



Part No.: 221097  
Vendor Part No.: ALL-SCG5410PM-10G

## ALLNET Apollo full managed Layer2+ 10Port • 8x 2.5GB • PoE Budget 240W • 8x PoE at • 2x SFP+ • Apollo • ALL-SCG5410PM-10G

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### EAN CODE

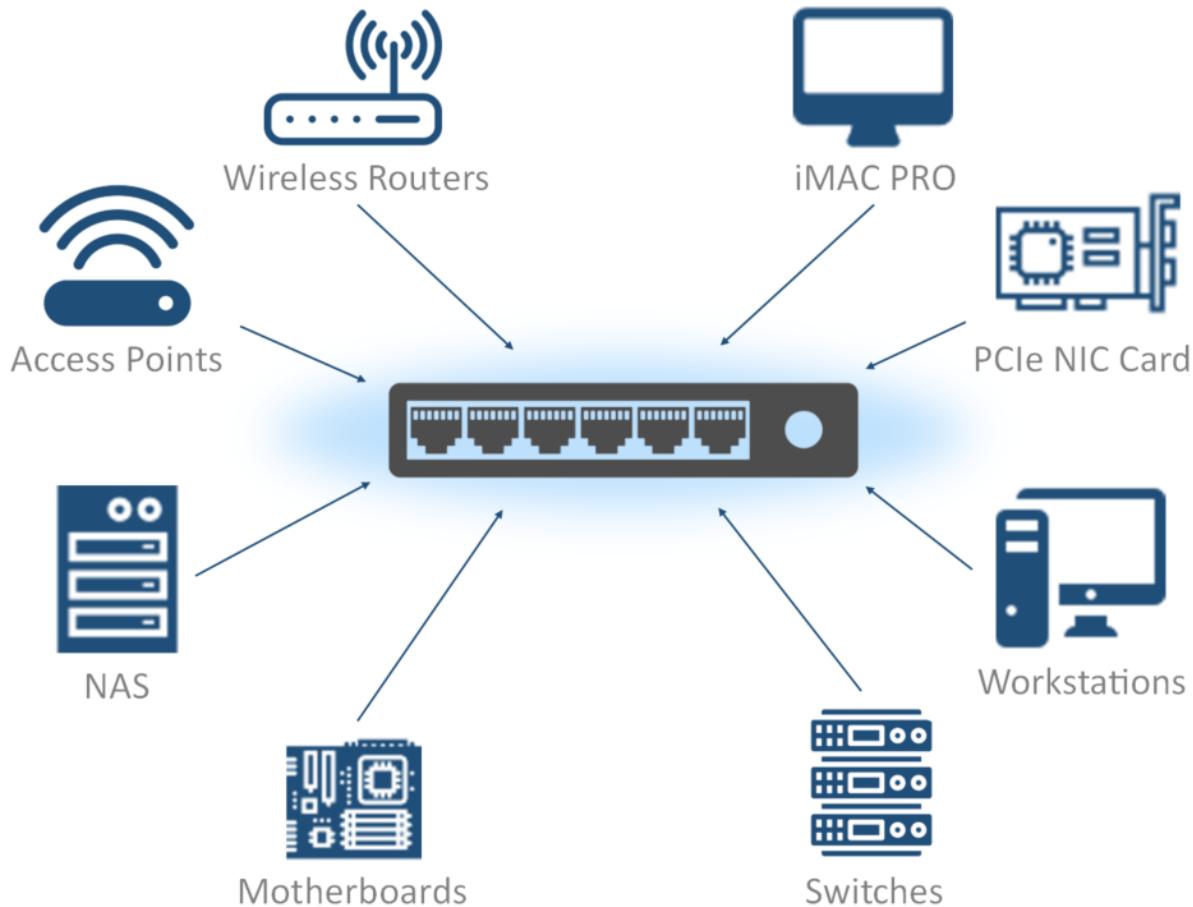


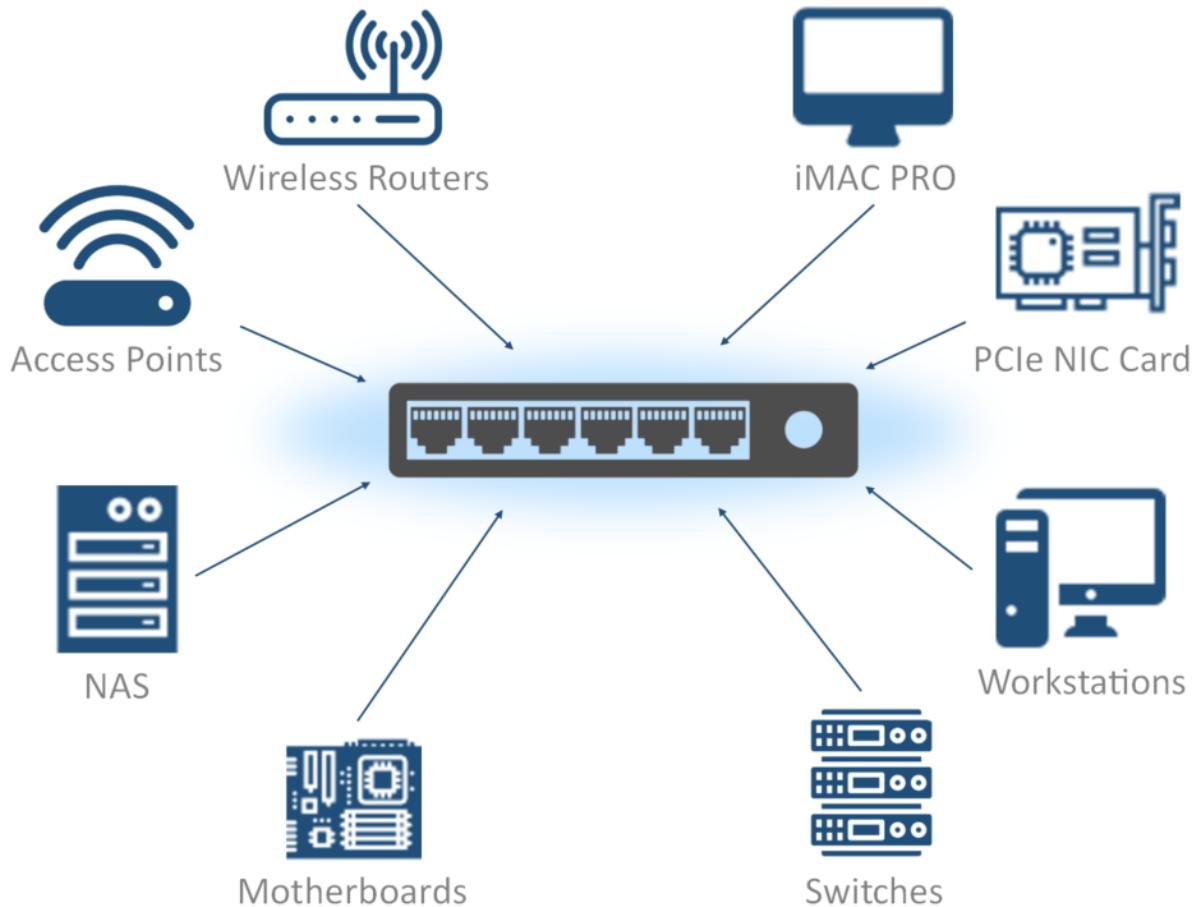
### Highlights:

- 8x 2.5GbE PoE Ports
- 2x SFP+ 10G Ports for Uplink
- Support PoE IEEE802.3af / at with max. 30W per Port
- PoE Budget 240W
- Supports Jumbo Frames
- Support IGMP snooping v1/v2/v3
- Support Link aggregation
- Support Loop protection
- Support Spanning Tree Protocol (STP) and Rapid Spanning Tree (RSTP)
- **Works as standalone switch or with Apollo controller (see ALL-AC100)**

There are more and more applications that need a faster Ethernet switch. ALLNET Apollo's MultiG switches support faster Wi-Fi 6/6E/7 APs, accelerate large file uploads and downloads, make video conferencing smoother and prevent jitter.

