# G-AP-IX460

Indoor 802.11a/b/g/n/ac/ax WiFi AP with PoE+ (in-wall) 1800 Mbps Dual Band 2X2 MU-MIMO



Its in-wall design makes this AP ideal for individual spaces where we look to minimise cabling such as hotel rooms, offices, hospitals, schools...



Antenna	Internal omni, 3dBi gain	
Interfaces (see image)	A/H. 2 x RJ45 pass Through ports. B-E. 4 x 1 Gbps RJ45 LAN Ports F. USB 2.0 port G. RJ45 1 Gbps WAN port I. RJ45 Console port J. Reset button. K. DC port	
Feeding source	DC: 12V 1A Jack connector (not included) PoE: 48V IEEE 802.3af/at	
Average power consumption	48V PoE ≈ 12 W (peaks up to 30W) DC: 12V 1A	
Size	160 x 86 x 29 mm	
Weight	300 g	
Temperature	Operation: -20°C - 55°C (-4°F - 131°F) Storage: -20°C -70°C (-4°F - 158°F)	
Humidity	Operation: 5% - 95% (non- condensing) Storage: 5% - 95% (non-condensing)	



Distributed intelligence, no need for a central controller.



Single management platform for all network elements.



High network scalability. Not limited by size or AP number.



**Automatic network** optimisation.



**Precise and robust Location** Analytics using only WiFi.

## Galgus® complete solution







Network Intelligence Management

Galgus' proprietary technology, CHT® (Cognitive Hotspot Technology), provides WIFI networks with a distributed intelligence with no need for a central controller. This avoids bottlenecks and single points of failure, improves performance, save costs, and enables advanced functionalities.

WiFi Features		
Standards	IEEE 802.11a/b/g/n/ac/ax	
Frequency bands	2.4 GHz (802.11 b/g/n/ax): 2.4 GHz ~ 2.484 GHz.	
	5 GHz (802.1a/n/ac/ax): 5.150 GHz ~ 5.850 GHz	
МІМО	2x2 MU-MIMO (2.4 GHz) 2x2 MU-MIMO (5 GHz)	
Spatial streams	2 per band	
Chanel width	20, 40, 80, 160 MHz	
Modulation  DL/UL-OFDMA = BPSK,QPSk  16-QAM, 64-QAM, 128QAM  256QAM y 1024QAM, y  DSSS = DBPSK, DQPSK, CCK		
WiFi features	IEEE 802.11h (DFS)  Tx Beamforming  LDPC, STBC  MSS clamping  IEEE 802.11r/k/v  WMM®  Power save  WISPr  IP/URL/MAC filtering	

Performance and capacity		
	Peak: 1800 Mbps	
PHY rates	2.4 GHz: 600 Mbps	
	5 GHZ: 1200 Mbps	
Multi SSID	Up to 8 (4 at 2.4 GHz and 4 at 5	
	GHz)	
Clients/AP	Up to 128	

Networking	
IP	IPv4 & IPv6 DHCP Client/server Static IP Dynamic IP
Network	IEEE 802.1s IEEE 802.1d VLAN tagging (802.1Q) Supports LACP, LLDP
VLAN	Dynamic VLANs Port forwarding Segmentation based on VLANs Tag VLAN based on SSID
Mesh	802.11s. Up to 2 mesh extenders Dynamic re-routing Robust reaction to DFS events

## Advanced features (CHT®)

- WPA/WPA2/WPA3 personal & Enterprise
- Passpoint® R2 (Hotspot 2.0)
- RADIUS support with dynamic VLANs
- Captive portal with social login
- IEEE 802.1X
- Supports ACL
- LDAP integration
- Isolated SSIDs
- URL filtering
- Firewall
- SSL / TLS / SSH
- Secured communication between APs
- WIDS & WIPS
- Location and tracking of hackers (Rogue AP or
- Protects against DDoS attacks

#### **Network optimisation**

- Distributed intelligence with no need for a central controller
- Smart Roaming 802.11r (seamless handoff)
- Automatic channel and bandwidth assignment
- Proactive load balancing (real time resource allocation)
- Pre-balancing
- Traffic control
- Automatic power control
- Smart multicast
- Airtime fairness
- Smart and robust Mesh
- Dynamic probe management for very high density scenarios

#### Certifications and regulatory compliance

Standards	CE Mark (EN 60950-1; EN 62479; EN300328; EN 300440; EN 301489) RED directive 2014/53/EU FCC
Environmental	ROHS

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# CONFIGURATION, MANAGEMENT AND LICENSES

Galgus' WiFi networks can range form a single access point to thousands of them. Many of the advantages provided by the embedded technology CHT® are only relevant for networks with more than one AP, as the distributed intelligence an the communication between the APs are enabled. This allows them to take collective decisions that optimise the performance of the entire network.



