

Comprehensive Industrial Network Solution

Maximize Industrial Connectivity





30 years in the industrial networking industry has allowed PLANET to develop a robust set of products and solutions to tackle a wide range of networking demands including Industrial Network Infrastructures, PoE Networking, Intelligent Network Management and more.

Table of Contents

- [Diverse Networking Solutions](#) 1
- [Intelligent Network Management](#) 3
- [Secure and Reliable Connectivity](#) 4
- [Sustainable Network](#) 5

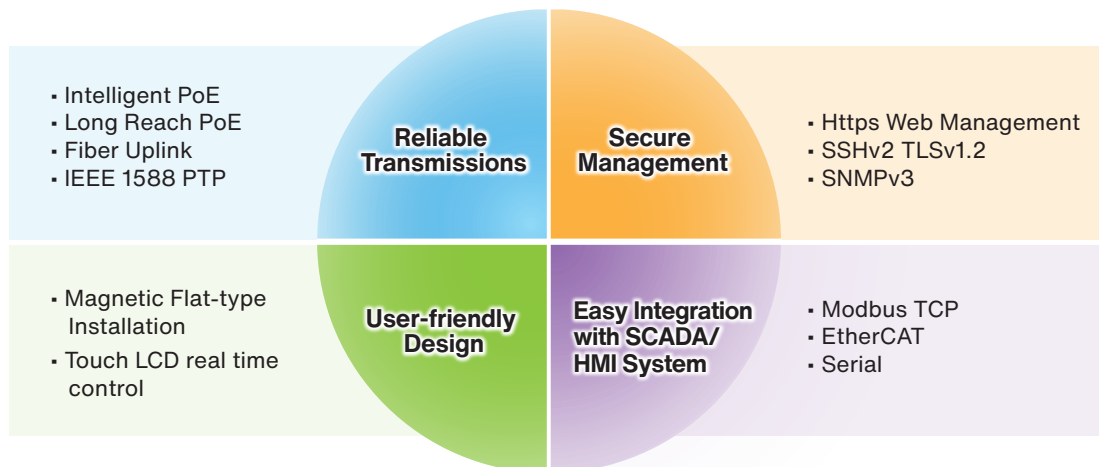
Product Line Features

- [Industrial Ethernet Switches](#) 6
- [Power over Ethernet](#) 7
- [10G Managed Ethernet Switches and Media Converters](#) 8
- [Industrial Automation Devices \(TSN & EtherCAT\)](#) 9
- [Network Management System](#) 11
- [Cellular Gateway](#) 12
- [Wireless Access Points](#) 13

Diverse Networking Solutions

From SMBs to large industrial network infrastructures, PLANET devices are designed to provide the highest networking performance for any verticals.

PLANET Industrial Ethernet Solution



ERPS Ring for Network Redundancy



IEEE 1588 Protocol (PTP)



5G NR / 4G LTE Cellular Options



Intelligent PoE Management



IEEE 802.11ax Dual Band Operation



12V DC Power Supply

Certification Standards



IEC 62443-4-1 Certified



E-Mark Certified



EN50121-4 Certified



ISO 27001 Certified



EN50155 Certified



EN61000-6-2/-4 Heavy Industrial EMC

Industrial Ethernet

Robust design aims to provide high-speed data transmission for industrial applications



Rack-mount Ethernet Switches
IGS-6325-20S4C4X



DIN-rail Managed Ethernet Switches
IGS-10080MFT



Flat-type Ethernet Switches with Touch LCD
WGS-5225-8UP2SV



TSN Ethernet Switch
TSN-6325-8T4S4X



ITS Compliant Switches
IGS-5226-4P2T/IGS-10020HPT-U



EtherCAT Junction/Slave
IECJ-410FT/IECS-1116-DO



Serial Device Server
ICS-2100T



Modbus Gateway
IMG-2105AT

Diverse Networking Solutions

Intelligent Network Management

Efficiently utilize intelligent management features to monitor network of any size

Universal Network Management Controller



UNC-NMS



NMS-1000V



NMS-500

Industrial Network Security

Robust cybersecurity to ensure network protection and privacy from external threat

Industrial VPN Security Gateway



IVR-300FP



IVR-300



IVR-300W

High-speed PoE Switch

Streamline network infrastructure with high-speed PoE transmission



EN50155 Ethernet Switches
IGS-604HPT-M12



Multi-port PoE Injector Hub
UPOE-2400G



Layer 3 PoE++ Switch
IGS-6325-24UP4X



PoE Media Converter
GUP-805A-95W

Fast Wireless Transmission

Enabling 5G NR, Wi-Fi and LoRa signal for fast wireless connectivity



5G NR Wireless Gateway
ICG-2515FW-NR



Wi-Fi Wireless Access Point
WDAP-C3000AX/WDAP-3000AX



LoRaWAN Gateway
LCG-300-NR

Renewable Energy PoE Network

Utilize renewable energy to power remote network sites to achieve power independence and reduce carbon emissions



Renewable Power PoE Managed Switch
BSP-360



Renewable Energy Management Controller with LCD Touch Screen (10"/12")
NMS-360V



Renewable Energy Management Controller
NMS-360

Intelligent Network Management



Efficiently monitor and manage multiple network sites and devices via intelligent network analysis



Dashboard

Providing the at-a-glance view of center system, site summary, site map, traffic, PoE network status.



