



# MOXA DRP-C100 Series DIN Rail Computers Instruction Manual

[Home](#) » [MOXA](#) » MOXA DRP-C100 Series DIN Rail Computers Instruction Manual 

## MOXA DRP-C100 Series DIN Rail Computers



### Features and Benefits

- DIN-rail mountable computers with fanless design
- Intel® Celeron® or Intel® Core™ i5, or i7 processor
- Rich interface options for up to 8 serial and 10 LAN ports
- Compact size to fit most field applications
- -30 to 60°C operating temperature range

## Contents

- 1 Certifications
- 2 Introduction
- 3 Appearance
- 4 Specifications
- 5 Dimensions
- 6 Ordering Information
- 7 Customer Support
- 8 Documents / Resources
  - 8.1 References
- 9 Related Posts

## Certifications



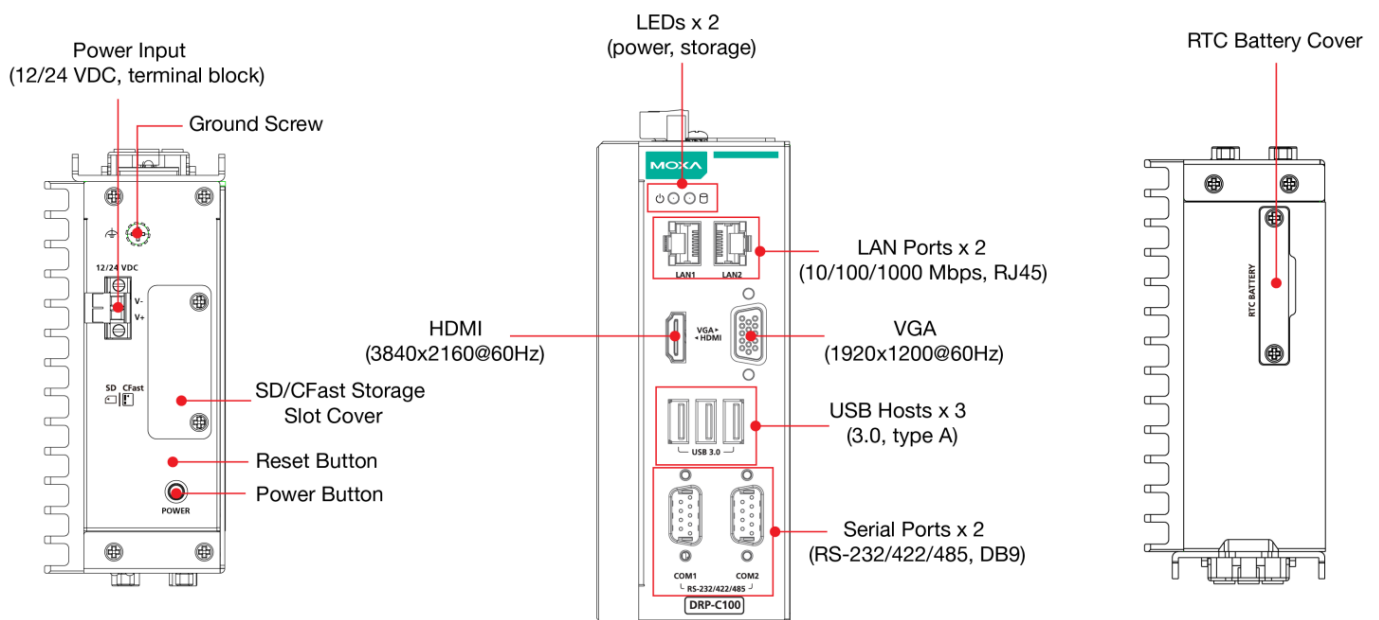
## Introduction

The DRP-C100 Series DIN-rail mountable computers are powered by an Intel® Celeron®, or Intel® Core™ i5 or i7 processor. The computers come with a rich set of interface options including up to 8 software-selectable RS-232/422/485 serial ports and up to 10 gigabit Ethernet ports. The communication interfaces are located on the front and rear sides of the product, enabling easy access and expansion for industrial applications. A dual-storage design that includes CFast and SD slots enables easy storage expansion. A unique battery-fastener cover secures the battery in place and ensures stability in all operating environments while a trap-door design for the battery slot enables easy battery swapping without having to remove the cover.

