

## CM7100 Console Server with *Smart OOB™*



The Opengear CM7100 is a highly reliable and feature-rich console server that simplifies out-of-band management of your network, server, and power infrastructure in data centers and remote sites. Get secure and reliable access to IT equipment via your preferred SSH client or via an in-built HTTPS AJAX web terminal. Powerful diagnostics and remediation features enable efficient recovery from infrastructure fault conditions and increase uptime.

**Problem:** IT environments today are increasingly complex with an ever-growing variety of devices from multiple vendors. Tight budgets and sparse staffing make managing mission critical IT, network and power infrastructure while meeting enterprise uptime requirements a formidable challenge, for IT Managers and Administrators alike.

**Solution:** The Opengear CM7100 Console Server has 16, 32, 48 and 96 serial ports for out-of-band access to routers, switches, PDUs, firewalls and other serial consoles. With simple Cisco-straight cabling, an intuitive status monitoring dashboard with pro-active alerting, vendor neutral power management and simple, secure access to device consoles, Network and IT Administrators can simplify remote management, rapidly recover from faults, and maximize uptime. The CM7100 also comes standard with a limited 4-year warranty and responsive one-on-one support — all at a very competitive per-port price point.

### Smart OOB™ for advanced console management

The CM7100 extends beyond traditional out-of-band management. Proactively detects faults before they become failures. Monitors and logs systems health and physical environmental conditions. Monitors and controls UPS and power status (disruptions, surges, power cycling). Beyond devices — monitors temperature, humidity, motion, water door access. Provides reliable access to core networking and data center devices with a built-in dashboard view that presents an intuitive status at a glance.

### More features, better value

Advanced monitoring notifies you of server kernel panics, network console warnings, unplugged cables and environmental alarms. Alerts can be automatically escalated for protracted outages, and pre-set complex remedial actions taken, depending on what is detected. 4GB embedded storage stores console session logs for audit and troubleshooting and TFTP server for remote backup and restore of managed device configuration, OS upgrades and recovery.

### Built-in redundancy, reliability and flexibility

Dual AC feed inlets and dual internal power supplies support automatic failover for increased uptime. Dual USB ports allow attachment of peripherals like additional storage and USB consoles. Dual Gigabit Ethernet ports facilitate connections to both primary and secondary networks.

### Strong security, granular access control

The CM7100 supports Active Directory, OpenLDAP, Kerberos, RADIUS and TACACS+ enterprise AAA systems. Default-deny security policies lock down remote access to permitted users and groups. FIPS 140-2 validated encryption for military-grade applications and supports encryption of sensitive management traffic via HTTPS, SSH and VPN, including OpenVPN and IPsec.

### Powerful and reliable console server for smart out-of-band management

- Class leading performance and features – the best value console server
- 16 – 96 ports, out-of-band management of network and server devices
- Simple straight-through cabling to Cisco style serial consoles
- Dual Gigabit Ethernet and dual AC Power supplies for built-in redundancy. Fiber SFP available in CM7196A only.
- Audit trail logging to embedded 4GB local storage or remote log server for troubleshooting and compliance
- AAA including Active Directory and TACACS+ integration, lock down ports per-user & group
- Unified power management of PDU and UPS equipment from 100+ vendors
- Environmental monitoring with optional EMD5000 module, Nagios and Solar-Winds integration
- Standard 4-year warranty and responsive one-on-one product support via web and email

### Comprehensive management feature set, strong security, best value for money

#### CM7100 Console Server Benefits

- **Simplify management** with a powerful and dependable console server that can connect to a wide variety of networking and power equipment and presents a unified dashboard view of the status of your environment
- **Minimize MTTR and increase MTBF.** Proactive problem identification, quick notification and automated remediation reduce operating and downtime costs
- **Understand everything that affects uptime.** Monitor and control virtually everything, including the physical environment, prevent disruptions
- **Increase efficiency and reduce human error.** Equip every rack with virtual remote hands in lights-out data centers and colocation cages

## Who can benefit most from CM7100 infrastructure management?

- Businesses with limited IT staffing and budget
- IT departments with remote branch office infrastructure
- Colocation tenants in datacenters
- Cloud and hosting providers, ISPs
- Research and lab environments
- Government, Education and Healthcare

## Key Management Features

### SmartOOB™ for advanced console management

Securely access your networking devices, servers and power equipment and proactively monitor for console warnings from managed devices. Gain insights into your rack environment with a single pane dashboard view. Built-in TFTP server enables remote recovery of routers and switches. Improves compliance and forensics with audit trail logging to local storage or remote log server. Increases ops team efficiency and mitigates the risk of infrastructure faults and failures by enabling remote provisioning, maintenance and repair.