NMS

To auto-detect PLANET managed devices with remotely monitor and control function.



Site Map

To create site list, site map for NMS agent management.



Topology Viewer

A topology of network devices compliant with SNMP and LLTD Protocol.



Event Reports

The status of a network can be reported via network alarm, system log, and SNMP trap.



Statistic

To show Top 10 Event Report, History Comparison function, Critical Events for devices.



AP Control

Supports AP controller with group profile provisioning setting.



MQTT/IOT

Reliably handle the complexities of delivering messages for mobile applications while keeping management low cost.



Management UI

- Intuitive user interface
- Status overview of network and devices
- Real-time operation comparison
- PoE power consumption management
- Alert notification when detects abnormality

CloudViewerPro App

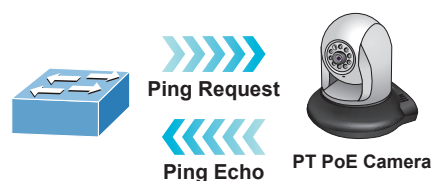
- Device discovery
- Remote network status monitoring
- Configuration of access points

Intelligent PoE Management

PLANET PoE network switches feature a complete PoE network management capability. Allowing users to not only provide power and data to the devices but also fully monitor and manage all the connected PoE devices

Device Class	Current Used [mA]	Powered Used [W]
8	1488	78
8	1451	76
8	1440	76
8	1418	75
0	0	0

PD Status Good!!



PoE Usage Monitoring

- Amount of power consumed by PoE devices

PD Alive Check

- Detection of PoE network disconnection
- Automatically reboot connection

Secure and Reliable Connectivity



Cybersecurity Features

All of PLANET's products are equipped with robust cybersecurity features to ensure a well-protected network.



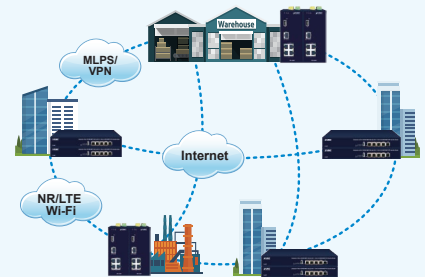
Full VPN Server Capability

- SSL VPN
- L2TP
- IPSec
- GRE
- PPTP



Network Security Protection

- SPI Firewall to prevent DoS/DDoS attacks
- Content Filtering



Complete SD-WAN function

- Improve network performance
- Cost-saving for network infrastructure

Advanced Network Recovery

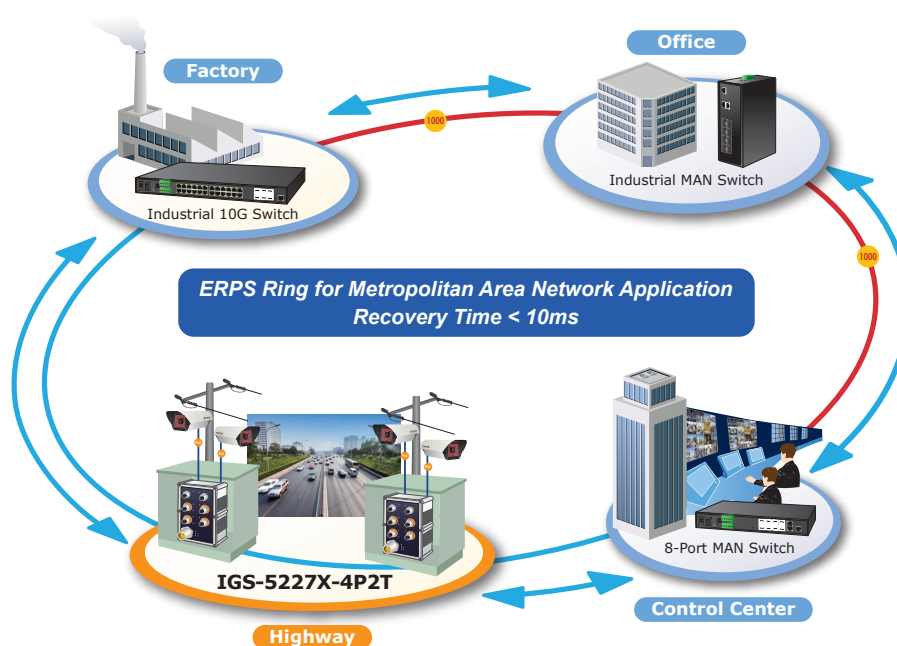
Utilizing the most advanced network recovery technologies to ensure reliable network transmission

