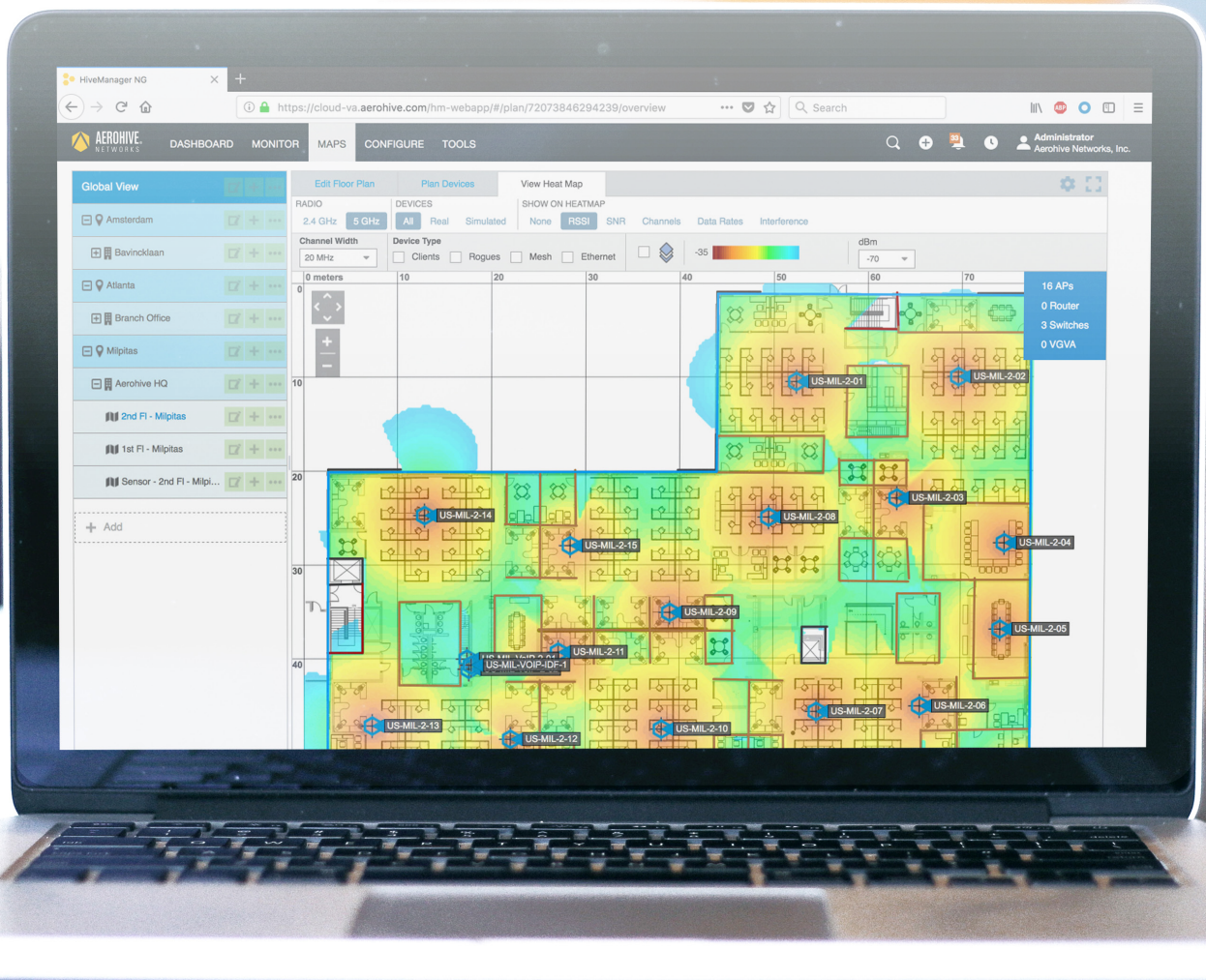


DATA SHEET

# HiveManager™ Public Cloud

Enterprise Access Network Management Offering Intuitive Configuration Workflows,  
Real-Time & Historical Monitoring, and Simplified Troubleshooting