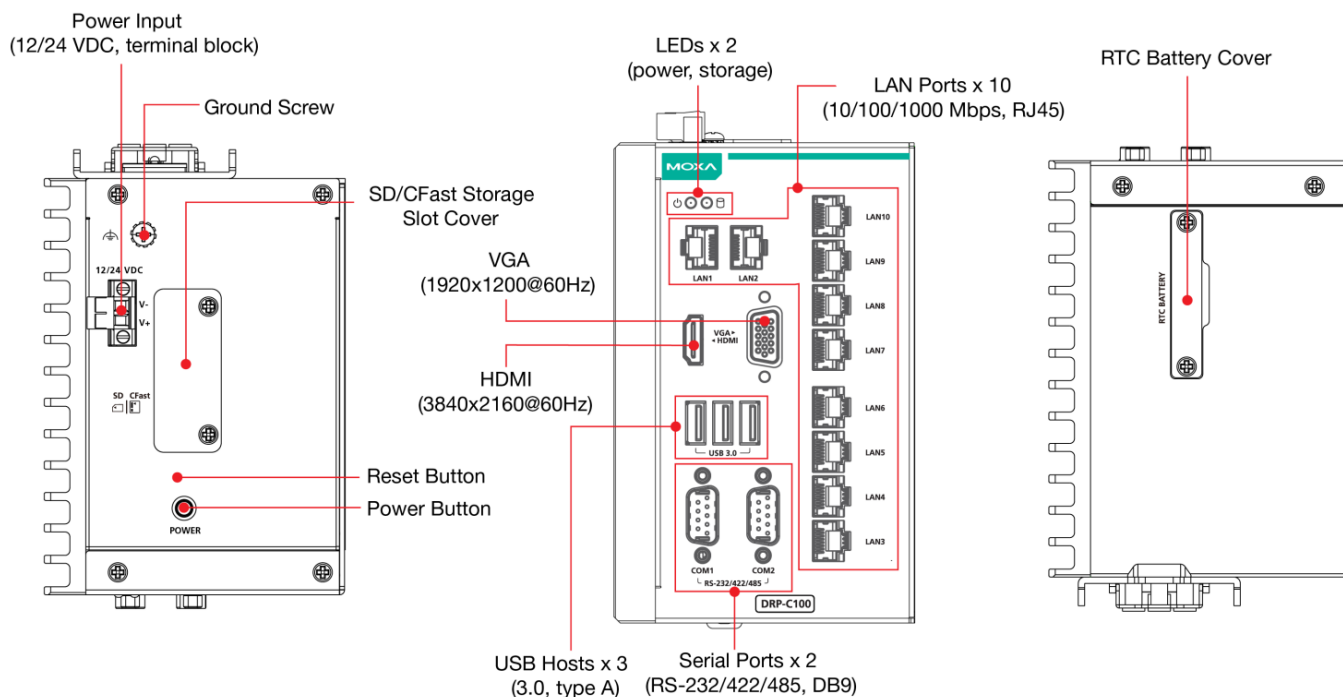
The DRP-C100 compact computers come in a fanless design and can withstand a temperature range of -30 to 60°C, making them a good fit for harsh operating environments. The built-in TPM 2.0 module secures the platform from unauthorized access. The DRP-C100 Series is an intelligent, reliable, durable, and versatile yet user-friendly computing solution that fulfills both OT and IT requirements of industrial environments.

## Appearance

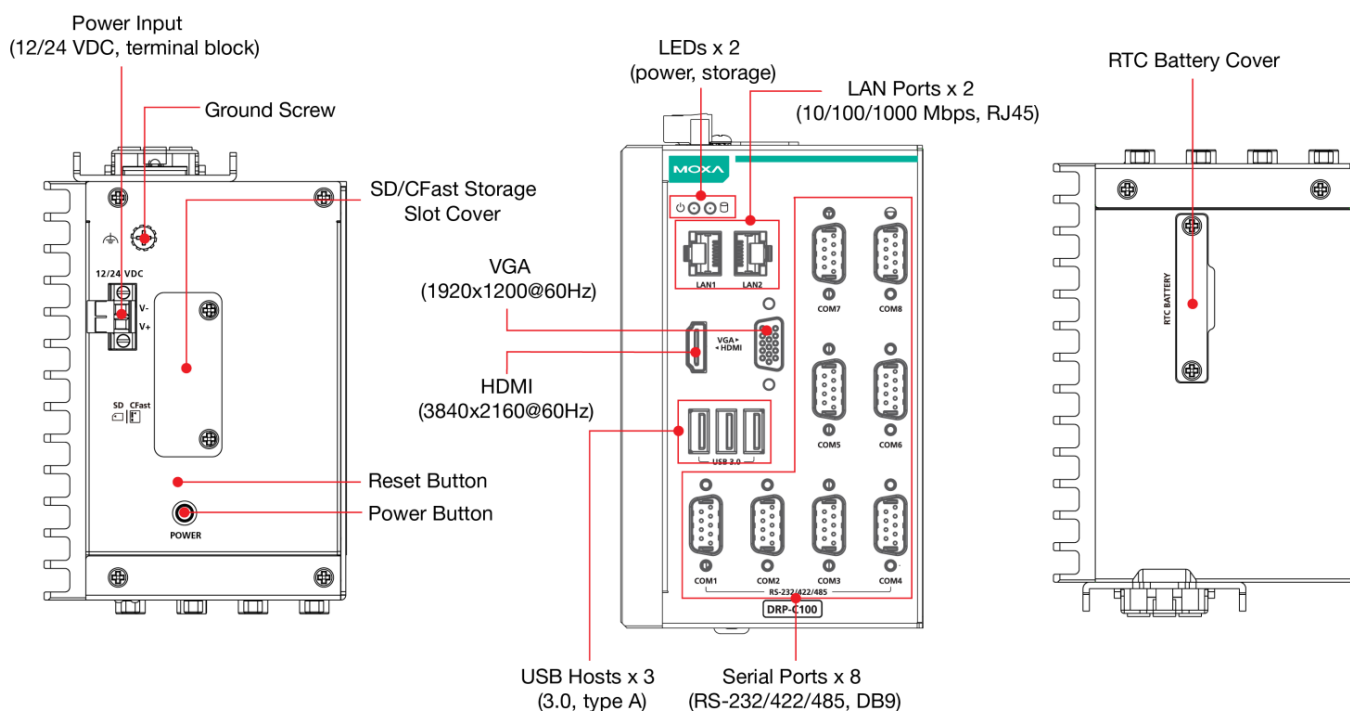
### DRP-C100-C1-T/DRP-C100-C5-T/DRP-C100-C7-T/DRP-C100-C1-T-Win10/DRP-C100-C5-T-Win10/DRP-C100-C7 TWin10 Models



