard Accessories

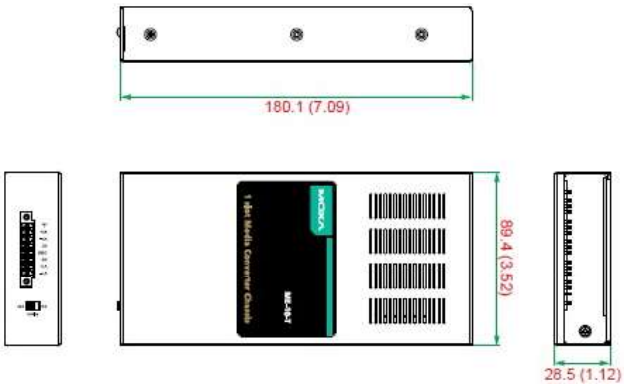
- ME-10-T x 1
- Quick installation guide (printed)
- Warranty card

NOTE If any of these items are missing or damaged, please contact your customer service representative for assistance.

Features

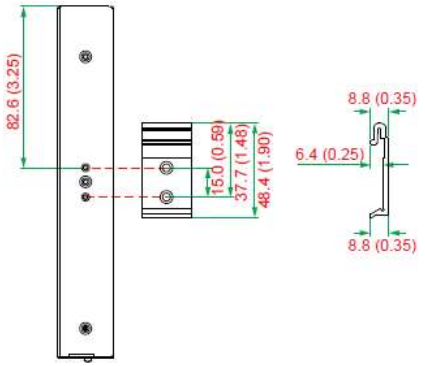
- Redundant 24 VDC (12 to 48 VDC) power inputs, DIN-rail or panel mountable
- Relay Output alarm for when a port breaks or the power fails
- Operating temperature range from -40 to 75°C (T models)

Mounting Dimensions



DIN-Rail Mounting

The aluminum DIN-rail attachment plate should be fixed to the back panel of the ME-10-T when you take it out of the box. If you need to reattach the DIN-rail attachment plate to the ME-10-T, make sure the stiff metal spring is situated at the top.



Wiring Requirements

ATTENTION

Safety First!

- Be sure to disconnect the power cord before installing and/or wiring your Moxa ME-10-T.
- Calculate the maximum possible current allowed in each power wire and common wire. Observe all electrical codes dictating the maximum current allowed for each wire size.
- If the current goes above the allowed maximum, the wiring could overheat, causing serious damage to your equipment.

- Use separate paths to route wiring for power and the devices. If power wiring and device wiring paths must cross, make sure the wires are perpendicular at the intersection point.
- Do not run signal or communications wiring and power wiring in the same wire conduit. To avoid interference, wires with different signal characteristics should be routed separately.
- You can use the type of signal transmitted through a wire to determine which wires should be kept separate. The rule of thumb is that wiring that shares similar electrical characteristics can be bundled together.
- Keep input wiring and output wiring separated. We strongly advise that you label the wiring to all the devices in the system.

Grounding the ME-10-T

Grounding and wire routing help limit the effects of noise caused by electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface before connecting the devices.

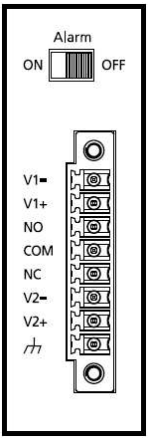
ATTENTION

This product should be mounted to a well-grounded mounting surface, such as a metal panel.

Wiring the Alarm Contact

The alarm contact is made up of the three middle contacts of the terminal block on the ME-10-T's top panel. Refer to the next section for detailed instructions on how to connect the wires to the terminal block connector, and how to attach the terminal block connector to the terminal block receptor.

In this section, we explain the meaning of the three contacts used to connect the alarm contact.



RELAY: The three middle contacts of the 8-contact terminal block connector are used to detect both power faults and port faults. The two wires attached to the fault contacts form an open circuit when:

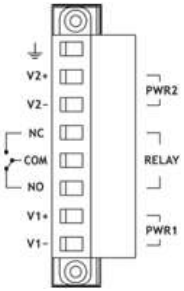
1. The ME-10-T has lost power from one of the DC power inputs.

   OR

2. One of the ports for which the corresponding PORT ALARM Dip Switch is set to ON is not properly connected.

If neither of these two conditions occurs, the fault circuit will close.

Wiring the Redundant Power Inputs



STEP 1: Insert the negative/positive DC wires into the V-/V+ terminals.

STEP 2: To keep the DC wires from pulling loose, use a small flat-blade screwdriver to tighten the wire-clamp screws on the front of the terminal block connector.

STEP 3: Insert the plastic terminal block connector prongs into the terminal block receptor.

ATTENTION

Before connecting the ME-10-T to the DC power inputs, make sure the DC power source voltage is stable.

Slide-in Modules Installation

Installing the Media Converter Slide-in Modules

The instructions to install the media converter slide-in modules into the ME-10-T chassis are as follows:

1. The slide-in modules can be installed in an empty slot of the chassis.
2. Before installing a slide-in module, make sure the front plate has been removed.
3. Align the slide-in module with the chassis installation slot so that the panel fastener screw is at the top of the module.
4. Carefully insert the slide-in module into the slot while aligning the module's circuit board as per the installation guide.
5. Ensure that the slide-in module is firmly fitted inside the chassis.
6. Push in and rotate the attached panel fastener screw clockwise to secure the module to the chassis.

Replacing the Media Converter Slide-in Modules

To replace a media converter slide-in module in the ME-10-T chassis:

1. The media converter slide-in module can be hot-swapped, which means the chassis doesn't have to power off during the installation or when the module is being removed.
2. Remove the slide-in module that needs to be replaced by loosening the panel fastener screw that secures the module to the chassis. Slide the module out from the chassis.
3. Align the replacement slide-in module with the chassis installation slot so that the panel fastener screw is at the top of the module.
4. Carefully insert the slide-in module into the slot while aligning the module's circuit board as per the installation guide.
5. Ensure the slide-in module is firmly fitted inside the chassis.
6. Push in and rotate the attached panel fastener screw clockwise to secure the module to the chassis.

Specifications

Physical Characteristics	
Housing	SECC (1.2 mm)
Dimensions	180.1 x 89.4 x 28.5 mm (7.09 x 3.52 x 1.12 in)
Weight	0.53 kb (1.17 lb)
Number of Slots	1 slot on the front for slide-in modules
Environmental Limits	
Operating Temperature	-40 to 75°C (-40 to 167°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Power Requirements	
Input Voltage	12 to 48 VDC
Input Current	0.43 A @ 12 VDC
Standards and Certifications	
Safety	UL 60950-1, EN 60950-1
EMC	CE, FCC
EMI	EN 55032 Class A, FCC Part 15 Subpart B Class A
EMS	EN 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV EN 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m EN 61000-4-4 EFT: Power: 1 kV EN 61000-4-5 Surge: Power: 1 kV EN 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m EN 61000-4-8 PFMF EN 61000-4-11
Green Product	RoHS, CRoHS, WEEE
MTBF (mean time between failures)	
Time	1,055,112 hrs.
Standard	Telcordia (Bellcore), GB
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty