

# TRC-190 Series

## 19-inch rackmount chassis media converters



### Features and Benefits

- 19-inch chassis for rackmount use
- 19 slots for high-density applications
- Supports dual power inputs with redundancy
- Fanless chassis design reduces servicing costs

### Certifications



## Introduction

The TRC-190 rackmount chassis provides 19 slots for media converter modules from the CSM-200 Series of Ethernet-to-fiber modules and TCF-142-RM Series of serial-to-fiber modules. A TRC-190 chassis comes with one AC or DC power input, with an optional redundant power expansion AC or DC module available to enhance reliability. The PWR-190-AC and PWR-190-DC-48 power modules can be installed at the same time.

## Specifications

### Power Parameters

|                             |                                                                                    |
|-----------------------------|------------------------------------------------------------------------------------|
| Input Voltage               | TRC-190-AC: 110 to 240 VAC<br>TRC-190-DC-48: 36 to 53 VDC<br>Redundant dual inputs |
| No. of Power Inputs         | 2                                                                                  |
| Overload Current Protection | Supported                                                                          |
| Power Consumption           | TRC-190-AC: 0.9 A @ 110 VAC<br>TRC-190-DC-48: 2.1 A @ 48 VDC                       |

### Physical Characteristics

|              |                                             |
|--------------|---------------------------------------------|
| Dimensions   | 440 x 260 x 88 mm (17.32 x 10.24 x 3.46 in) |
| Installation | 19-inch rack mounting                       |
| IP Rating    | IP30                                        |
| Weight       | 5200 g (11.4 lb)                            |

### Environmental Limits

|                                        |                           |
|----------------------------------------|---------------------------|
| Ambient Relative Humidity              | 5 to 95% (non-condensing) |
| Operating Temperature                  | 0 to 60°C (32 to 140°F)   |
| Storage Temperature (package included) | -20 to 75°C (-4 to 167°F) |

## Standards and Certifications

|                       |                                                                                                                                                                                                                                                                                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC                   | EN 55032/24                                                                                                                                                                                                                                                                      |
| EMI                   | CISPR 32, FCC Part 15B Class A                                                                                                                                                                                                                                                   |
| EMS                   | IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV<br>IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m<br>IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV<br>IEC 61000-4-5 Surge: Power: 1 kV; Signal: 0.5 kV<br>IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m<br>IEC 61000-4-8 PFMF |
| Environmental Testing | IEC 60068-2-1<br>IEC 60068-2-2<br>IEC 60068-2-3                                                                                                                                                                                                                                  |
| Safety                | EN 60950-1, IEC 60950-1                                                                                                                                                                                                                                                          |
| Vibration             | IEC 60068-2-6                                                                                                                                                                                                                                                                    |

## MTBF

|           |                          |
|-----------|--------------------------|
| Time      | 1,055,112 hrs            |
| Standards | Telcordia (Bellcore), GB |

## Warranty

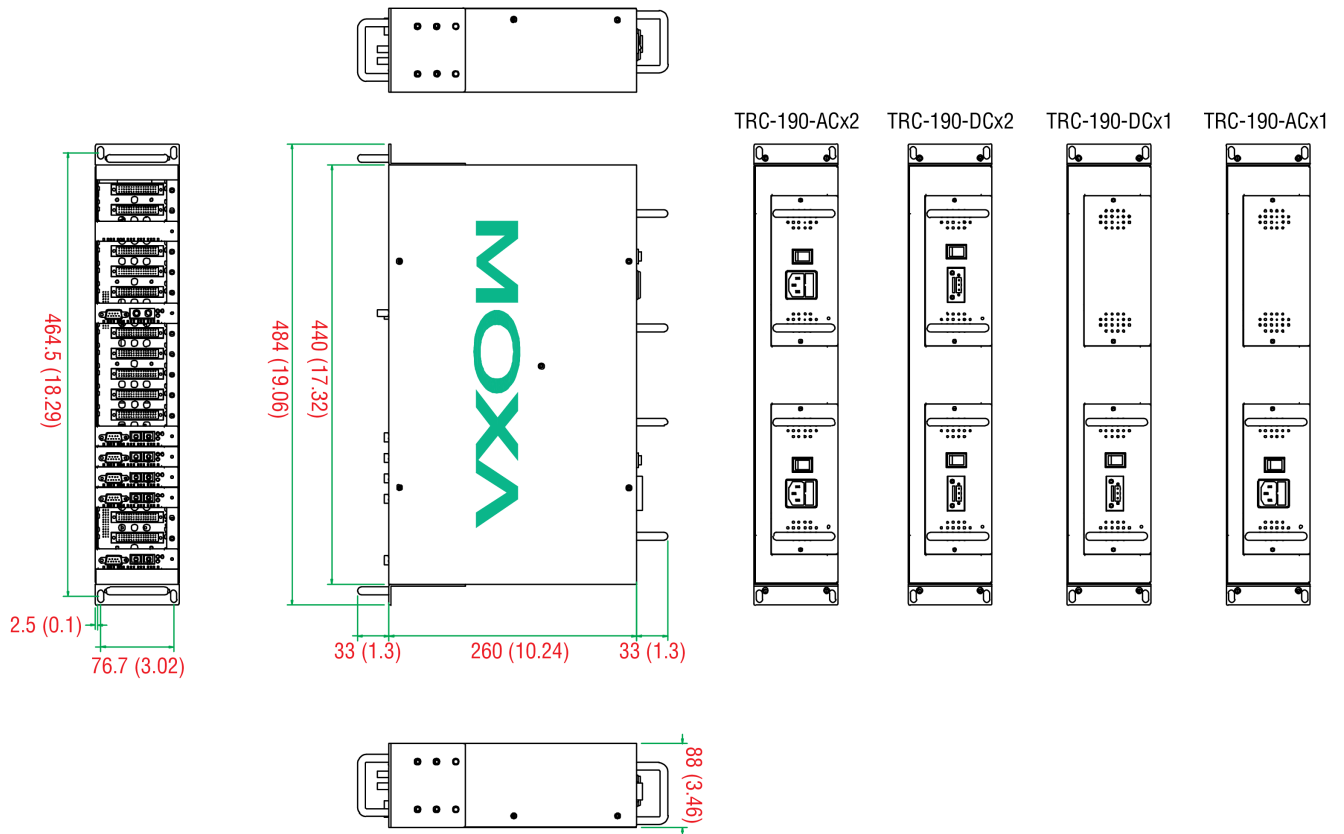
|                 |                                                                      |
|-----------------|----------------------------------------------------------------------|
| Warranty Period | 5 years                                                              |
| Details         | See <a href="http://www.moxa.com/warranty">www.moxa.com/warranty</a> |