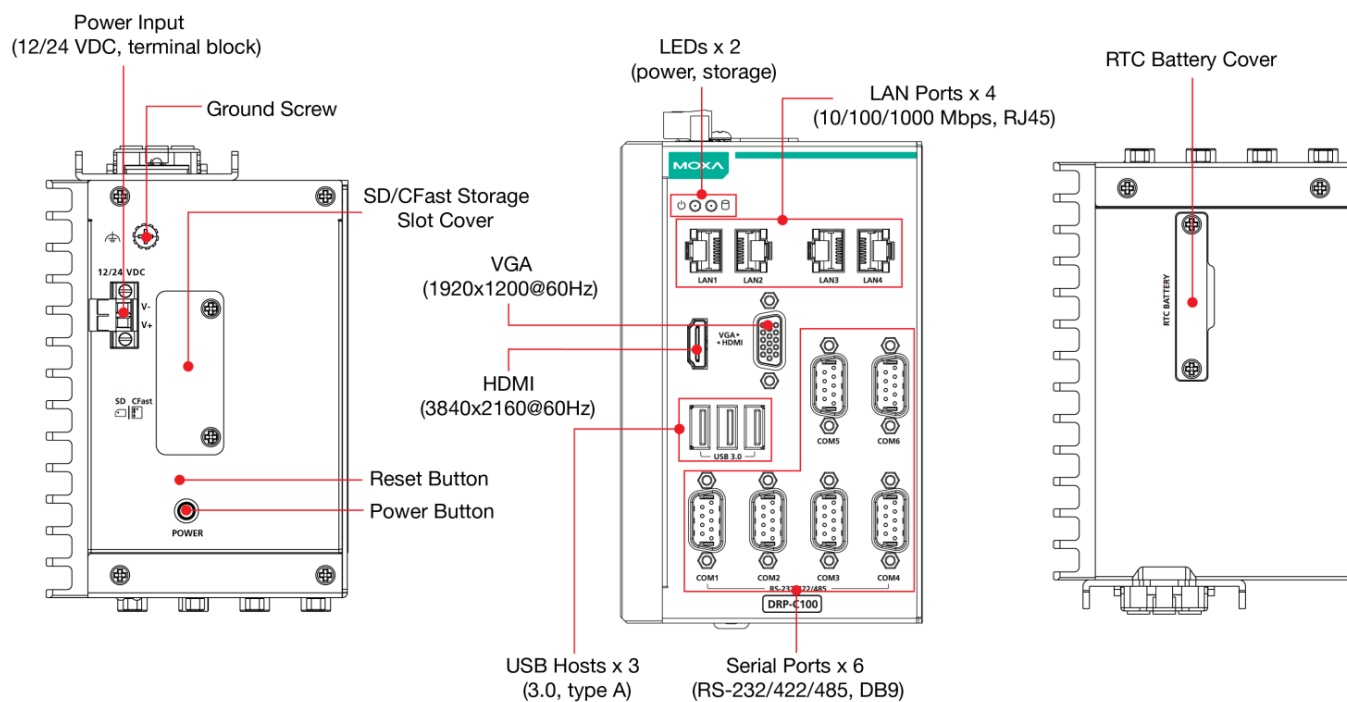
## DRP-C100-C1-8L-T/DRP-C100-C5-8L-T/DRP-C100-C7-8L-T Models