# HiveManager™ Public Cloud

**HiveManager Public Cloud is an industry-leading and visionary approach to cloud-managed networking, built from the ground up to take full advantage of the SD-LAN and SD-WAN solution from Aerohive. Working in tandem with Aerohive's cutting-edge HiveOS, HiveManager Public Cloud leverages state-of-the-art cloud technology. Benefit from unified, full-stack management of Wi-Fi, switching and routing, centralized monitoring and configuration, real-time and historical reporting, simplified troubleshooting, integrated RF planner tools and much more.**

## Summary

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**HiveManager Public Cloud** operates on Aerohive's third generation Cloud Services architecture, capable of supporting millions of infrastructure devices and hundreds of millions of clients per Regional Data Center. All Aerohive Cloud Services (ACS) components are hosted in secure SOC Type 1 data centers with 24/7 monitoring, scheduled backups, and build-in disaster recovery capabilities. The Aerohive HiveManager offers rapid feature velocity, increased availability, and advanced flexibility desired for modern access network management.

Aerohive Cloud Services also provides a full suite of cloud-optimized open APIs for developers to create 3rd party applications and user experiences including user onboarding mechanisms, proximity-based services, presence and location analytics, and more.

HiveManager is available in two editions: *Connect* and *Select*. The Connect solution is bundled with Aerohive access points and switches and is free for the lifetime of the device. The optional upgrade to Select unlocks a slew of advanced features and capabilities that enhance network management, security and visibility.

## Key Features of HiveManager

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**Auto-Provisioning:** With zero-touch deployment, automatically apply a configuration policy, upgrade software and more.

**Dashboard:** Intuitive, visual dashboard with contextual filters for a comprehensive overview of network assets, application and data usage as well as user activity.

**Comparative Analytics:** Anonymously compare operational and performance-based metrics to those of other organizations of a similar size and vertical.

**Application Visibility and Control:** Visibility and control of application usage on the network, for professional and recreational applications and network services.

**Monitoring:** Real-time and historical view of devices, clients, alarms and events with automated out-of-band alerting.

**Simplified Deployment:** Guided workflows for creating and deploying network policies, with optional advanced configuration.

**Guest Access:** Flexible onboarding and management options for visitor and BYOD devices including intuitive Captive Web Portals, Social Login and PPSK.

**Network Health:** Real-time and historical view of client and device health with built-in remediation tools.

**Deployment Scalability:** Centrally manage over 1 million network connected devices including access points, switches, and routers

**Troubleshooting:** Help-desk optimized interface to triage historical and real-time client problems with actionable data to reduce escalations and provide a better end-user experience.

**Full-stack Management:** Single pane-of-glass management and visibility of wired and wireless devices.

**Multi-tenancy:** Allows MSPs and large corporations to efficiently manage multiple customers or subsidiary accounts from one master account with VHM switching or Hierarchical Management (HHM).



**IoT Management:** Securely connect IoT devices with AES encryption using Aerohive's unique Private Pre-Shared Key (PPSK).

**Open APIs:** A full suite of REST APIs and webhooks including: monitoring, identity, presence and location, configuration.

## Optional Free Cloud Management

HiveManager is available in two editions: *Connect* and *Select*. Connect is completely free and optimized for those who want to use Aerohive APs and switches to deliver enterprise-grade connectivity, a streamlined user experience and management simplicity but operate on a limited budget. The optional Select upgrade offers the full capabilities of HiveManager with SD-LAN and SD-WAN for larger organizations with comprehensive security, policy, analytics and troubleshooting requirements.

Not sure which solution is right for you? With one-click flexibility, administrators can start with Connect and upgrade to Select as their requirements or budget evolve.