### 2.5G / 10G Devices Ecosystem





## Application

Multi-GE





## Feature

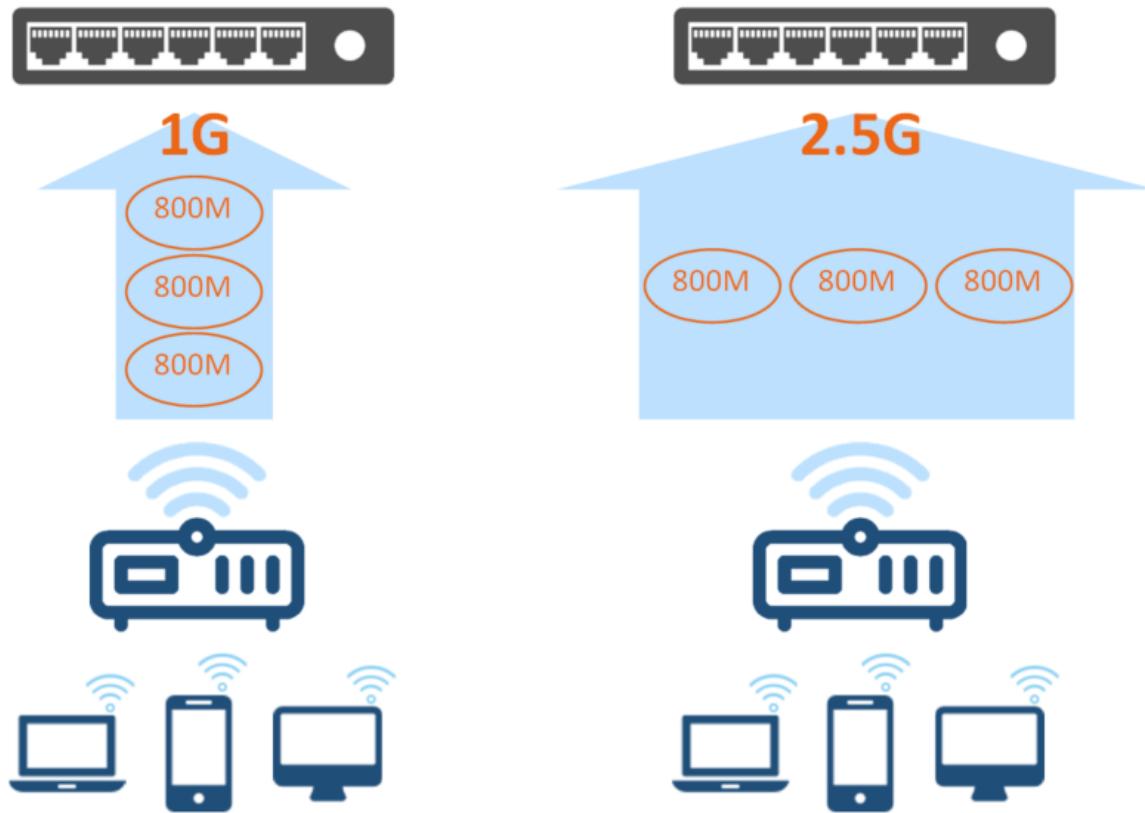
### Multi-GE access interface

The uplink bandwidth of WLAN APs has been increased from 2.5 Gbps in 802.11ac to 5 Gbps or 10 Gbps. Traditional gigabit access cannot meet the uplink bandwidth requirements of APs. Emplus's Multi-GE switches the ports support 100M\*/1/2.5Gbps even 5G/10Gbps(SMX series) auto-sensing, meeting the bandwidth requirements of high-speed wireless APs in the Wi-Fi 6 era. In response to the next-generation Wi-Fi standard (Wi-Fi 7), Emplus' Multi-GE switch family with Wi-Fi 7 features will be coming soon.

