

# SANGFOR IAG

## M12000-AC-I

As the leading vendor of Network Management, Sangfor IAG has been already listed in the SWG Gartner Magic Quadrant for 10 years in a row.

It has professional internet bandwidth management, application control, URL filter, traffic control, information control, illegal hotspot/proxy control, behaviour analysis, wireless network management and many other features, which can truly help you achieve a Unified Internet Behaviour Management of all clients in the entire network.

IAG-M12000 is the ideal network management solution for Small & Medium Enterprises. It is also ideal for Branch Deployment.



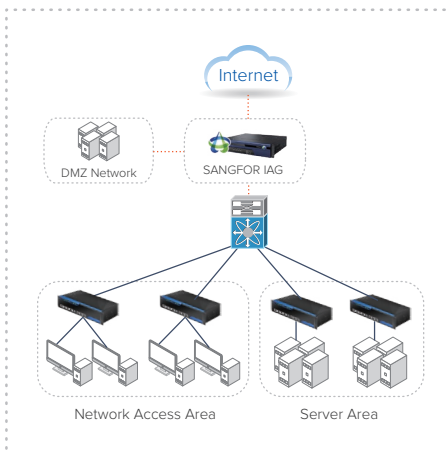
All Pictures shown are for illustration purpose only. Actual Product may vary.

Performance & Capacity	IAG M12000-AC-I	Hardware Specifications	IAG M12000-AC-I
Dimension	2U	RAM	96 GB
Application Layer Throughput	40Gbps	Storage HD Capacity	1 TB + 64GB SSD
Recommended Concurrent Users	200,000	Power [Watt] Max	325W
Concurrent Connections (TCP)	24,000,000	Operating Temperature	0°C~40°C
New Connections (TCP)	400,000	Humidity	5%~95% non-condensing
Redundancy Power Supply	Support	System Weight	20.0 Kg
		System Dimensions	600x440x89 mm
Compliance	IAG M12000-AC-I	Network Interfaces	IAG M12000-AC-I
Certifications	CE, FCC, IPV6 Ready	Bypass (Copper)	2 pairs
		10/100/1000 Base-T	4
Network Interfaces	IAG M12000-AC-I	SFP	2
		10G Fiber SFP	4
Optional Interface	Each extended slot number can be configured and use one of the following NIC: ①. 4x1GbE BASE-T    ⑤. 4x1GbE BASE-T & 4x1GbE SFP ②. 4x1GbE SFP      ⑥. 2x10GbE SFP+ ③. 8x1GbE BASE-T   ⑦. 4x10GbE SFP+ ④. 8x1GbE SFP      ⑧. 2x40GbE QSFP+	Serial Port	1 x RJ45
		USB Port	2
		Extended slot number	4



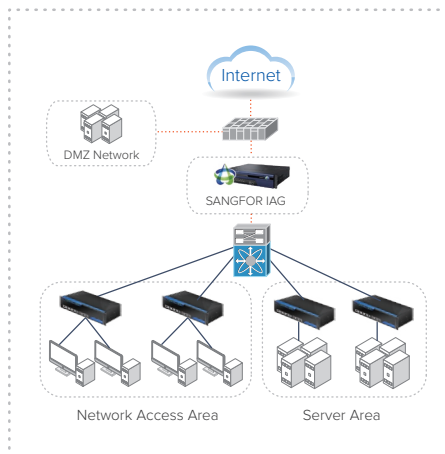
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### Deployment Modes



#### Gateway Mode

It uses layer-3 switching mode so that all traffic is handled by Sangfor IAG to implement functions such as authentication, proxy server, traffic management, behaviors control, reporting and log audit of internal users. Sangfor IAG can help organizations improve the work productivity, make the internet bandwidth more efficient and reduce the overall TCO.



#### Bridge Mode

The bridge mode is useful for organizations that do not wish to modify the current network structure, router configuration or IP configuration. Sangfor IAG will help organizations improve the work productivity, make the internet bandwidth more efficient and let the traffic & user behavior become visible and controllable.