ITU-T G.8032 ERPS (Ethernet Ring Protection Switching)

- Compatible with other ERPS Ring devices
- Incorporated into all PLANET network switches
- Recovery time less than 10ms

Redundant Power Supply

- Active redundant power failure protection
- Handle demands of high-tech facilities



Sustainable Network

Renewable Energy PoE Network Solution

PLANET has developed the world's first Renewable Energy PoE Network Solution. It enables networks to utilize renewable energy to achieve network power independence and reduce carbon emissions



Utilize Green Energy



Power Independence



Reduce Carbon Emissions



Remote Network Management

- **Green Cabling Deployment:**

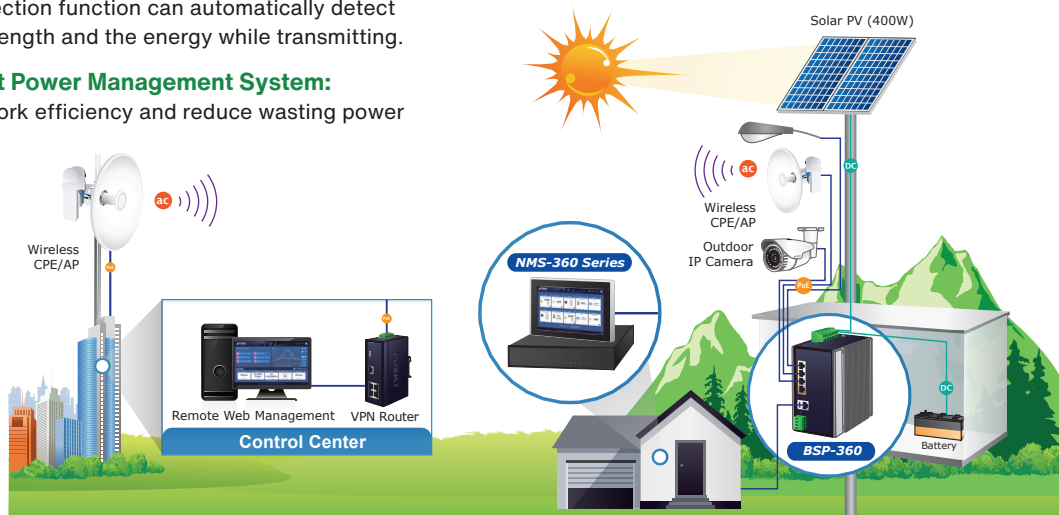
Supports IEEE 802.3af/at/bt PoE standard to easily expand the network with the existing network structure

- **Energy Saving Cable Transmission:**

Cable detection function can automatically detect the cable length and the energy while transmitting.

- **Intelligent Power Management System:**

Improve work efficiency and reduce wasting power

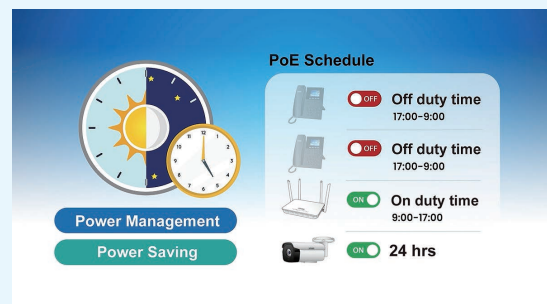


Network Power Management

All of PLANET PoE devices feature PoE power consumption management. This allows operators to closely manage the power of PoE devices, reducing the power usage for a more sustainable network infrastructure.



- Monitor the power consumption of the connected network devices
- Analyze usage to help reduce power consumption



- Designate time when power is transferred to PoE devices
- Reduce power usage from PoE devices

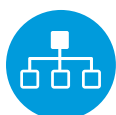
Choose the Right Networking Devices for Your Networks

A complete range of networking products designed to provide the fastest and most efficient transmission for industrial and enterprise applications

Industrial Ethernet Switches



2.5G/10G
High-bandwidth



Layer 2+/3 Routing



Withstand Harsh Environments

Providing secure high-bandwidth transmission for harsh industrial environments that meets various industrial protocols and ITS certifications such as MQTT, Modbus, SCADA, EtherCAT, EN50155 and E-Mark.

Model		IMS-6325-5	IGS-6325-20S4C4X	IGS-6325-5X1T	IGS-6325-16T4X	IGS-6325-8T8S4X	WGS-5225-8T2SV
Product Image							
Description		Layer 3 Modular Switch	Layer 3 Fiber Switch	Layer 3 10G Switch	Layer 3 Aggregation Switch	Layer 3 Aggregation Switch	Layer 2+ LCD Switch
Hardware	10/100/1000T RJ45	24 max.	4 (combo)	-	16	8	8
	10Gbps RJ45	-	-	1	-	-	-
	1G/2.5Gbps SFP	20 max. (1Gbps)	24	-	-	8	2
	10Gbps SFP+	4	4	4	4	4	-
	Switch Fabric	128Gbps max.	158Gbps	120Gbps	112Gbps	136Gbps	26Gbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO	-
	LCD	-	-	-	-	-	2.4" Color Touch LCD
Power	Inputs	Dual 12~48V DC	1 x 100~240V AC 2 x 24~60V DC	Dual 9~48V DC 24V AC	Dual 9~48V DC 24V AC	Dual 12~48V DC 24V AC	Dual 12~48V DC
	Redundancy	●	●	●	●	●	●
Mechanical	Dimension (WxDxH)	217x135x152mm	440 x 200 x 44.5mm	80x135x135mm	96x107x152mm	86x107x152mm	180x24.4x140mm
	Enclosure	IP30 Aluminum	IP30 Aluminum	IP30 Aluminum	IP30 Aluminum	IP30 Aluminum	IP30 metal
	Installation	DIN-rail, wall-mountable, Rack-mountable	Rackmount	DIN-rail, wall-mountable	DIN-rail, wall-mountable	DIN-rail, wall-mountable	DIN-rail, wall-mountable, Magnetic mounting
Environment	Operating Temperature	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-20~70°C
Regulatory		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Layer 3 Features	Dynamic Routing Protocols	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	IPv4 OSPFv2	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	IPv4 OSPFv2	-
	Static Routing	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6
Protocol	VLAN	IEEE 802.1Q Tag, Q-in-Q, GVRP, Protocol-based VLAN, MAC-based VLAN, Private VLAN, Voice VLAN					
	Multicast	IPv4 IGMP Snooping, IGMP Querier, IPv6 MLD Snooping, MLD Querier, MVR					
	Spanning Tree	IEEE 802.1d/1w/1s, BPDU Guard					
	Link Aggregation	IEEE 802.3ad LACP, Static Trunk					
	Data Redundancy	G.8032 ERPS Ring, Major Ring and Sub-ring					
	Quality of Service	IP ToS, DSCP, DiffServ Policy QoS, 802.1p CoS, DSCP-COS, L4 Port-COS					
Security	Authentication	802.1x Port-based Authentication, MAC-based Authentication, AAA					
	Basic	Port Security, MAC Binding, MAC Filtering, IP-based ACL, MAC-based ACL					
	Advanced	DHCP Snooping, ARP Inspection, IP Source Guard					
Industrial Protocol	Modbus TCP	Port status, Power status, Ring status, DI/DO status, Alarm status					
	1588 PTPv2	Transparent Clock-End to End and Peer to Peer device types					
Management	Interface	Web, SNMP, Command line, console					Web, SNMP, Command line
	Security	Cybersecurity, SSHv2, TLSv1.3, SNMPv3, user privilege level					
	Relay Alarm	User defined Power Status and Port link status					-
	Event Log	Syslog, system log, SNMP trap, e-mail					

Power over Ethernet Switches



Intelligent PoE Management



Enhanced Power Budget



ERPS Ring

Highly dependable power and data transmission with Intelligent PoE Management functionality to efficiently monitor and manage all connected PoE devices