Multi-GE switch ports with auto-negotiation of 100Mbps, 1Gbps, 2.5Gbps, and 5Gbps speeds on existing Cat5e cable, and all the way up to 10-Gbps speeds over newer Cat6a cabling (below table).

Cable	1 G	2.5G	5 G	10G
<b>Cat5e</b>	•	•	•	N/A
<b>Cat6</b>	•	•	•	• (55m)
<b>Cat6a</b>	•	•	•	•

\*100Mbps does not support half-duplex mode



## Spanning Tree Protocol (STP)

Supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence.

## Loop protection

If the switch detects a loop, it disables the source port from forwarding data packets originating from the switch to avoid broadcast storms.

## Jumbo frame support

Supports up to 10K bytes frame size to improve the performance of large data transfers.

## IGMP snooping v1/v2/v3

Improves network performance through multicast filtering, instead of flooding traffic on all ports.



## Link aggregation

Groups together multiple ports up to a maximum of eight (8) ports per trunk automatically using Link Aggregation Control Protocol (LACP).

## Software Features - Apollo

System Information
System Name
System Location
System Contact
System System Features
IPv4 Settings -IP address / Subnet mask -DHCPv4
IPv6 Settings -Global address -Link-local address -DHCPv6
Domain Name System (DNS) -IPv4 (Support 4 Servers)
Port
Port Configuration -Speed configuration -Flow control (802.3x, back pressure) -Port description (support 128 bytes) -Port extend mode
IEEE 802.3az Energy Efficient Ethernet (EEE)
L2
MAC Address Table -MAC address table (16K) -Age Time -Static MAC address
Jumbo Frame -Per-Port/Per-system (9216 bytes)
Spanning Tree -802.1w rapid spanning tree -802.1s multiple spanning tree -MSTP instance (16 instances) -Per device BPDU forward -Per port BPDU forward -Per port BPDU Filter -Per port BPDU Guard



- Per port Root Guard
- Edge port mode
- Point to Point mode
- Per port admin state

## L2

Loopback detection

-STP independent + port base shutdown only

Multicast Filtering

- Unknown Multicast Drop (unregistered multicast filtering)
- Unknown Action-Drop/Flood/Router Port

Multicast Group

- Support Max. multicast group (256 groups)

IGMP Multicast Forwarding

- MAC Group Address FDB

IGMP Snooping

- Support v1, v2, v3 awareness
- IGMP snooping fast leave (per-vlan)
- IGMP querier
- Dynamic router port
- Static/Forbidden router

MLD Multicast Forwarding

- MAC Group Address FDB
- IP Group Address FDB

MLD Snooping

- Support v1
- MLD snooping fast leave (per-vlan)
- MLD querier
- Dynamic router port
- Static/forbidden router

802.3ad Link Aggregation

- Static Trunk

Max. 8 ports/group

Max. 8 groups per device

-Dynamic Trunk (LACP)

Max. 8 ports/group

Max. 8 groups per device

-Load Balance Algorithm (source/destination MAC, VLAN, EtherType, source/destination IP address, TCP/UDP ports)

-LA description

802.1ab Link Layer Discovery Protocol (LLDP)



#### **EOAM**

- SFP information, SFP+ DDM
- Cable diagnostic
- Port statistics

#### **DHCP**

- IPv4 DHCP Relay
- DHCP Relay
- Max. IPv4 DHCP servers
- Option82 Status
- Option82 Strategy (Keep/Replace/Drop)

#### IPv4 DHCP Snooping

- DHCP Snooping
- Binding list
- Statistics

#### **VLAN**

##### 802.1Q Support

##### VLAN Group

- VID from 1-4094 (Max. 256 VLAN groups)

#### GVRP

- Dynamic VLAN groups
- Per port / device enable / disable
- VLAN advertisement

#### Voice VLAN

#### **L3 Interface**

##### Multiple IP Interface

- Max. 4 IP interfaces
- Max. 4 Ip v4 address
- 20 IPv6 address (shared for both link local and global address)

#### ARP Table

- Max. 192 ARP entries

#### Static ARP

- Static 192 ARP entries (Share with ARP Table)

#### ARP Age Time

#### IPv6 Neighbor Discovery Table

- Max. 42 ND entries

#### Static IPv6 Neighbor Discovery

- Static 42 ND entries (Share with IPv6 Neighbor Discovery Table)

#### **L3 Routing**

##### IPv4 Static Route and Default Route

- Max. 63 entries



IPv4 Default Route
-Max. 1 entry
IPv4 Route Table
IPv6 Static Route
-Max. 21 entries
IPv6 Default Route
-Max. 1 entry
IPv6 Route Table
Interface specific select
-Per VLAN
RIP
OSPF
<b>L3 IP Multicast</b>
IGMP
-IP group address FDB
MLD
-IP group address FDB
<b>QoS</b>
Trust Mode
-Cos/802.1p
-DSCP
-CoS/802.1p-DSCP
Per Port Trust Mode
-Enable-follow the global trust type
-Disable-Always go to the lowest priority queue.
Queue
-Number of priority queues supported-8
CoS Mapping
CoS Based on 802.1p Priority
CoS Based on Physical Port
CoS Based on DSCP/TOS
Scheduling Mechanism
-Strict/WRR/Strict + WRR
Queue Weight Bandwidth
Bandwidth Control
-Rate limit according to network speed 16kbps~1000Mbps-in step of 16kbps
Advanced QoS



<b>Security</b>
802.1X Authentication Protocol
-Local/RADIUS/TACACS+
802.1X Port-based Access Control
802.1X Authenticated Hosts
802.1X Guest VLAN
RADIUS-VLAN assignment
EAP/RADIUS of Port Statistics
Port Security (Limited Dynamic Lock)
Storm Control
-Support broadcast/unknown multicast/unknown unicast 16kbps~1000Mbps - in step of 16kbps
Port Isolation (Protected Ports)
DOS Attack Prevention
Access Control List (ACL)
-Ingress/Egress
-MC Based ACL
-IPv4 Based ACL
-IPv6 Based ACL
-MAC Range Mode
-IP Range Profile
-ACL Binding
-Action-Permit/Deny/Shutdown/Rate Limit
Management VLAN
Radius Server
-IPv4 / IPv6 / hostname(IPv4)
<b>AAA</b>
Login Authentication List
-Local
-Telnet/HTTP
Security Password
-Requires a user to generate a new means of authentication before access is granted to the device for the first time.
PoE management
-Power on/off per port
-Power class configuration (autoclass/userdefine)
-Power feeding with priority
-Power budget limit
PD LifeGuard
Account Manager
-Muti Privileges
Web Graphical User Interface (GUI)



-HTTP IPv4 / IPv6
-HTTPS IPv4 / IPv6
Web support multi-language
-Language support
SNMP v1/v2/v3 Support
RMON 1, 2, 3, 9
-Support 4 groups of RMON (1-statistics, 2-history, 3-alarms, 9-events)
SSH Server
-IPv4/IPv6

<b>AAA</b>
Telnet Server
-IPv4/IPv6
TFTP Client
-IPv4/IPv6
Port Mirroring
-Support 1 to 1 and many to 1
-Max. mirroring session-3
-Tx/Rx/both mirroring
Dual Images
Image upgrade/backup
-Firmware upgrade (TFTP/HTTP)
Configuration upgrade/backup
-TFTP/HTTP
Configuration Saving
-Manual/Auto Save
System Time
-Time setting/daylight saving
Simple Network Time Protocol (SNTP)
-IPv4/IPv6/hostname(IPv4) SNTP server
-Daylight Savings Time
-Port number for SNTP server
Web UI Supports Non-IE Browser
-Chrome, Firefox, Safari
SYSLOG
-Support log admin password/IP change activity enhancement
-Local logging-buffered/flash
-Remote logging-IPv4/IPv6/hostname(IPv4)
-Originator Identifier-None/Hostname/Ipv4/Ipv6/User Defined
SYSLOG Backup
-Buffered