### Easy integration into your environment

Connect the CM7100 console server to a wide variety of network equipment with simple straight through Cat 5 patch cabling – no adapters or special cables necessary. Comprehensive SNMP status MIB integrates with your existing monitoring solution, including Nagios and SolarWinds support. Dual Gigabit Ethernet ports allow connection to separate networks or link aggregation. Eliminates the need for installation and management of other devices such as media converters. Supports IPv6 devices.

### Vendor neutral power management

Monitor and log power equipment status, control PDU outlets via serial, USB and Ethernet. Enforce remote power permissions and map managed consoles to outlets – power cycle managed devices with console in-session hot-key or easy-to-use UI. Uniquely supports over 100 power vendors' equipment.

### Strong authentication, authorization and auditing

Lock down consoles per-user or per-user-group with local and remote AAA including Active Directory, OpenLDAP, Kerberos, RADIUS and TACACS+ integration. Comprehensive session logging can record each console keystroke for compliance and audit trail. Encrypt sensitive management traffic with IPsec and OpenVPN. Bolster security and reduce complexity with a single point of authentication and policy enforcement. FIPS 140-2 validated encryption for government and military applications.

## Ordering Information

Model	Serial Ports	Ethernet Ports	USB	Storage	Sensors	Power
CM7116-2-DAC	16	2	2	4GB	EMD5000	Dual AC
CM7116-2-SAC	16	2	2	4GB	EMD5000	Single AC
CM7132-2-DAC	32	2	2	4GB	EMD5000	Dual AC
CM7148-2-DAC	48	2	2	4GB	EMD5000	Dual AC
CM7148-2-SAC	48	2	2	4GB	EMD5000	Single AC
CM7196A-2-DAC	96	2 <sup>1</sup>	2	64GB	EMD5000	Dual AC

Append model number with destination country, e.g. "CM7116-2-DAC-US" for USA.

Available country codes: -US, -AU, -UK, -EU, -JP, -CN.

-CN models are not available for the CM7196A and SAC models

Each serial port pinout is Cisco-straight.

EMD5000 device on a configured serial port provides temp/humidity and alerts for door closure, fire, water, vibration sensors.

<sup>1</sup>CM7196A Serial ports are located on both the front and back panels. Dual Ethernet/SFP Fiber ports.



CM7100 – Serial ports on the back of unit



CM7196A – Serials ports on front & back panels

## Technical Specifications

### Power

- DAC models - dual socket universal 100-240V AC
- SAC models - single socket universal 100-240V AC
- Power consumption 15W-20W 16-48 ports  
35W 96 ports

### Dimensions

- 17 x 10 x 1.75 in - 9 lbs
- 44 x 25.4 x 4.5 cm - 4.0 kg
- 1RU with rack mount accessories

### CPU & Storage

#### CM71xx Models

- 800MHz ARM SoC and 256MB DDR3 RAM
- 4GB internal flash

#### CM7196A Only

- 800MHz ARM SoC and 2 GB DDR3 RAM
- 4GB internal flash plus internal 64GB USB Module
- Dual Ethernet/SFP Port
- Internal Temperature Sensor

### Temperature

- Operation: 5°C to 50°C / 41°F to 122°F
- Storage: -30°C to +60°C / -20°F to +140°F
- Humidity: 5% to 90%

### Software Features

#### Remote Management:

HTTPS AJAX web terminal & SSH console, Nagios NSCA & NRPE, SNMP, TFTP & FTP server, Password access control, IP service port control, CDK & custom scripts for Auto-Response

#### Management Gateway:

Stateful firewall, DHCP server, DDNS, Failover, Port forwarding, IP filtering with access control lists, IPv6 support

### Other Agency Approvals

CE, UL, TuV RCM (was C-Tick), RoHS compliant, Security features to support NERC CIP standards, FIPS 140-2 validated module Certificate #1051, CCC

### Latest Specifications & Ordering

<http://opengear.com/products/cm7100-console-server>