## DRP-C100-C1-6C-T/DRP-C100-C5-6C-T/DRP-C100-C7-6C-T Models



## DRP-C100-C1-2L4C-T/DRP-C100-C5-2L4C-T/DRP-C100-C7-2L4C-T Models



## Specifications

### Computer

|                             |                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU                         | <p>DRP-C100-C1 Models: Intel® Celeron® 6305E (Dual core, 4M cache, 1.80 GHz)</p> <p>DRP-C100-C5 Models: Intel® Core™ Processor i5-1145G7E (Quad core, 8M cache, 2.60 GHz, Base:1.50 GHz)</p> <p>DRP-C100-C7 Models: Intel® Core™ Processor i7-1185G7E (Quad core, 12M cache, 2.80 GHz, Base:1.80 GHz)</p>                                                                          |
| System Memory Slot          | SODIMM DDR4 slots x 1, up to 32 GB max.                                                                                                                                                                                                                                                                                                                                            |
| System Memory Pre-installed | 8 GB DDR4                                                                                                                                                                                                                                                                                                                                                                          |
| Storage Slot                | <p>CFast slot x 1 (SATAIII interface)</p> <p>SD slots</p> <p>1, SD 3.0 interface (SDHC/SDXC)</p>                                                                                                                                                                                                                                                                                   |
| Storage Pre-installed       | <p>DRP-C100-C1-T-Win10/C5-T-Win10/C7-T-Win10 Models:</p> <p>64 GB CFast card</p>                                                                                                                                                                                                                                                                                                   |
| Supported OS                | <p><b>Windows Images and Drivers Supported:</b></p> <ul style="list-style-type: none"> <li>• Windows 10 IoT Enterprise LTSC 2021 64-bit</li> <li>• Windows 11 Professional 64-bit</li> </ul> <p>Linux Drivers Supported:</p> <ul style="list-style-type: none"> <li>• Debian 11 (kernel 5.10)</li> <li>• Ubuntu 22.04 LTS (kernel 5.15)</li> <li>• RHEL 9 (kernel 5.14)</li> </ul> |
| Graphics Controller         | Intel® UHD Graphics                                                                                                                                                                                                                                                                                                                                                                |

## Computer Interface

|                |                                                                                                                                                                                                                                                                                                   |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet Ports | DRP-C100-C1-8L-T/C5-8L-T/C7-8L-T:<br>Auto-sensing 10/100/1000 Mbps ports (RJ45 connector) x 10<br>DRP-C100-C1-2L4C-T/C5-2L4C-T/C7-2L4C-T:<br>Auto-sensing 10/100/1000 Mbps ports (RJ45 connector) x 4<br>All Other Models:<br>Auto-sensing 10/100/1000 Mbps ports (RJ45 connector) x 2            |
| Serial Ports   | DRP-C100-C1-6C-T/C5-6C-T/C7-6C-T:<br>RS-232/422/485 ports x 8, software selectable (DB9 male) x 8<br>DRP-C100-C1-2L4C-T/C5-2L4C-T/C7-2L4C-T:<br>RS-232/422/485 ports x 6, software selectable (DB9 male) x 6<br>All Other Models:<br>RS-232/422/485 ports x 2, software selectable (DB9 male) x 2 |
| USB 3.0        | USB 3.0 hosts x 3, type-A connectors                                                                                                                                                                                                                                                              |
| TPM            | TPM v2.0                                                                                                                                                                                                                                                                                          |
| Video Output   | HDMI 2.0b x 1, (type A connector)<br>VGA x 1, 15-pin D-sub connector (female)                                                                                                                                                                                                                     |
| Buttons        | Reset button<br>Power button                                                                                                                                                                                                                                                                      |

## Ethernet Interface

|                               |                   |
|-------------------------------|-------------------|
| Magnetic Isolation Protection | 1.5 kV (built-in) |
|-------------------------------|-------------------|

## Serial Interface

|              |                              |
|--------------|------------------------------|
| Baudrate     | 50 bps to 115.2 kbps         |
| Connector    | DB9 male                     |
| Data Bits    | 5, 6, 7, 8                   |
| Parity       | None, Even, Odd, Space, Mark |
| Stop Bits    | 1, 1.5, 2                    |
| Flow Control | RTS/CTS, XON/XOFF            |

## Serial Signals

|           |                                        |
|-----------|----------------------------------------|
| RS-232    | TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND |
| RS-422    | Tx+, Tx-, Rx+, Rx-, GND                |
| RS-485-2w | Data+, Data-, GND                      |
| RS-485-4w | Tx+, Tx-, Rx+, Rx-, GND                |

## LED Indicators

|        |                               |
|--------|-------------------------------|
| System | Power x 1<br>Storage x 1      |
| LAN    | 2 per port (10/100/1000 Mbps) |

## Power Parameters

|                   |                                   |
|-------------------|-----------------------------------|
| Input Voltage     | 12/24 VDC                         |
| Power Connector   | Screw-fastened Euroblock terminal |
| Power Consumption | 90 W                              |

