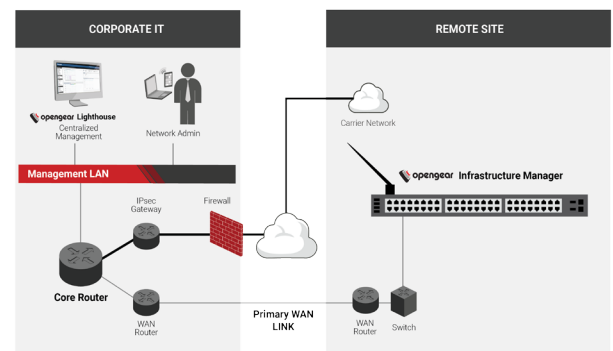


## Secure management for distributed edge networks.

Computers and communications equipment can now be found in the most remote and obscure places where there will never be technical staff. Branch locations, satellite offices, pop-up stores, remote retail locations contain equipment that must be managed remotely. And as the Internet of Things (IoT) and M2M drive the proliferation of remote devices, the complexity of distributed networks continues to increase.

Opengear's Smart OOB™ solutions raise secure remote access and management to a new level. We move intelligence to the network edge for smarter real-time decision-making. Smart OOB brings cloud level reliability to remote, edge networks to optimize uptime and provide hardware-layer business continuity. Everything is monitored at the remote sites including the physical environment. Our management solutions can be programmed to auto respond to events, and ensure uninterrupted availability for remote networks. And all Failover to Cellular™ enabled Opengear devices can use the cellular connection during system failures, network outages and new site turn up to provide OOB access to your end devices.

- Diagnose and solve problems from central location and single pane of glass
- Control remote devices, even those installed behind restrictive firewalls
- Out-of-band management enables reach even when the network is down
- Automatic failover and failback to cellular when the primary internet link is unavailable
- Monitor the entire site environment (temperature, humidity, smoke, water leak) with alarms and data logging
- Enterprise grade security ensures compliance with security policies for all devices at each remote location
- Instantaneous SMS or NMS alerts on remote physical access with intrusion detection sensors
- Models with gigabit UTP/SFP-Fiber ethernet ports provide flexibility and longevity



Opengear's SmartOOB solutions deliver full site monitoring, access and proactive issue notification which combine with root cause remediation to ensure business continuity at the remote site.

### Benefits

#### Smart OOB

- Improved cloud to edge network reliability
- Control critical network infrastructure with serial, USB and Ethernet connections
- Manage IT, network, security, power and environmental conditions
- Optional 4G LTE secure alternate path for troubleshooting and repair
- Backup and restore device images and configs to integrated TFTP server and USB storage
- Log system health and environmental conditions

#### Consolidated Management

- Comprehensive management of compute, storage, LAN, Internet/WAN, power and environmental
- Up to 48 RS-232 serial console ports for out-of-band monitoring and control
- Optional built-in switch for secure service processor and BMC access and IPMI control
- Vendor-neutral power management, uniquely supports over 100 power vendors' equipment
- In session remote control

#### Increased Accessibility at Remote Site

- Integrated failover to high speed 4G LTE cellular
- Minimize disruption and downtime with transparent, failover to cellular — and failback
- Embedded cellular module combined with multi-carrier capabilities enables selection of best cellular carrier at each remote site during installation or any later time

#### Strong security and authentication

- Lock down management interfaces with granular, role-based user permissions
- Remote AAA including Active Directory, TACACS+ and RADIUS with RSA SecurID two-factor
- IPsec and OpenVPN, strong-cipher SSH and FIPS 140-2 certified SSL; Stateful Firewall
- PCI-DSS V3.2 compliance
- Audit trail logs of each management connection and every keystroke

#### Automatic problem detection and remediation

- Increase MTBF with proactive detection and notification of infrastructure faults
- Detect console cable unplugged and server kernel panics
- Monitor temperature, humidity, water leak and more with optional EMD5000 module
- Deliver alerts to Nagios with NSCA and NRPE, SolarWinds and other NMS with SNMP
- Brute force protection temporarily blocks IPs that show malicious signs

## Technical Overview

Product comparison chart: <http://opengear.com/product-feature-comparison>



### Resilience Gateway

- 4 - 8 RJ45 RS-232 serial
- 4 x USB 2.0 Console ports
- 2 x TTL digital I/O
- Cellular Connectivity
- Built-in 4 x GbE Switch<sup>1</sup>
- GbE RJ45 or SFP Port<sup>1</sup>

**Part #**  
ACM7000-Lx

**Latest Specifications**  
<http://opengear.com/products/resilience-gateway>

<sup>1</sup> 8 port models do not have built in switch or SFP port



### Remote Site Gateway

- 4 RJ45 RS-232 serial
- 4 x USB 2.0 Console ports
- 2 x TTL digital I/O
- Built-in 4 x GbE Switch
- GbE RJ45 or SFP Port

**Part #**  
ACM7004-5

**Latest Specifications**  
<http://opengear.com/products/remote-site-gateway>



### Infrastructure Manager

- 8, 16, 32 or 48 RJ45 RS-232 (software selectable pinout)
- Optional 24 USB 2.0 ports
- 2 x USB 3.0 Host Ports
- 1 RJ45 RS-232 local console port
- 1 RJ11 V.92 modem
- Optional 4G LTE cellular modem
- Dual GbE LAN ports (RJ45 copper or SFP fiber)
- Optional Wi-Fi access point

**Part #**  
IM7200-X

**Latest Specifications**  
<http://opengear.com/products/im7200-infrastructure-manager>

Part #	Serial Ports			Serial Pinout		Management LAN Ports		Modem		USB		Digital I/O	Power			
	2-4	8	16-48	Cisco Straight	Cisco Rolled	Single	Switch	Internal PSTN	Internal Cellular	2.0	3.0		AC	DC	Dual AC	Dual DC
ACM7000-Lx	•	•		•		•	•		•	4		•	•	•		
ACM7004-5	•			•		•	•			4		•	•	•		
IM7200-X		•	•	• <sup>1</sup>	• <sup>1</sup>	•		•	•	24	2	•			•	•

<sup>1</sup> IM7200 pinouts are software selectable between x1 & x2 on a port by port basis.

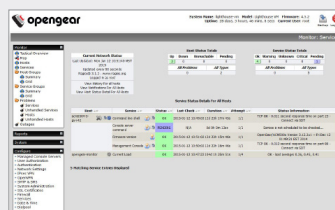
## Opengear Centralized Monitoring and Management

### Remote Management



- Fully integrated in- and out-of-band management solution
- Serial console, PDU, UPS, network host monitoring, access and control
- Secure HTTPS web and Linux SSH CLI user interfaces
- Management dashboard for status at a glance
- Extensive data logging and alert delivery feature set

### Centralized Management



- Centralized management of your critical infrastructure
- Configuration and connection to your OOB network from a centralized point
- End-to-end out-of-band management solution
- Serial console, PDU, UPS, network host monitoring, access and control from a single pane of glass



### Resources

- Web Resource Library:**  
<http://www.opengear.com/resources>
- Opengear Blog:**  
<http://blog.opengear.com/>
- Opengear Twitter:**  
<https://twitter.com/opengear>

### Your Contact