

CM8100-10G High Density Console Manager

with Smart Out-of-Band Management

CM8100-10G, used with our Lighthouse software, is the newest addition to Opendgear's Network Resilience platform.

- Secure, remote, access to manage up to 96 serial devices
- Connect to high-speed networks via 10G SFP+ uplinks
- Simplify configuration with the auto-port discovery
- Reduce cable clutter with software-selectable serial ports
- Global cellular modem for cellular resiliency



Console Specifications

Serial Ports	• CM8116-10G: 16 x RJ45 RS-232 Software Selectable Straight or Rollover Pinout • CM8132-10G: 32 x RJ45 RS-232 Software Selectable Straight or Rollover Pinout • CM8148-10G: 48 x RJ45 RS-232 Software Selectable Straight or Rollover Pinout • CM8196-10G: 96 x RJ45 RS-232 Software Selectable Straight or Rollover Pinout
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Interfaces

Network Ports	2 x 10G SFP+ Fiber and 2 x 1000 Base-T Ethernet
Console Port	1 x RJ45 RS-232 Console Port - Cisco rolled X1 pinout, baud rate 9600
Serial Ports	RJ45 RS-232 Software Selectable 50 to 230,400 bps
USB	2 x USB 3.0 host ports, can be used for external storage or serial console
Remote Access	Dual Ethernet, aggregation & redundancy, Automatic Network Failover, Easy browser UI, IPv6
Console Management	• Local WebUI has built-in web terminal for CLI access • IP alias for serial port console connections • Support for console event and keystroke logging • Alert on text pattern match • Multiple concurrent sessions • Centralized access to all serial managed devices from Lighthouse Software

Power Requirements

Dual AC	Dual socket universal IEC C14 inlet 100-240V AC 50/60Hz
Dual DC	+/- 40V to 72V DC, 1.5A - 0.75A (x2)
Power Consumption	• CM8148-10G, CM8132-10G, and CM8116-10G: Less than 25W (85 BTU/h) typical • CM8196-10G: Less than 30W (102 BTU/h) typical
Cooling	Passive Cooling - can be forward or reverse mounted to best suit airflow

Physical Dimensions

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|-----------------------|---|
| Dimensions and Weight | <ul style="list-style-type: none">• CM8148-10G, CM8132-10G, and CM8116-10G: 17.3" x 10.5" x 1.75" - 8 lbs, 440 x 265 x 44 mm - 3.5 kg• CM8196-10G: 17.3" x 10.5" x 3.5" - 10 lbs, 440 x 265 x 87 mm - 4.5 kg |
|-----------------------|---|

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|-------------|---|
| Form Factor | <ul style="list-style-type: none">• CM8148-10G, CM8132-10G, and CM8116-10G: 1 RU• CM8196-10G: 2 RU |
|-------------|---|

Memory and CPU

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|---------|-------------------------------------|
| CPU | 1.6 GHz Dual-Core ARM Cortex-A9 SoC |
| Memory | 2GB DDR4 SDRAM |
| Storage | 32GB eMMC |

Environmental

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|-----------------------|---------------------------------|
| Operating Temperature | 5°C to 50°C, 41°F to 122°F |
| Storage Temperature | -30°C to +60°C, -22°F to +140°F |
| Humidity | 5% to 90% (non-condensing) |

Security, Encryption & Authentication

- TACACS+, RADIUS, Active Directory/OpenLDAP, with local fallback
- IPsec and OpenVPN
- FIPS 140-2 compliant
- Trusted Platform Module 2.0

Automation & Scalability

- ZTP
- Ansible
- **API** based OS
- Docker support
- Python and Ruby
- SNMP-Standard **MIBs**

Global Cellular Interface

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|-------------|---------------------------------------|
| Modules | CM81xx-10G-5G: Sierra Wireless EM9291 |
| Aggregation | 5G NR Sub-6 & LTE CAT20 |

Certifications

Cellular	PTCRB, GCF, Verizon and AT&T
Cyber Security	EN 18031-1:2024, EN 18031-2:2024, EN 18031-3:2024
Emissions	47 CFR Parts: 15B, EN55032:2015+A11:2020, ICES-003 Issue 7, EN 61000-3-2:2019, EN61000-3-3:2013
Immunity	EN55035:2017+A11:2020
Other Agency Approvals	KS C 9832:2023, KS C 9835:2019, AS/NZ CISPR 32:2015, VCCI-CISPR 32:2016, CISPR 22:2009, CNS 15936:2016
Radio Equipment Directive (RED)	EN 301 908-1 V15.2.1, EN 301 908-2 V13.1.1, EN 309 908-13 V13.2.1, EN 303 413 V1.2.1, EN 301 489-1 V2.2.3 (2019-11), EN 301 489-52:2021 v.1.2.1, EN 62311: 2020
RoHS	EN 63000:2018
Safety	IEC 62368-1:2018, EN 62368-1:2014 + A11:2017, EN 62368-1:2014 + A11:2017

Warranty

5 years hardware replacement included. Appliance requires a minimum of 1 year Foundation Support at the time of purchase.