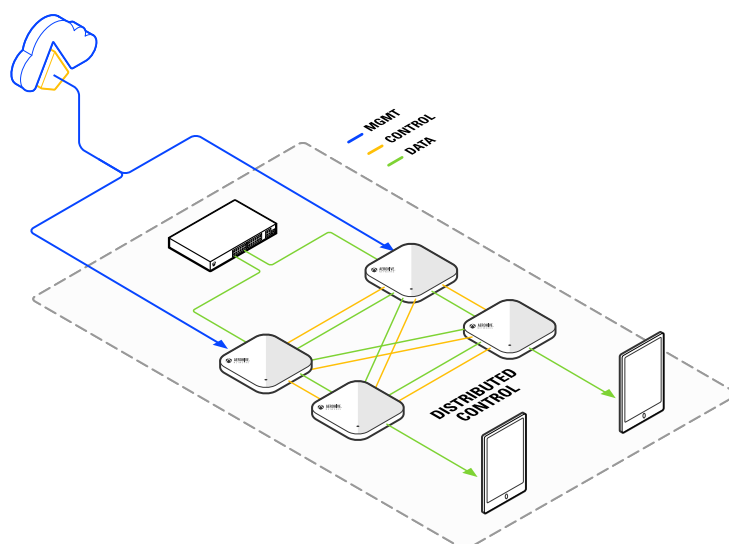
 <b>Connect</b>	 <b>Select</b>	
CLOUD-MANAGED ENTERPRISE WI-FI	ADVANCED IT MANAGEMENT SUITE	
Enterprise-class connectivity	360° Device & Client Monitoring	Customizable L7 Firewall
Unified Cloud Network Management	Historical Dashboard & Troubleshooting	Rogue Detection and PCI Compliance
Auto-Provisioning Tools	Aerohive Private Pre-Shared Key	Role-Based Access Controls
Network Device & Client Monitoring	Application Visibility and Control	Advanced Quality of Service
RF Planning	Real-Time Heat Maps	Advanced Switch & Router Management
Guided Network Configuration	VPN and GRE Tunneling	Comparative Analytics
802.1X and PSK Secured Networks	Private Cloud / On-Premises	Spectrum Analysis
HiveCare™ Connect Forum	Multiple Network Policies	Integrated Presence and Location

*Aerohive Connect provides subscription-free enterprise Cloud networking, with a one-click upgrade to the advanced features of Aerohive Select.*

## Distributed Control

HiveManager is a Network Management System (NMS). It leverages Aerohive's unique distributed control architecture (built into HiveOS) and eliminates the needs for centralized network controllers. The control and data planes operate at the edge. With this **out-of-band control plane**, no control or data plane information traverses ACS.

As a result, network devices can operate without having to connect to HiveManager. This is essential to support continuous operation in the event the WAN connection to the HiveManager Cloud is interrupted. It also enables HiveManager to meet stringent regulatory restrictions and achieve optimal network performance.