## Physical Characteristics

|              |                                                                                                                                                                                             |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Housing      | Metal                                                                                                                                                                                       |
| IP Rating    | IP20                                                                                                                                                                                        |
| Dimensions   | DRP-C100-C1-T/C1-T-Win10/DRP-C100-C5-T/C5-T-Win10/DRP-C100-C7-T/-C7- TWin10:<br>60 x 130 x 150 mm (2.36 x 5.12 x 5.91 in)<br>All Other Models:<br>94 x 130 x 150 mm (3.70 x 5.12 x 5.91 in) |
| Weight       | DRP-C100-C1-T/C1-T-Win10/DRP-C100-C5-T/C5-T-Win10/DRP-C100-C7-T/-C7- TWin10:<br>1,213 g (2.67 lb)<br>All Other Models:<br>1.612 g (3.55 lb)                                                 |
| Installation | DIN-rail mounting                                                                                                                                                                           |

## Declaration

|               |                   |
|---------------|-------------------|
| Green Product | RoHS, CRoHS, WEEE |
|---------------|-------------------|

## Environmental Limits

|                           |                            |
|---------------------------|----------------------------|
| Operating Temperature     | -30 to 60°C (-22 to 140°F) |
| Storage Temperature       | -40 to 75°C (-40 to 167°F) |
| Ambient Relative Humidity | 5 to 95% (non-condensing)  |

## Standards and Certifications

|                        |                                                                                                                                                                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC                    | EN 55032/35                                                                                                                                                                                                                                                          |
| EMI                    | CISPR 32, FCC Part 15B Class A BSMI                                                                                                                                                                                                                                  |
| 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: 0.5 kV; Signal: 0.5 kV<br>IEC 61000-4-5 Surge: Power: 0.5 kV, Signal: 1 kV<br>IEC 61000-4-6 CS: 3 V<br>IEC 61000-4-8 PFMF: 1 A/m at 50 to 60 Hz |
| Safety                 | UL 62368-1 (CB) BSMI                                                                                                                                                                                                                                                 |
| Shock                  | IEC 60068-2-27                                                                                                                                                                                                                                                       |
| Vibration              | IEC 60068-2-64                                                                                                                                                                                                                                                       |
| Package Drop Test      | ISTA 1A                                                                                                                                                                                                                                                              |
| Package Vibration Test | ISTA 1A                                                                                                                                                                                                                                                              |

## Reliability

|                          |                                                            |
|--------------------------|------------------------------------------------------------|
| Time Source              | Built-in RTC (real-time clock) with lithium-battery backup |
| Automatic Reboot Trigger | Built-in WDT                                               |

## MTBF

|           |                          |
|-----------|--------------------------|
| Time      | 584.337 hrs              |
| Standards | Telcordia (Bellcore), GB |

## Warranty

|                 |                                                                      |
|-----------------|----------------------------------------------------------------------|
| Warranty Period | 3 years                                                              |
| Details         | See <a href="http://www.moxa.com/warranty">www.moxa.com/warranty</a> |

