



SMART SOLUTIONS FOR DISTRIBUTED NETWORKS

Infrastructure Management

# **IM4200 Infrastructure Manager**



The Opengear IM4200 infrastructure manager consolidates and streamlines remote management of network, server and power infrastructure in high density computing environments, ensuring efficient and secure access, monitoring and control for local and remote operations teams.

Problem: Data centers, colocation facilities and network exchange points host a wide array of critical network, power and server infrastructure from a variety of vendors. The scope and complexity of managing these environments securely and efficiently continues to grow.

Solution: Opengear IM4200 is a single appliance to manage all of your rack infrastructure, even during network downtime. Built for high availability in mission critical deployments, Opengear offers true out-of-band infrastructure management and proactive monitoring while integrating with your existing tools and workflow, to improve fault detection and reduce mean-time-to-repair.

# Advanced console management

Bullet proof infrastructure management with integrated 8 – 48 port console server, available in three serial pinouts including Cisco®-straight for Cat 5 patch cabling to Cisco-style RJ45 consoles, no adapters. Immediate access to consoles via your preferred SSH client or integrated HTTPS AJAX web terminal. Detect server kernel panics and console warnings with configurable pattern match alerting, log serial management traffic for audit trail and forensics.

# Multi-vendor, multi-device access & control

IM4200 supports the widest array of network, IT and power infrastructure and vendors. Out-of-band management of routers and switches, servers and SAN via serial console, or IPMI lights-out servers via integrated management switch (optional). Vendor-neutral power management support for UPS and switched PDUs from over 100 vendors enables monitoring and hotkey power cycling from inside the console management session.

# **Consolidated monitoring and alerts**

Monitor network equipment and server status, PDU load and UPS battery charge. Monitor the rack environment and physical sensors, including console cable unplugged, temperature, humidity and cabinet open with EMD5000 module (optional). Direct alert notification with smart escalation via email and SMS, or integrates with existing monitoring systems such as Nagios with NSCA and NRPE, Solarwinds and other NMS with SNMP.

# Highly Available, Highly Secure

- 8 48 port serial console server, manage network and server consoles
- Dual feed AC or DC power, dual bonded NIC, simple serial cabling
- Enterprise-grade security, FIPS 140-2 certified SSL, SSH and VPN
- AAA including LDAPS &TACACS+, lock down ports per-user & group
- Audit trail logging to 16GB local storage or remote log server
- Monitor environment and physical sensors with EMD5000 module
- PSTN or 3G cellular module for remote access during primary outage



**Integrated Management Console Efficient** remote management of all rack infrastructure from UI or CLI

## Infrastructure Management Benefits

- Minimize MTTR and increase efficiency, always-available infrastructure provisioning, maintenance and repair, local or remote
- Increase MTBF with proactive detection & notification of infrastructure fault conditions, via email, SNMP, SMS or Nagios
- Reduce complexity, bolster security with single point of authentication and policy enforcement, monitor and log each management keystroke
- Increase efficiency and reduce human error, equip every rack with virtual remote hands in lights-out data centers and colocation cages
- · Leverage existing tools and workflow, integrates with standard management tools - flexible, open management solution



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# Who can most benefit from IM4200 infrastructure management?

- Hosting and Cloud Providers
- Internet Service Providers
- Telco and Cellco
- Colocation Tenants
- Education, Research and HPC
- Finance and Insurance
- Broadcast and Media
- Government and Military

# **Key Management Features**

# Comprehensive out-of-band

Maintain complete control during infrastructure fault conditions and network outages with serial, Ethernet and USB connectivity to critical infrastructure management consoles. Built-in dial-in or 3G cellular modem provides secure alternate path for troubleshooting and repair.

## Strong security and authentication

Lock down management interfaces with local and remote AAA including Active Directory, Kerberos, TACACS+ and RADIUS with RSA SecurID. Encrypt sensitive management traffic with IPsec and OpenVPN. Comprehensive logging features for compliance and audit trail. FIPS 140-2 certified for government and military applications.

## Vendor-neutral power management

Monitor UPS battery status, automate routine maintenance and load testing. Control PDU outlets via serial, USB and Ethernet. Enforce remote power permissions and map managed consoles to outlets, minimize MTTR with out-of-band power control. Uniquely supports over 100 power vendors' equipment.

## Cost effective, feature rich, open

Highly competitive price-per-port. More features out of the box, with extensible Auto-Response run book automation framework, root-level scripting and Linux source code access.

# Infrastructure management that scales

Extend IM4200 with Opengear Lighthouse central management to manage up to 5,000 Opengear appliances from a single pane of glass.

# **Ordering Information**

Model	Serial	Ethernet	Internal Modem	Internal Modem	Power
IM4208-2-DAC-X2	8	2	Cisco Straight	V.92	Dual AC
IM4208-2-DAC-X2-G	8	2	Cisco Straight	3G cellular	Dual AC
IM4216-2-DAC-X2	16	2	Cisco Straight	V.92	Dual AC
IM4216-2-DAC-X2-G	16	2	Cisco Straight	3G cellular	Dual AC
IM4216-34-DAC-X2	16	34	Cisco Straight	V.92	Dual AC
IM4216-34-DAC-X2-G	16	34	Cisco Straight	3G cellular	Dual AC
IM4232-2-DAC-X2	32	2	Cisco Straight	V.92	Dual AC
IM4232-2-DAC-X2-G	32	2	Cisco Straight	3G cellular	Dual AC
IM4248-2-DAC-X2	48	2	Cisco Straight	V.92	Dual AC
IM4248-2-DAC-X2-G	48	2	Cisco Straight	3G cellular	Dual AC

For regional shipping codes please append model number with destination country. e.g. "IM4208-2-DAC-X2-US" for USA. Available country codes, -US, -AU, -UK, -EU, -JP Models available with Classic (-X0) and Cyclades (-X1) serial pinout

For dual DC power supply models specify -DDC



## **Technical Specifications**

Less than 30W consumption

## **Dimensions**

17 x 12.3 x 1.75 in - 11.8 lbs 44 x 31.3 x 4.5 cm - 5.4 kg

## Storage

16GB internal flash

# **Temperature**

Operating: 5°C to 50°C / 41°F to 122°F Storage: -30°C to +60°C / -20°F to 140°F

#### **Software Features**

#### **Remote Management:**

HTTPS & SSH console, Nagios NSCA & NRPE, SNMP, TFTP, FTP server

## **Gateway Router:**

Stateful firewall, IPsec, OpenVPN, DHCP server, DDNS, Failover

## Wireless Certification

PTCRB, NAPRD, GCF-CC, R&TTE, EN 301, A-Tick, CDG TIA/EIA-690, CDG TIA/EIA-98-E

## **Latest Specifications & Ordering**

opengear.com/products/im4200infrastructure-manager



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