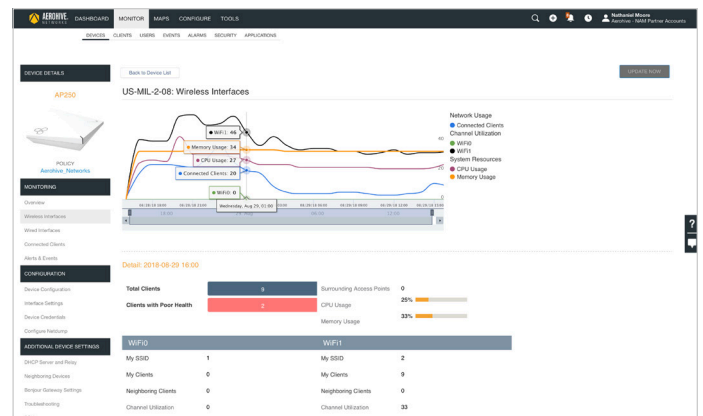
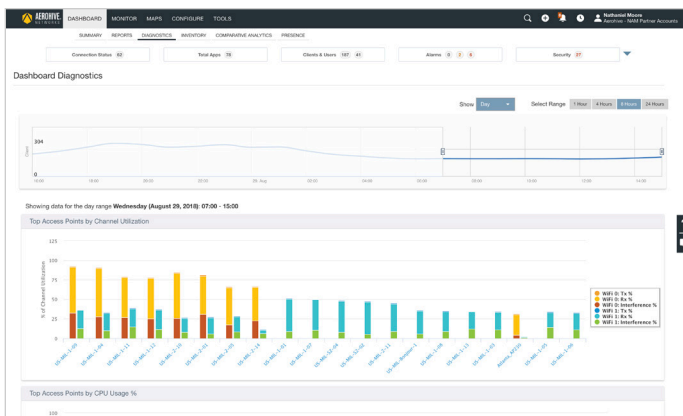
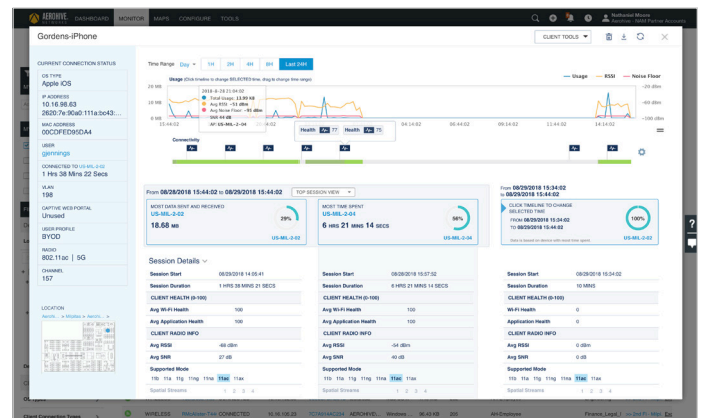
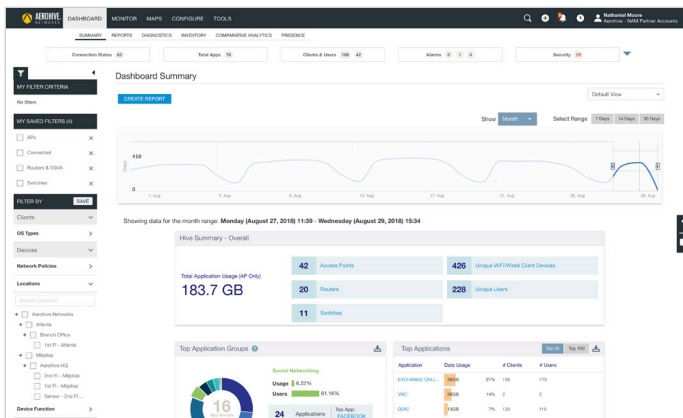
*Aerohive's unique distributed control architecture.*



## Security and Operation

- Accounts are password protected and accessed via secure SSL
- Management traffic is encrypted and restricted using industry-proven CAPWAP protocol over HTTPS
- Out-of-band operation ensures no customer data traverses Aerohive's Cloud Services (ACS)
- Single-Sign-On (SSO) to HiveManager Public Cloud for administrator accounts
- Multi-Factor authentication with Google Authenticator for administrator accounts
- Multi-tenant architecture with secure account separation
- Centralized monitoring and management
- Integrated RBAC to delegate select HiveManager roles and permissions to different administrators
- VAR and partner management capabilities including account provisioning and maintenance
- HiveManager Cloud connectivity does not impact network operations servicing end-users
- 99.99% uptime, excluding maintenance windows

## Intuitive Interface



## Simplified Deployment

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- Customer self-service sign-up
- Guided workflow for network policy deployment
- On-screen step-by-step guided configuration
- RF planner with map import and export
- Ability to swap simulated APs with real Aerohive APs on RF planner map
- Devices automatically connect to HiveManager for provisioning
- Devices auto-provision with network policy and firmware updates