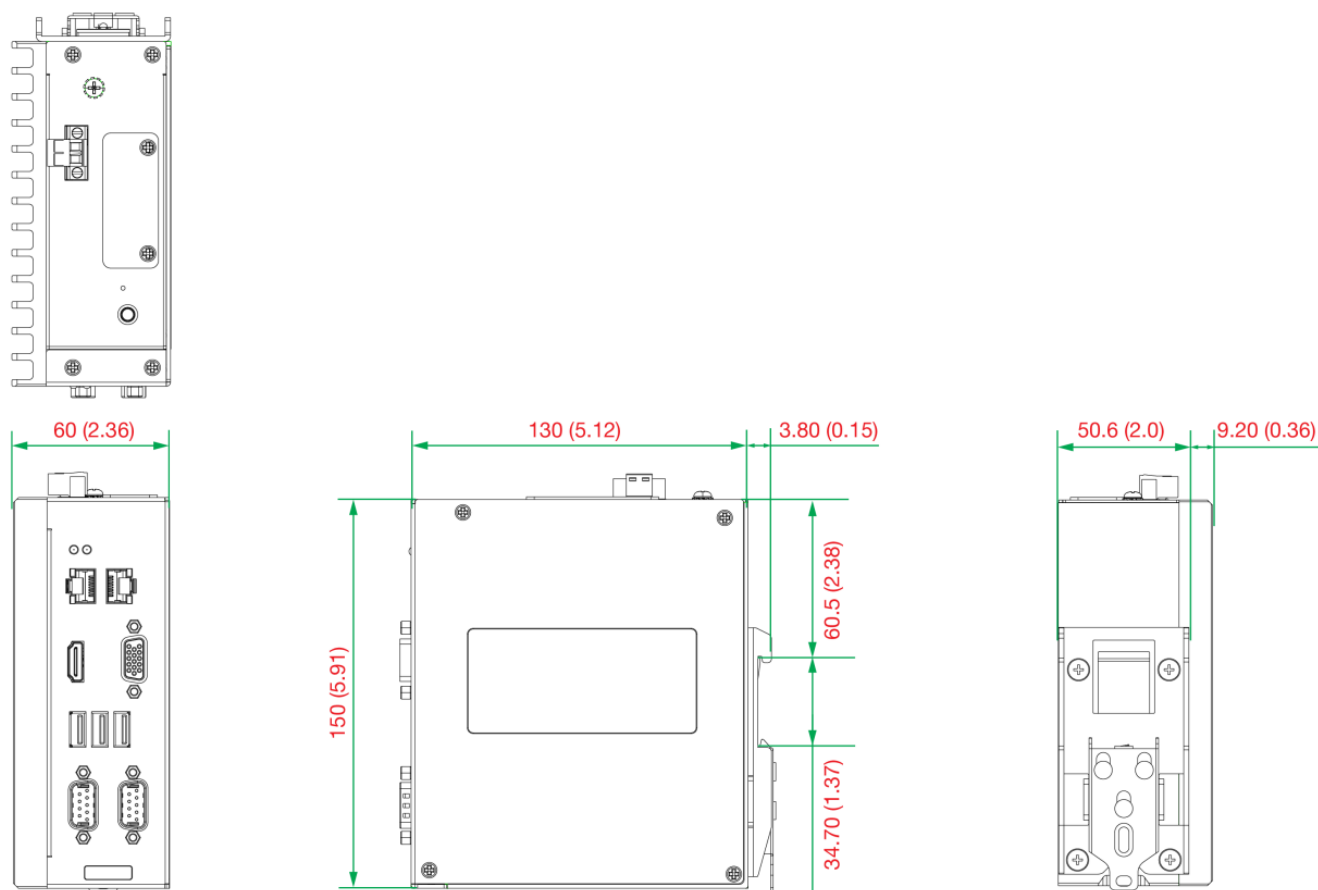
## Package Contents

|                  |                                                          |
|------------------|----------------------------------------------------------|
| Device           | 1 x DRP-C100 Series computer with DIN-rail ears attached |
| Installation Kit | 1 x terminal block, 2-pin, for DC power                  |
| Documentation    | 1 x quick installation guide 1 x warranty card           |

## Dimensions

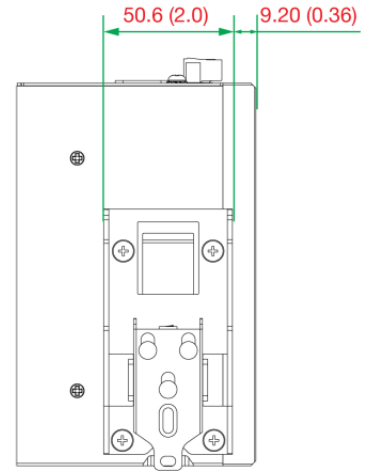
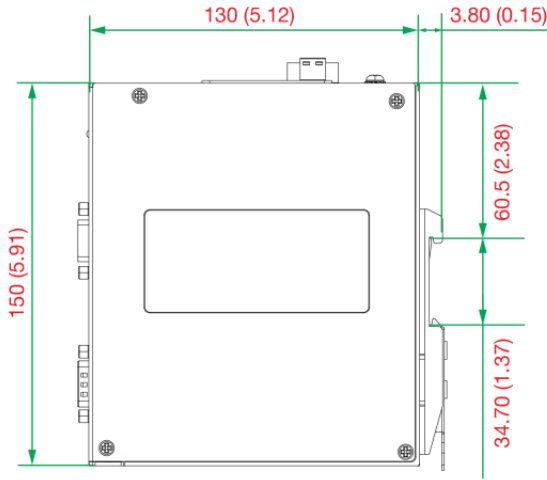
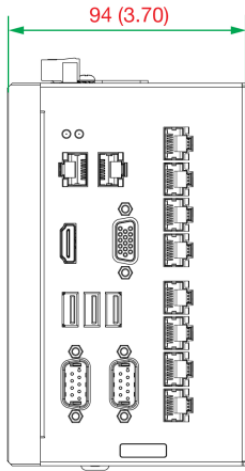
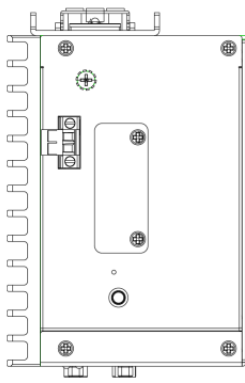
### DRP-C100-C1-T/DRP-C100-C5-T/DRP-C100-C7-T Models

Unit:mm (inch)