Model		GS-6322-24P4X	IGS-6325-24UP4X	IGS-6329-8UP2S4X	WGS-6325-8UP2X	WGS-5225-8UP2SV	WGS-4215-16P2S
Product Image							
Description		CRPS modular Power Switch	Layer 3 Rackmount PoE Switch	Heavy EMC PoE Switch	Layer 3 Flat-type Switch	L2+ LCD Flat-type Switch	L2/L4 Flat-type Switch
Hardware	10/100/1000T RJ45	24	24	8	4 x 2.5G 4 x 1G	8	16
	10Gbps RJ45	-	-	-	-	-	-
	1G/2.5Gbps SFP	-	-	2	-	2	2 x 1G
	10Gbps SFP+	4	4	4	2	-	-
	Switch Fabric	128Gbps	128Gbps	106Gbps	68Gbps	26Gbps	36Gbps
	DI & DO	-	2 DI & 2 DO	2 DI & 2 DO	-	-	-
PoE	LCD	-	-	-	-	2.4" Color Touch LCD	-
	PoE Standard	802.3bt PoE++	802.3bt PoE++	802.3bt PoE++	802.3bt PoE++	802.3bt PoE++	802.3at PoE+
	PoE Port	24 x 95W	24 x 95W	8 x 95W	8 x 95W	8 x 95W	16 x 36W
	PoE Budget	2,280 watts max.	1,440 watts max.	360 watts	480 watts	720 watts	240 watts
	PoE Mode	802.3bt PoE++ End-span Mid-span Force	802.3bt PoE++ End-span Mid-span Force Legacy	802.3bt PoE++ End-span Mid-span Force	802.3bt PoE++ PoH End-span Mid-span Force Legacy	802.3bt PoE++ End-span Mid-span Force Legacy	End-span Force Legacy
Power	Inputs	2 x CRPS PSU slots 100~240V AC	2 x 48~54V DC	2 x 48~54V DC	2 x 48~54V DC	2 x 48~54V DC	2 x 48~54V DC
	Redundancy	●	●	●	●	●	-
Mechanical	Dimension (WxDxH)	440 x 300 x 44.5mm	440 x 200 x 44.5mm	76x135x152mm	245x36x140mm	245x36x140mm	245x24.4x140mm
	Enclosure	Metal	IP30 metal	IP30 aluminum	IP30 metal	IP30 metal	IP30 metal
	Installation	Rackmount	Rackmount	DIN-rail, wall-mountable	wall-mountable	wall-mountable	DIN-rail, wall-mountable
Environment	Operating Temperature	0~50°C	-40~75°C	-40~75°C	-40~75°C	-20~70°C	-10~60°C
Regulatory		CE, FCC	CE, FCC	CE, FCC IEC 61000-6-2 IEC 61000-604 EN50121-4	CE, FCC	CE, FCC	CE, FCC
Layer 3 Features	Dynamic Routing Protocols	IPv4 OSPFv2	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	-	-
	Static Routing	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6	-
Protocol	VLAN	IEEE 802.1Q Tag, Q-in-Q, GVRP, Protocol-based VLAN, MAC-based VLAN, Private VLAN, Voice VLAN					IEEE 802.1Q Tag, Q-in-Q GVRP, Protocol-based VLAN, Private VLAN, Voice VLAN
	Multicast	IPv4 IGMP Snooping, IGMP Querier, IPv6 MLD Snooping, MLD Querier, MVR					IPv4 IGMP Snooping, IGMP Querier, IPv6 MLD Snooping
	Spanning Tree	IEEE 802.1d/1w/1s, BPDU Guard					
	Link Aggregation	IEEE 802.3ad LACP, Static Trunk					
	Data Redundancy	G.8032 ERPS Ring, Major Ring and Sub-ring					G.8032 ERPS Ring, Major Ring
	QoS	IP ToS, DSCP, DiffServ Policy QoS, 802.1p CoS, DSCP-COS, L4 Port-COS					Port Number, DSCP, IP precedence, 802.3p CoS
Security	Authentication	802.1x Port-based Authentication, MAC-based Authentication, AAA					802.1x Port-based Authentication, AAA
	Basic	Port Security, MAC Binding, MAC Filtering, IP-based ACL, MAC-based ACL					
	Advanced	DHCP Snooping, ARP Inspection, IP Source Guard, DoS protection					
Industrial Protocol	Modbus TCP	Port status, Power status, Ring status, DI/DO status, Alarm status					-
	1588 PTPv2	Transparent Clock- End to End and Peer to Peer device types					-
Management	Interface	Web, SNMP, Command line, console					
	Security	Cybersecurity, SSHv2, TLSv1.3, SNMPv3, user privilege level					Cybersecurity, SSHv2, TLSv1.3, SNMPv3
	Relay Alarm	-	User defined Power Status and Port link status				-
	Event Log	Syslog, system log, SNMP trap, e-mail					Syslog, system log, SNMP trap

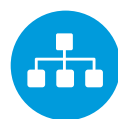
All-port 10G Managed Ethernet Switches and Media Converters



10Gbps High-speed Transmission



Fiber Connectivity



Layer 2 / Layer 3

Utilizing 10Gbps transmission speed to meet the demand of high bandwidth data advanced network equipment to accelerate the performance of large data transmission.