## Centralized Configuration

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- Guest Access functionality
- Device templates for switches, routers and APs
- Aerohive device as RADIUS server or RADIUS proxy, and as DHCP server
- Centralized view of all configuration objects
- Ability to bulk edit device properties
- Ability to schedule firmware upgrade
- Command Line Interface (CLI) access to Aerohive devices
- Support for select Dell N-Series switches
- Active directory/LDAP
- IPv6 support
- Syslog and SNMP server configuration
- Auto-provisioning
- Configuration audit, backup, restore, import and export
- Support for Aerohive VPN gateway (VG-VA)
- Multi-tenant capability: supports multiple virtual organizations

## Centralized Policy Management

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- Device classification by location & timezone
- Customer application definition
- Client classification by location, OS type, MAC address
- Multiple user profiles for each SSID
- Time-based firewall and QoS policy
- Application, network and MAC layer firewall policy rules
- WIPS policy for rogue AP detection and mitigation

## Security and Privacy

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- Role-based access control
- Customer and network data is private and secure
- No customer data traverses Aerohive's network
- SSO for HiveManager administrators via SAML
- Optional multi-factor authentication with Google Authenticator for administrators

## Security and Privacy (Continued)

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- EU General Data Protection Regulation (GDPR) features including:
  - Search for, download and delete personal data for specific users
  - Creation of reports to document the above actions

## Dashboard

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- Graphical widgets and status cards with drill-down capabilities
- Time-range slider on dashboard for historical view
- 360° views of Aerohive network policies, AP, client devices, users and apps
- Global search function by network policy, MAC address, serial number, user, hostname or application name
- 30-days of historic monitoring and reporting data
- Interactive Network Summary Report with easy sharing
- Savable contextual filters by location, SSID, policy, user, profile and client OS type
- Comparative Analytics to anonymously compare operational and performance metrics against other cloud customers of a similar size and industry

## Troubleshooting

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- Client 360° behavioral analysis; real-time and historical network performance monitoring and optimization
- Help-desk optimized interface with problem summary and suggested remedy
- Dedicated Helpdesk user role
- Real-time troubleshooting with probe messages and stage filters
- Historical troubleshooting with automatic issue detection
- Mark issue resolved or escalate issue with email notification
- Built-in Command Line Interface (CLI) and remote SSH
- RADIUS test
- AP technical data download
- VLAN probe tool for simplified troubleshooting of the wired network
- Optional packet capture analysis with partner solution (*CloudShark*)

## Monitor

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- WIPS history report
- Drill-down capability from client list to client 360° view
- Device list with rich utilities for advanced configuration and investigation
- Real-time client list with SNR, RSSI, data usage and connection status
- Savable and reusable filters shared across dashboard and monitor
- Alarm and event lists with historical and real-time data
- PCI DSS 3.2 compliant reporting
- Rogue AP and rogue client monitoring
- Real-time data for connection clients and users
- Google Maps integration and navigation with floorplan upload capability

### **Guest Access**

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- Onboarding and management of visitor and employee personal devices (BYOD)
- Provides multiple onboarding workflows via Captive Web Portal, Kiosk app and Guest Check-In applications
- Private PSK (PPSK), 802.1X (RADIUS) and PSK authentication
- Supports 3rd party and customized CVPs including HTML upload for added deployment flexibility

### **Supported Languages**

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- English, German, Spanish, French, Italian, Japanese, Korean, Portuguese, Chinese

### **Reliability**

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- Data centers with SOC Type 1 compliance (formally SAS 70 and/or SSAE 16), Type 2 and 3 compliance
- High availability with disaster recovery and redundancy
- 99.99% Uptime SLA (excluding maintenance windows)
- Scheduled backups
- 24x7 monitoring

**HiveManager Public Cloud - SKUs**

SKU	DESCRIPTION
<b>AH-NGCS-XXX-1YR</b>	HiveManager Public Cloud Subscription for 1 network device for 1 year
<b>AH-NGCS-XXX-3YR</b>	HiveManager Public Cloud Subscription for 1 network device for 3 years
<b>AH-NGCS-XXX-5YR</b>	HiveManager Public Cloud Subscription for 1 network device for 5 years