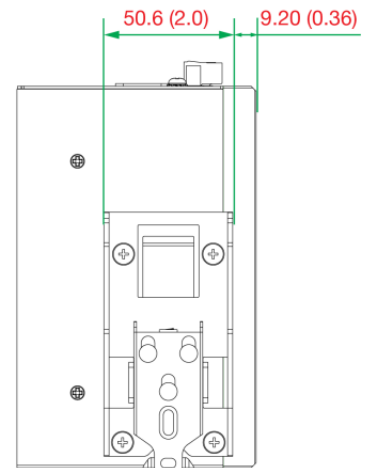
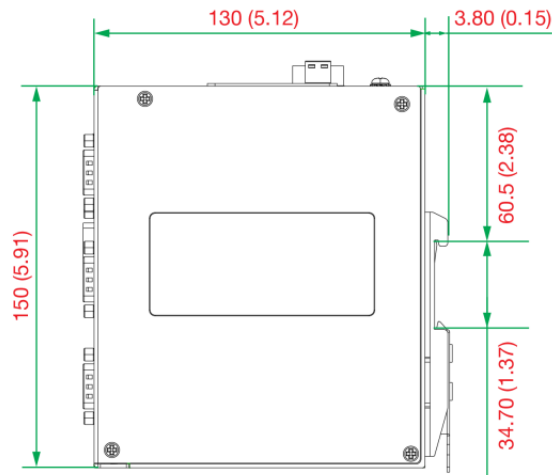
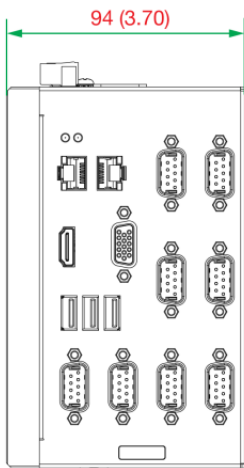
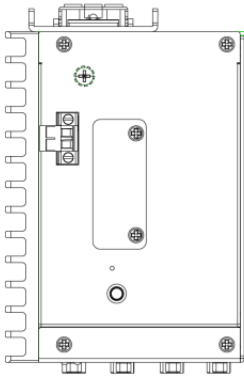
### DRP-C100-C1-8L-T/DRP-C100-C5-8L-T/DRP-C100-C7-8L-T Models

Unit:mm (inch)



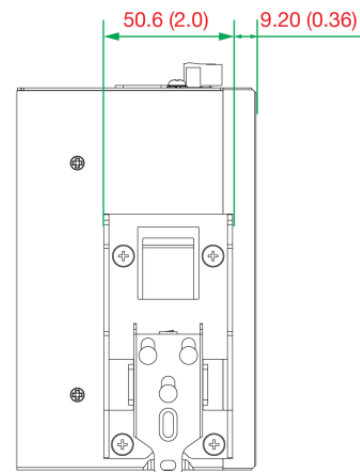
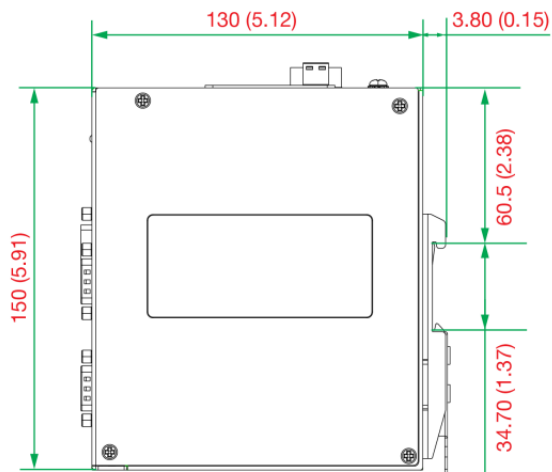
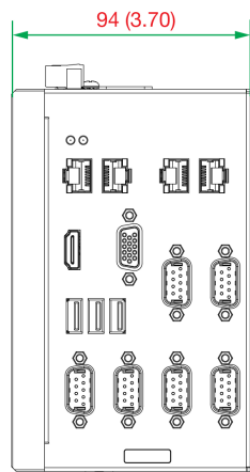
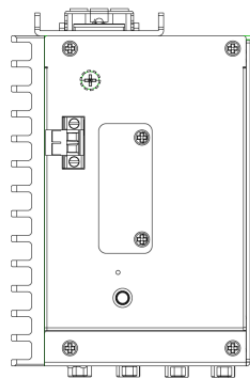
### DRP-C100-C1-6C-T/DRP-C100-C5-6C-T/DRP-C100-C7-6C-T Models

Unit:mm (inch)



### DRP-C100-C1-2L4C-T/DRP-C100-C5-2L4C-T/DRP-C100-C7-2L4C-T Models

Unit:mm (inch)