Model		XGS-6320-12X4TR	XGS-6320-8X8TR	XGS-6320-8UP4X	IGS-6325-5X1T	IXT-900-2X1PD	IXT-900-2X1UP
Product Image							
Description		Layer 3 10G Copper Switch	Layer 3 10G Copper Switch	Layer 3 10G PoE Switch	Layer 3 Industrial 10G Switch	Industrial 10G Managed Media Converter	Industrial 10G PoE Managed Media Converter
Hardware	10Gbps RJ45	4	8	8	1	1	1
	10Gbps SFP+	12	8	4	5	2	2
	Switch Fabric	320Gbps	320Gbps	240Gbps	12Gbps	60Gbps	60Gbps
	DI & DO	-	-	-	2 DI & 2 DO	-	-
	LCD	-	-	-	-	-	-
PoE	PoE Standard	-	-	802.3bt PoE++	-	802.3at PoE+ PD	802.3bt PoE++
	PoE Port	-	-	8 x 95W	-	PD	1 x 95W
	PoE Budget	-	-	420 watts	-	-	95 watts
	PoE Mode	-	-	802.3bt PoE++ End-span Mid-span Force	-	-	802.3bt PoE++ End-span Mid-span Force
Power	Inputs	1 x 100~240V AC 1 x 36~60V DC	1 x 100~240V AC 1 x 36~60V DC	1 x 100~240V AC	2 x 48~54V DC	2 x 48~54V DC	2 x 48~54V DC
	Redundancy	●	●	-	●	●	●
Mechanical	Dimension (WxDxH)	440x200x44.5mm	440x200x44.5mm	440x300x44.5mm	80x135x135mm	50x87x135mm	50x87x135mm
	Enclosure	Metal	Metal	Metal	IP30 aluminum	IP30 metal	IP30 metla
	Installation	Rackmount	Rackmount	Rackmount	DIN-rail, wall-mountable		
Environment	Operating Temperature	0~50°C	0~50°C	0~50°C	-40~75°C	-40~75°C	-40~75°C
Regulatory		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Layer 3 Features	Dynamic Routing Protocols	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	-	-
	Static Routing	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6	-	-
Protocol	VLAN	IEEE 802.1Q Tag, Q-in-Q, GVRP, Protocol-based VLAN, MAC-based VLAN, Private VLAN, Voice VLAN					IEEE 802.1Q Tag, Q-in-Q, Protocol-based VLAN, Private VLAN
	Multicast	IPv4 IGMP Snooping, IGMP Querier, IPv6 MLD Snooping, MLD Querier, MVR					-
	Spanning Tree	IEEE 802.1d/1w/1s, BPDU Guard					-
	Link Aggregation	IEEE 802.3ad LACP, Static Trunk					-
	Data Redundancy	G.8032 ERPS Ring, Major Ring and Sub-ring					G.8032 ERPS Ring, Major Ring
Security	QoS	IP ToS, DSCP, DiffServ Policy QoS, 802.1p CoS, DSCP-COS, L4 Port-COS					Port Number, DSCP, IP precedence, 802.3p CoS
	Authentication	802.1x Port-based Authentication, MAC-based Authentication, AAA					-
	Basic	Port Security, MAC Binding, MAC Filtering, IP-based ACL, MAC-based ACL					Access Security
Industrial Protocol	Advanced	DHCP Snooping, ARP Inspection, IP Source Guard, DoS protection					-
	Modbus TCP	-	-	-	●	-	-
Management	1588 PTPv2	-	-	-	●	-	-
	Interface	Web, SNMP, Command line, console					Web, SNMP, Command line
	Security	Cybersecurity, SSHv2, TLSv1.3, SNMPv3, user privilege level					Cybersecurity, SSHv2, TLSv1.3, SNMPv3
	Relay Alarm	-	-	-	User defined Power Status and Port link status		
Event Log		Syslog, system log, SNMP trap, e-mail					Syslog, system log, SNMP trap

Industrial Automation Devices (TSN)



TSN Protocol



Converge IT/OT
Network



Traffic Shaping

For time-critical networks, they guarantee end-to-end transmission of high-priority traffic with extremely low latency.