Each access point can be configured locally though the console port; however, when there are several network elements and we want to configure more advanced functionalities, Galgus' management tool is required. Additionally, this management tool can be used to configure other GALGUS network elements, such as switches, Network Enhancers, etc; resulting in a simplified and easy to use unified management tool.

Galgus' network manager requires an annual license and offers all the advantages of a Cloud solution (scalability, continuous updates, pay as you grow, reduced operation costs, improved security, immediate availability, increased service availability...).

This tool allows one to supervise, control, update, troubleshoot and get alerts from the network, in addition to providing all kinds of advanced analytics:

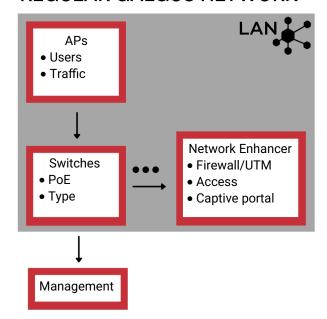
Features		No manager	Cloud manager
	Local web interface	✓	✓
	Type of license	Lifetime	Annual license
	Software maintenance	Optional (CHT)	Included
Ž	Type of Software maintenance	Manual optional	Automatic
ano	Modular licenses	✓	✓
) Je	Zero-Touch Provisioning (ZTP)		✓
Ä	Unified management platform		✓
Management	Platform updates		✓
	Customisable alerts		✓
	CLI with remote access (SSH)		✓
	Open API (REST)		✓
Network analytics	Real time location of associated devices		✓
	Location-enabled real time network KPIs		✓
	Coverage estimation		✓
	WLAN design		✓
	Client distribution		✓
	Client details		✓
	Historic record and visualization of network KPIs.		✓
S	Historic data exportation of network KPIs.		✓

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#### REGULAR GALGUS NETWORK



Depending on the Network's needs in terms of size and use, a complete Galgus solution incorporates different elements:

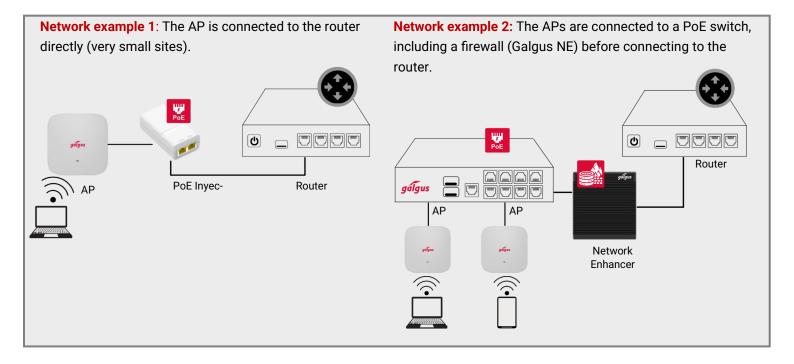
**Access Points (APs)**: The choice of one or another depends on the expected density of users and traffic. All Galgus APs incorporate CHT®, our distributed intelligence software, which <u>eliminates the need for a central controller.</u>

**Network switches:** Manageable or not, with or without PoE. Can be chosen from a wide range to adjust to the needs of the network.

**Network Enhancer (NE):** Used to provide advanced associated services and to offload the AP from certain network functionalities such as Firewall, access control, etc, all managed via web interface.

All these elements can be managed through Galgus' management tools.

ALL Galgus' access points and networks can incorporate Galgus' business intelligence tool: **GALGUS LOCATION ANALYTICS**.



### OPTIONAL SUPPORT SERVICES FOR GALGUS NETWORKS:

**3D simulation and network design:** Always recommended as the best way to guarantee the most accurate solution from a technical point of view, ensuring the highest performance and client satisfaction while reducing investment costs.

Remote configuration: Galgus remotely configures and ensures the correct performance of the network.

**Remote network management:** GALGUS, as manufacturer and technology owner, offers a network management service, to ensure it is always available and offering the highest performance and quality of service.

L2 technical support: GALGUS will always provide technical help regarding the acquired products and services.

Warranty extension: Possibility to extend the warranty of most GALGUS devices up to 5 years.

Turnkey projects.