#### Bypass Mode

In this mode, Sangfor IAG connects to the mirrored port of the switch. In bypass mode, the existing network structure is not affected. This decreases the occurrence rate of single-point failure. Sangfor IAG will help to monitor and audit data traffic & user behavior on the LAN, as well as manage & control TCP behavior of users.

#### Single-Arm Mode

In Single-arm mode, Sangfor IAG connects to a hub or switch to monitor and control the entire local network. The customer's network does not need to be reconstructed. Sangfor IAG implements functions including but not limited to: authentication, proxy server, traffic management, behavior control, reporting and log audit of internal users.

#### Authentication Mode

In the authentication mode, Sangfor IAG works as an authentication server, offering unified authentication management and the multiple authentication method such as SMS, WeChat and Facebook that can be achieved when using common WLAN service.

## Key Features

### ① Unified Management of all Clients in the Entire Network

Sangfor IAG can effectively control both Wired and Wireless networks, achieving Unified Management of all clients in the entire network. Rich and flexible authentication methods, such as username/password, IP/MAC binding, etc., as well as value-added marketing authentication methods (QR code, SMS, WeChat, Facebook, Alipay, etc.) are available in Sangfor IAG. It can also control permissions based on user, application, location and client types.

### ② Intelligent Control with Visibility of User Behavior & Traffic

Sangfor IAG is able to manage and control network applications & web browsing more conveniently and accurately. It has one of the largest application signature database and URL database, which are updated every 2 weeks. Its bulk management mode for large enterprises greatly improves the productivity and efficiency.

Thanks to three unique major traffic management technologies (Dynamic Traffic Control, Intelligent Flow Control, Quota Control) of Sangfor IAG, the bandwidth utilization can be improved by more than 30%.

### ③ Simple & Intuitive Reporting for Simpler Network Management

SANGFOR IAG is built-in with an Advanced Report Center, which supports various customized reports based on traffic statistics, queries, ranking, times and behavior of user & user groups, helping enterprises analyze the root causes of all network issues. IT managers are provided with all the detailed information they need to know about their network, including Internet access activities, bandwidth consumption and viewed contents.

Reports are self-generated and automatically & regularly sent to an appointed e-mail address to effectively assist in the network design, secure it and optimize the usage of the bandwidth.

### ④ Business Intelligence

The Sangfor Business Intelligence platform is based on Hadoop and adapted to Mapreduce data process technology & NoSQL database to perform TB data query' s in seconds and makes data processing more efficient and intelligent. Traffic identification distinguishes between user and machine traffic while the Graph Computing and Machine Learning performs modeling analysis of all traffic. Scenario based applications brings you the best ever operation experience.

## Hardware Description

1. Management Console
2. USB ports
3. Line Interface
4. LED Indicators
5. Fan Trays
6. Switch
7. Power Outlet



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## Software Features

### 01 User Authentication and Management

Mapping and identifying users | IP/MAC binding, hostname, USB Key, SMS, QR-Code, Portal, WeChat, Facebook, etc. | User accounts importing and synchronizing from LDAP, CAM3, etc. | SSO integration: AD/POP3/Proxy/Radius, 3rd party authentication device and DB Server.

### 02 Access Control | SSL Decryption

Application control | URL filtering | Search Engine Control, Enhanced Email/IM control | File filtering | SSL traffic control | Illegal Wi-Fi.

### 03 Proxy Avoidance Protection

Anti-Proxy with Endpoint Secure Integration | Anti-proxy with IAG application signature database.

### 04 Bandwidth Management

BM according to specific object/policy | International & Domestic BM | Bandwidth Guarantee & Limitation | Multi-level SON Channel | Dynamic BM | Virtual line | Multiplexing and intelligent routing.