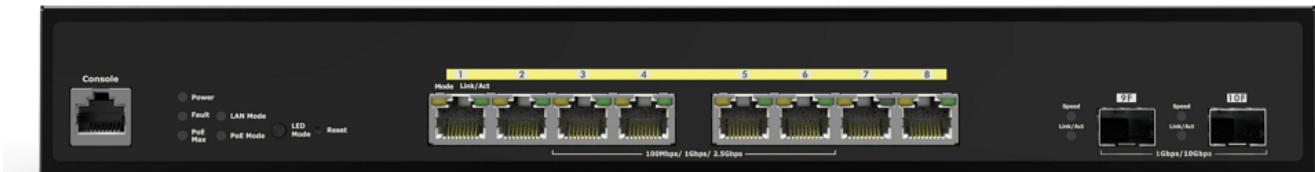
Ping
-IPv4/IPv6/hostname(IPv4)
Trace Route
-IPv4/IPv6/hostname(IPv4)
Factory Default
Reboot Switch
Flick Reboot
<b>MIB Support</b>
MIB II
-RFC1213
Bridge
-RFC1493
RMON
-RFC1757
802.1p
-RFC2674
LLDP MIB
-RFC2863
Pubic Mib From Cloud Agent
-ReadOnly

## Physical Interfaces

### Multi GE PoE Switch

**ALL-SGC5410PM-10G**

330 x 44 x 230 mm



## Technical Details:

Multi GE PoE Switch

	ALL-SGC5410PM-10G
Copper Ports	8x 2.5GbE
SFP Ports	-
SFP+ Ports	2x 10GbE
PoE Available Ports	8
PoE Standard	802.3af/at
PoE Power Budget	240W
Switch Chip	RTL9302C
PHY	GPY241
PoE Controller	RTL8238B
Flash Memory	16MB NOR 128MB NAND
SDRAM Memory	512MB DDR3
Packet Buffer	12Mbit
MAC Table Size	16K
Switching Capacity	80Gbps
Fan(s)	2
Power Supply	Int. PSU 300W
Dimensions (W x H x D)	330 x 44 x 230
Operating Temperature	0°C to 50°C

## Attributes

Attribute	Value
Anzahl Ports PoE/LAN:	8/0
Belüftung Switch:	Mit Lüfter
Einsatzort Switch:	19";
LAN Geschwindigkeit:	100 Mbit/s; 1Gbit/s; 2,5Gbit/s;
Management:	full managed; Apollo Series (Apollo Controller) ;
PoE Budget:	<300 Watt
PoE Port Leistung:	30W at



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Attribute	Value
SFP Geschwindigkeit:	SFP+ 10GBit;
Weight:	1 Kg
Warranty:	24.00 Months

## Accessories

Part No.	Name
211733	ALLNET Apollo On-Prem Hardware Controller / Management & Provisioning of AP's and Switches Apollo Series "ALL-AC100"
211734	ALLNET Apollo Wireless AP WIFI6 • AX3000 • 2x2 • Indoor • 2.5 GbE • ALL-WAPC0522AX-3000 • Apollo
211736	ALLNET Apollo Wireless AP WIFI6 • AX5400 • 2x2:2; 4x4:4 • Indoor • 2.5 GbE • ALL-WAPC0544AX-5400 • Apollo
211739	ALLNET Apollo Wireless AP WIFI6 • AX3000 • 2x2 • Outdoor IP67 • 2.5 GbE • ALL-WAPC0522AXO-3000 • Apollo