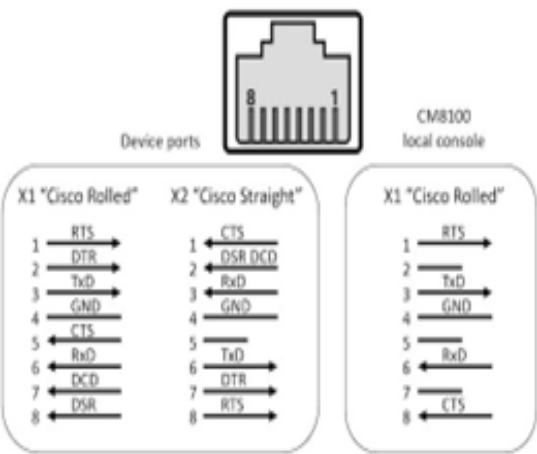
Available Models

Model	Description
CM8116-10G	16 serial selectable pinout, 2x 10GbE SFP+, 2x 1GbE, ARM 1.6GHz 2-core 2GB mem 32GB flash, TPM, Dual AC
CM8116-10G-C	16 x RS-232 RJ45 serial, 2x 1G Ethernet (RJ45), 2x 10G Ethernet (SFP+) and 5G cellular modem
CM8116-10G-DDC	16 x RS-232 RJ45 serial, 2x 1G Ethernet (RJ45), 2x 10G Ethernet (SFP+), Dual DC power
CM8132-10G	32 serial selectable pinout, 2x 10GbE SFP+, 2x 1GbE, ARM 1.6GHz 2-core 2GB mem 32GB flash, TPM, Dual AC
CM8132-10G-C	32 x RS-232 RJ45 serial, 2x 1G Ethernet (RJ45), 2x 10G Ethernet (SFP+) and 5G cellular modem
CM8132-10G-DDC	32 x RS-232 RJ45 serial, 2x 1G Ethernet (RJ45), 2x 10G Ethernet (SFP+), Dual DC power
CM8148-10G	48 serial selectable pinout, 2x 10GbE SFP+, 2x 1GbE, ARM 1.6GHz 2-core 2GB mem 32GB flash, TPM, Dual AC
CM8148-10G-C	48 x RS-232 RJ45 serial, 2x 1G Ethernet (RJ45), 2x 10G Ethernet (SFP+) and 5G cellular modem
CM8148-10G-DDC	48 x RS-232 RJ45 serial, 2x 1G Ethernet (RJ45), 2x 10G Ethernet (SFP+), Dual DC power
CM8196-10G	96 serial selectable pinout, 2x 10GbE SFP+, 2x 1GbE, ARM 1.6GHz 2-core 2GB mem 32GB flash, TPM, 2RU, Dual AC
Every appliance ships with 2 x C14 power cables. Country-specific power cables can be purchased separately.	

Package Checklist

- Console Server CM81xx-10G
- Rack Mount Kit (Part# 590037)
 - Two rack ears with six M4 screws
 - Four M5mm caged nuts
 - Four M5x15mm rack screws
- One CAT5 Patch Cable 5'
- One DB9F-RJ45 rollover serial adapter (Part# 319018)
- Two A/C Power cables (not included with -NP and -DDC)
- Four Cellular antennas (Part# 569052) – Cellular Models Only

Opengear Pinout



Optional Accessories

Part Number	Description
319017	Adapter - DB9F to RJ45 straight serial - DCE -For X1 Pinout
319018	Adapter - DB9F to RJ45 crossover serial -DTE - For X1 Pinout
319019	Adapter - DB9M to RJ45 straight serial - DCE - For X1 Pinout
440016	Cable - Straight through CAT5 - 5' length
590037	Rack Mount Kit - Ears and Screws - CM8100 / OM2200

Warranty

Part Number	Description
Included	5 year standard warranty
Select one of the following to include with the appliance:	
OG-FNTS-CM8100-1YR	1 year Foundation Support for CM8100 - 8x5 Regional Support with Advanced Replacement
OG-FNTS-CM8100-2YR	2 year Foundation Support for CM8100 - 8x5 Regional Support with Advanced Replacement
OG-FNTS-CM8100-3YR	3 year Foundation Support for CM8100 - 8x5 Regional Support with Advanced Replacement
OG-FNTS-CM8100-5YR	5 year Foundation Support for CM8100 - 8x5 Regional Support with Advanced Replacement
OG-FNTS-CM8100-7YR	7 year Foundation Support for CM8100 - 8x5 Regional Support with Advanced Replacement
OG-PRTS-1YR	1 year Premium Support - Access to Premium Resources 24x7 and Advanced Replacements
OG-PRTS-2YR	2 year Premium Support - Access to Premium Resources 24x7 and Advanced Replacements
OG-PRTS-3YR	3 year Premium Support - Access to Premium Resources 24x7 and Advanced Replacements
OG-PRTS-5YR	5 year Premium Support - Access to Premium Resources 24x7 and Advanced Replacements
OG-PRTS-7YR	7 year Premium Support - Access to Premium Resources 24x7 and Advanced Replacements