### 05 Report Center

Report based on application traffic, user behavior, etc. | Graphical reports by counts, ranking, comparison, trends analysis with statistics, pie, bar, line chart, etc. | Real time report | Content log for IM chat records, emails, forum posts, etc. | Customized CIO report | Built-in internal and optional external report center | Export to CSV or PDF format.

### 06 Management & Deployment

Centralized management support | Proxy functions: HTTP/HTTPS Sockets 4/5, ICAP | HA support (A/A,A/P), Hardware bypass | Deployment mode: Route, Bridge, Double Bridge, Bypass, Single-arm | Built-in Firewall | IPsec VPN.

### 07 Endpoint Security Compliance

Ingress Client Based (Agent) | Ingress Client rule based on Login domain, operating system, process, file, registry, task, patch, access check, access control, external device control, windows account, anti-defacement and anti-virus software related to update and database version | Traffic Based (Agentless) | Traffic Based rule based on Check personal software and enterprise software for anti-virus destination server IP heartbeat.

### 08 Asset Management

Asset Discovery: Identify and list of IOT devices, advanced search and filter, export to csv | Asset Classification: Categorize endpoint type based on host, mobile endpoint, network device, dumb endpoint, medical equipment, network endpoint sharing and custom | Endpoint Check: Rule configured based on ingress client based (agent) and traffic based (agentless).

**DESCRIPTION**

*For more information on Sangfor full range of support & services, please contact your local representative.*

**Sangfor IAG M12000-AC-I Hardware (Mandatory)**

M12000-AC-I, Sangfor Internet Access Gateway Hardware.

**Sangfor IAG M12000-AC-I Essential Bundle (Mandatory)**

M12000-AC-I, Essential Bundle (Bandwidth Management, User Authentication, URL Filtering, Traffic Control, User Behaviour Audit, Content Audit, Proxy Server, Anti-proxy, Endpoints Management, Report Center, Multi-links(Link Load Balance), Sangfor VPN, Sangfor URL Database), 1 Year.

**Sangfor IAG M12000-AC-I Premium Bundle**

M12000-AC-I, Premium Bundle (Bandwidth Management, User Authentication, URL Filtering, Traffic Control, User Behaviour Audit, Content Audit, Proxy Server, Anti-proxy, Endpoints Management, Report Center, Multi-links(Link Load Balance), Sangfor VPN, Sangfor URL Database, Engine Zero, Neural-X), 1 Year.

**Sangfor IAG M12000-AC-I Engine Zero License**

M12000-AC-I, Engine Zero license, AI powered Malware Detection, Anti-malware, Anti-virus, 1 year.

**Sangfor IAG M12000-AC-I Neural-X License**

M12000-AC-I, Neural-X license, Threat Intelligence and analytics, Unknown Threat & Advanced Threats Defense, Value-Added Cloud Service, 1 year.

**Sangfor IAG M12000-AC-I NAC with Ingress Client License**

M12000-AC-I, NAC Modules including Endpoint Check, Ingress Client, 1 Year.

**Sangfor IAG Care Services (Mandatory)**

M12000-AC-I, IAG Software and Technical Support Service, IAG RTF, SDS, NBD and 24\*7\*4 Premium Hardware Service : 1 year, 2 years or 3 years options

**Sangfor IAG Software Module, Permanent License**

IPSec VPN Remote Client, IPSec VPN Remote Client, 1 User Support SMS authentication (requires SMS Gateway or Modem)

**Sangfor IAG Accessories**

- 1) Authentication KEY, Access authentication KEY for user | 1 key
- 2) Data Center Authorization key, Authorization for data center access | 1 key
- 3) Free Audit KEY | 1 key
- 4) GSM/CDMA SMS Modem

**Business Intelligence**

- Sangfor Business Intelligence provides scenario-based analytics & applications including Electricity Waste Analytics, Event Analytics, Leased Line Analytics (Report Center, Bandwidth Analytics, Internet Access Analytics are built-in)
- 1000 endpoints license for BI.
- Software and Technical Support, BI and application upgrade, Sangfor IAG-BI, 1 year, 3 years, 5 years.

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