## Ordering Information

| Model Name          | CPU                   | Memory | Storage Slots       | OS Preinstalled            | LAN/Serial | USB 3.0 | Video Outputs       | Power Input |
|---------------------|-----------------------|--------|---------------------|----------------------------|------------|---------|---------------------|-------------|
| DRP-C100-C1-T       | Intel® Celeron® 6305E | 8 GB   | 1 x CFast<br>1 x SD | —                          | 2/2        | 3       | 1 x VGA<br>1 x HDMI | 12/24 VDC   |
| DRP-C100-C1-T-Win10 | Intel® Celeron® 6305E | 8 GB   | 1 x CFast<br>1 x SD | Win 10 LTSC<br>64 GB CFast | 2/2        | 3       | 1 x VGA<br>1 x HDMI | 12/24 VDC   |
| DRP-C100-C1-8L-T    | Intel® Celeron® 6305E | 8 GB   | 1 x CFast<br>1 x SD | —                          | 10/2       | 3       | 1 x VGA<br>1 x HDMI | 12/24 VDC   |
| DRP-C100-C1-6C-T    | Intel® Celeron® 6305E | 8 GB   | 1 x CFast<br>1 x SD | —                          | 2/8        | 3       | 1 x VGA<br>1 x HDMI | 12/24 VDC   |
| DRP-C100-C1-2L4C-T  | Intel® Celeron® 6305E | 8 GB   | 1 x CFast<br>1 x SD | —                          | 4/6        | 3       | 1 x VGA<br>1 x HDMI | 12/24 VDC   |

|                         |                                 |      |                     |                                |      |   |                     |               |
|-------------------------|---------------------------------|------|---------------------|--------------------------------|------|---|---------------------|---------------|
| DRP-C100-C5-T           | Intel® Co<br>re™ i5-1<br>145G7E | 8 GB | 1 x CFast<br>1 x SD | –                              | 2/2  | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |
| DRP-C100-C5-T-<br>Win10 | Intel® Co<br>re™ i5-1<br>145G7E | 8 GB | 1 x CFast<br>1 x SD | Win 10 L<br>TSC 64<br>GB Cfast | 2/2  | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |
| DRP-C100-C5-8L<br>-T    | Intel® Co<br>re™ i5-1<br>145G7E | 8 GB | 1 x CFast<br>1 x SD | –                              | 10/2 | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |
| DRP-C100-C5-6<br>C-T    | Intel® Co<br>re™ i7-1<br>185G7E | 8 GB | 1 x CFast<br>1 x SD | –                              | 2/8  | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |
| DRP-C100-C5-2L<br>4C-T  | Intel® Co<br>re™ i5-1<br>145G7E | 8 GB | 1 x CFast<br>1 x SD | –                              | 4/6  | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |
| DRP-C100-C7-T           | Intel® Co<br>re™ i7-1<br>185G7E | 8 GB | 1 x CFast<br>1 x SD | –                              | 2/2  | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |
| DRP-C100-C7-T-<br>Win10 | Intel® Co<br>re™ i7-1<br>185G7E | 8 GB | 1 x CFast<br>1 x SD | Win 10 L<br>TSC 64<br>GB Cfast | 2/2  | 3 | 1 x VGA<br>1 x HDMI | 12/24 V<br>DC |
| DRP-C100-C7-8L<br>-T    | Intel® Co<br>re™ i7-1<br>185G7E | 8 GB | 1 x CFast<br>1 x SD | –                              | 10/2 | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |
| DRP-C100-C7-6<br>C-T    | Intel® Co<br>re™ i7-1<br>185G7E | 8 GB | 1 x CFast<br>1 x SD | –                              | 2/8  | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |
| DRP-C100-C7-2L<br>4C-T  | Intel® Co<br>re™ i7-1<br>185G7E | 8 GB | 1 x CFast<br>1 x SD | –                              | 4/6  | 3 | 1 x VGA<br>1 x HDMI | 12/24 VD<br>C |

## Customer Support

© Moxa Inc. All rights reserved. Updated Nov 28, 2023.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written perm

[www.moxa.com](http://www.moxa.com)

## Documents / Resources

|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><a href="#">MOXA DRP-C100 Series DIN Rail Computers</a> [pdf] Instruction Manual<br/>DRP-C100-C1-T, DRP-C100-C5-T, DRP-C100-C7-T, DRP-C100-C1-T-Win10, DRP-C100-C5-T-Win10, DRP-C100-C7-TWin10, DRP-C100-C1-8L-T, DRP-C100-C5-8L-T, DRP-C100-C7-8L-T, DRP-C100-C1-6C-T, DRP-C100-C5-6C-T, DRP-C100-C7-6C-T, DRP-C100-C1-2L4C-T, DRP-C100-C5-2L4C-T, DRP-C100-C7-2L4C-T, DRP-C100 Series, DRP-C100 Series DIN Rail Computers, DIN Rail Computers, Rail Computers, Computers</p> |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## References

- [M Moxa - Your Trusted Partner in Automation](#)
- [M Warranty Policy](#)
- [User Manual](#)

### Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.