## Package Contents

|               |                                                                         |
|---------------|-------------------------------------------------------------------------|
| Device        | 1 x TRC-190 Series converter                                            |
| Bracket       | 18 x faceplate and screws                                               |
| Power Supply  | 1 x power cord                                                          |
| Documentation | 1 x quick installation guide<br>1 x warranty card                       |
| Note          | This product requires additional modules (sold separately) to function. |

## Dimensions

Unit: mm (inch)



## Ordering Information

| Model Name    | Input Voltage          |
|---------------|------------------------|
| TRC-190-AC    | 100-240 VAC (47-63 Hz) |
| TRC-190-DC-48 | 36-53 VDC              |

## Accessories (sold separately)

### Brackets

|         |                                                                                      |
|---------|--------------------------------------------------------------------------------------|
| Plate-1 | TRC-190 bracket accessory package, 9 brackets, 9 screws (FMS M3 X 6)                 |
| BKT-PWR | TRC-190 DIN-rail accessory package, 2 L-shaped metal plates, 8 screws (FMS M4 x 6mm) |

### Communication Modules

|                 |                                                                                                        |
|-----------------|--------------------------------------------------------------------------------------------------------|
| TCF-142-M-SC-RM | RS-232/422/485 to multi-mode fiber slide-in module converter, SC connector                             |
| TCF-142-M-ST-RM | RS-232/422/485 to multi-mode fiber slide-in module converter, ST connector                             |
| TCF-142-S-SC-RM | RS-232/422/485 to single-mode fiber slide-in module converter, SC connector                            |
| TCF-142-S-ST-RM | RS-232/422/485 to single-mode fiber slide-in module converter, ST connector                            |
| CSM-200-1213    | 10/100BaseT(X) to 100BaseFX slide-in module media converter, multi-mode ST connector                   |
| CSM-200-1214    | 10/100BaseT(X) to 100BaseFX slide-in module media converter, multi-mode SC connector                   |
| CSM-200-1218    | 10/100BaseT(X) to 100BaseFX slide-in module media converter, single-mode SC connector                  |
| CSM-400-1213    | 10/100BaseT(X) to 100BaseFX slide-in management module converter, multi-mode ST connector, -20 to 55°C |
| CSM-400-1213-T  | 10/100BaseT(X) to 100BaseFX slide-in management module converter, multi-mode ST connector, -40 to 75°C |

|                |                                                                                                               |
|----------------|---------------------------------------------------------------------------------------------------------------|
| CSM-400-1214   | 10/100BaseT(X) to 100BaseFX slide-in management module converter, multi-mode SC connector, -20 to 55°C        |
| CSM-400-1214-T | 10/100BaseT(X) to 100BaseFX slide-in management module converter, multi-mode SC connector, -40 to 75°C        |
| CSM-400-1218   | 10/100BaseT(X) to 100BaseFX slide-in management module converter, single-mode SC connector, -20 to 55°C       |
| CSM-400-1218-T | 10/100BaseT(X) to 100BaseFX slide-in management module converter, single-mode SC connector, -40 to 75°C       |
| CSM-400-1224   | 10/100BaseT(X) to 100BaseFX slide-in management module converter, WDM-A single-mode SC connector, -20 to 55°C |
| CSM-400-1224-T | 10/100BaseT(X) to 100BaseFX slide-in management module converter, WDM-A single-mode SC connector, -40 to 75°C |
| CSM-400-1225   | 10/100BaseT(X) to 100BaseFX slide-in management module converter, WDM-B single-mode SC connector, -20 to 55°C |
| CSM-400-1225-T | 10/100BaseT(X) to 100BaseFX slide-in management module converter, WDM-B single-mode SC connector, -40 to 75°C |

#### Power Cords

|                  |                                                      |
|------------------|------------------------------------------------------|
| PWC-C13AU-3B-183 | Power cord with Australian (AU) plug, 1.83 m         |
| PWC-C13CN-3B-183 | Power cord with three-prong China (CN) plug, 1.83 m  |
| PWC-C13EU-3B-183 | Power cord with Continental Europe (EU) plug, 1.83 m |
| PWC-C13JP-3B-183 | Power cord with Japan (JP) plug, 7A/125V, 1.83 m     |
| PWC-C13UK-3B-183 | Power cord with United Kingdom (UK) plug, 1.83 m     |
| PWC-C13US-3B-183 | Power cord with United States (US) plug, 1.83 m      |

#### Power Supplies

|               |                                                 |
|---------------|-------------------------------------------------|
| PWR-190-AC    | 110 to 240 VAC power supply for the TRC-190-AC  |
| PWR-190-DC-48 | 36 to 53 VDC power supply for the TRC-190-DC-48 |

© Moxa Inc. All rights reserved. Updated Jan 18, 2019.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.