Model		TSN-6325-8T4S4X	TSN-5225-6T2C	TSN-5225-4T2S
Product Image				
Description		Layer 3 10G TSN Switch	Layer 2+ Edge TSN Switch	Layer 2+ Edge TSN Switch
Hardware	10/100/1000T RJ45	8	8	4
	10Gbps RJ45	-	-	-
	1G/2.5Gbps SFP	4	2	2
	10Gbps SFP+	4	-	-
	Switch Fabric	116Gbps	22Gbps	18Gbps
	DI & DO	2 DI & 2 DO	2 DI & 2 DO	2 DI & 2 DO
	LCD	-	-	-
Power	Inputs	Dual 9~48V DC 24V AC	Dual 9~48V DC 24V AC	Dual 9~48V DC 24V AC
	Redundancy	CE, FCC	CE, FCC	CE, FCC
Mechanical	Dimension (WxDxH)	86x135x152mm	60x135x135mm	60x135x135mm
	Enclosure	IP30 Aluminum	IP30 Aluminum	IP30 Aluminum
	Installation	DIN-rail, wall-mountable	DIN-rail, wall-mountable	DIN-rail, wall-mountable
Environment	Operating Temperature	-40~75°C	-40~75°C	-40~75°C
Regulatory		CE, FCC	CE, FCC	CE, FCC
Layer 3 Features	Dynamic Routing Protocols	IPv4 RIPv2/v2 IPv4 OSPFv2 IPv6 OSPFv3	-	-
	Static Routing	IPv4 and IPv6	IPv4 and IPv6	IPv4 and IPv6
Protocol	VLAN	IEEE 802.1Q Tag, Q-in-Q, GVRP, Protocol-based VLAN, MAC-based VLAN, Private VLAN, Voice VLAN		
	Multicast	IPv4 IGMP Snooping, IGMP Querier, IPv6 MLD Snooping, MLD Querier, MVR		
	Spanning Tree	IEEE 802.1d/1w/1s, BPDU Guard		
	Link Aggregation	IEEE 802.3ad LACP, Static Trunk		
	Data Redundancy	G.8032 ERPS Ring, Major Ring and Sub-ring		
	QoS	IP ToS, DSCP, DiffServ Policy QoS, 802.1p CoS, DSCP-COS, L4 Port-COS		
Security	Authentication	802.1x Port-based Authentication, MAC-based Authentication, AAA		
	Basic	Port Security, MAC Binding, MAC Filtering, IP-based ACL, MAC-based ACL		
	Advanced	DHCP Snooping, ARP Inspection, IP Source Guard, DoS protection		
Industrial Protocol	Modbus TCP	Port status, Power status, Ring status, DI/DO status, Alarm status		
	1588 PTPv2	PTP Master, PTP Slave, Boundary Clock, Peer-to-peer and End-to-end transparent clock		
	TSN	802.1AS gPTP, 802.1Qbv Enhancements for Scheduled Traffic, 802.1Qch Cyclic Queueing and Forward, 802.1CB redundancy, 802.1Qbu/802.1br Frame Preemption		
Management	Interface	Web, SNMP, Command line, console		
	Security	Cybersecurity, SSHv2, TLSv1.3, SNMPv3, user privilege level		
	Relay Alarm	User defined Power Status and Port link status		
	Event Log	Syslog, system log, SNMP trap, e-mail		

Industrial Automation Devices (EtherCAT)



EtherCAT Protocol



Multiple Topology



Fast & Precise Transmission

Enable high-speed and low-latency network transmission with EtherCAT Junction Slave and Media Converter

EtherCAT Junction Slave				EtherCAT Media Converter		
Model	IECJ-300	IECJ-400	IECJ-410FT	IECC-210T	IECC-210R	
Product Image						
Communication Interface						
Copper	Port	3 x 100BASE-TX RJ45 port (1 IN, 2 OUT)	4 x 100BASE-TX RJ45 port (1 IN, 3 OUT)	3 x 100BASE-TX RJ45 port (1 IN, 2 OUT)	1 x 100BASE-TX RJ45 Port (IN)	1 x 100BASE-TX RJ45 Port (OUT)
	Distance between Stations	max. 100 m (100BASE-TX)				
	Data Transfer Medium	Ethernet/EtherCAT cable (min. cat5), shielded				
Fiber	Port	-	-	1 x 100BASE-FX SFP slot (OUT)	1 x 100BASE-FX SFP slot (OUT)	1 x 100BASE-FX SFP slot (IN)
	Distance between Stations	-	-	Depending on the ability of SFP module		
	Data Transfer Medium	-	-	Depending on the ability of SFP module		
EtherCAT						
Protocol	EtherCAT	EtherCAT	EtherCAT	EtherCAT	EtherCAT	
Power						
Input Voltage Range	Dual 9~48V DC, Redundant power with reverse polarity protection					
Power Consumption	1.44W max.	2.44W max.	2.83W max.	1.92W max.	1.92W max.	
Mechanical						
Dimensions (W x D x H)	33x70x104mm	32x87x135mm	32x87x135mm	33x70x104mm	33x70x104mm	
Weight	234 g	383 g	383 g	208 g	208 g	
Installation	DIN-rail and wall mounting					
Case Material	IP30 metal	IP30 metal	IP30 metal	IP30 metal	IP30 metal	
Environment						
Operating Temperature	-40~75 degrees C					
Storage Temperature	-40~85 degrees C					
Relative Humidity	5~95% (non-condensing)					

Network Management System



Intelligent Network Management



Real-time Information



Intuitive User Interface

Efficiently manage and monitor for multiple network sites and devices in one central location via intelligent analysis.

Model	UNC-NMS	NMS-1000V	NMS-500	NMS-360V	NMS-360	NMS-AIoT
Product Image						
Description	Universal Network Management Central Controller	Universal Network Management Controller		Renewable Energy Management Controller		AIoT Application Server
SW Specification						
Max. Manageable Devices	102,400	1,024	512	512	512	3,000
Dashboard	Interactive Dashboard / Summary / Site Map(*UNC-NMS)			Interactive Dashboard / Summary / Event Alert		
Setup Wizard	●	●	●	●	●	●
Devices Status Monitoring & Configuration	Automatic Devices arrangement / Manual add devices / Domain Router Define / Switch Virtual Panel with Configuration Function / Switch per port Traffic and PoE History Graph			Automatic Devices arrangement / Switch(BSP-360) Virtual Panel with Configuration Function / Switch(BSP-360) per port Traffic and PoE History Graph		Automatic Devices arrangement / Node Virtual Panel with Configuration Function / Node History Graph
Topology Management	●	●	●	By site MAP	By site MAP	By site MAP
Fault Management	System Event and Syslog list / System Event Server / Remote Syslog Server SMTP Alert / Alert Pop Message / System Event / Syslog Event Filter			The status of system can be reported via event alarm / SMTP Alert		
AP controller	●	●	●	N/A	N/A	●
Site Map / Floor Map	●	●	●	●	●	●
Built-in DHCP Server	●	●	●	●	●	●
Built-in RADIUS Server	●	●	●	●	●	●
HW Specification						
Gbe Ethernet	6 (LAN5/6 bypass)	2	5	2	5	6 (LAN5/6 bypass)
USB 3.0 type A	2	2	2	2	2	2
Serial (Console port)	1	N/A	1	N/A	1	1
LED	2x LED (Power / HDD)	1x Power LED (Green)	1x Power LED (Blue)	1x Power LED (Green)	1x Power LED (Blue)	2x LED (Power / HDD)
Reset Button	1	N/A	1	N/A	1	1
Power Requirements	3 pin AC Power input socket AC 100~240V , 65W	DC IN 9~36V 60W adapter 12V 5A with terminal block AC 100~240V, 2.0A, 60~50Hz.	60W adapter 12V 5A with DC jack AC 100~240V, 3~1.5A, 60~50Hz.	DC IN 9~36V 60W adapter 12V 5A with terminal block AC 100~240V, 2.0A, 60~50Hz.	60W adapter 12V 5A with DC jack AC 100~240V, 3~1.5A, 60~50Hz.	3 pin AC Power input socket AC 100~240V , 65W
Dimensions (W x D x H)	438 x 180 x 44 mm	NMS-1000V-12: 319 x 51.7 x 245 mm NMS-1000V-10: 285 x 49 x 189 mm	232 x 153 x 44 mm	NMS-360V-12: 319 x 51.7 x 245 mm NMS-360V-10: 285 x 49 x 189 mm	232 x 153 x 44 mm	438 x 180 x 44 mm
Weight	3 kg	NMS-1000V-12: 2.9 kg NMS-1000V-10: 2 kg	1.15 kg	NMS-360V-12: 2.9 kg NMS-360V-10: 2 kg	1.15 kg	3 kg
Temperature	0 ~ 50 degrees C	0 ~ 50 degrees C	0 ~ 40 degrees C	0 ~ 50 degrees C	0 ~ 40 degrees C	0 ~ 50 degrees C
Humidity	5 ~ 90%	10 ~ 90%	10 ~ 85%	10 ~ 90%	10 ~ 85%	5 ~ 90%
MTBF (Hours)	100,000	100,000	120,000	100,000	120,000	100,000
Management	Supports SNMP, ONVIF and PLANET Smart Discovery					
Regulatory Compliance	CE, FCC					

Cellular Gateway



**Ultra-fast 5G NR
Signal**



**Robust
Cybersecurity**



Tough Built

Enable long distance connection with fast, high-bandwidth wireless transmission for industrial and ITS applications

Model		FWA-2100-NR	ICG-2210W-NR	ICG-2515FW-NR
Product Image				
Description		Industrial 5G NR Outdoor Unit (ODU) with 1-port Gigabit PoE PD	Industrial 5G NR Compact Cellular Wireless Gateway with 2-Port 10/100/1000T	Industrial 5G NR Cellular Wireless Gateway with 1-Port 1000X SFP
Hardware	GE RJ45 WAN	-	1	1 (Port 4:LAN/WAN)
	GE Fiber WAN	-	-	1 (Port 5:LAN/WAN)
	GE RJ45 LAN	1	1	3
	Cellular	5G NR / 4G LTE	5G NR / 4G LTE SIM/UIM card interface w/built-in 15KV ESD protection	5G NR / 4G LTE
	SIM	2 (Nano SIM)	2 (Micro SIM)	2
	Wi-Fi	IEEE 802.11n	IEEE 802.11ac	IEEE 802.11ax
	Serial Interface	-	1, (RS485/RS232)	1, (RS485)
	GPS	GNSS positioning	-	GNSS positioning
	DI/DO	-	-	●
	Power Range	802.3 af/at, 12V DC	9~36V DC	9~54V DC
	Operating Temperature	-20~60 degrees C	-40~75 degrees C	-40~75 degrees C
	Material	plastic case, metal bottom	metal case, DIN-rail	metal case, DIN-rail
WAN	Dynamic IP	●	●	●
	Static IP	●	●	●
	PPPoE / PPTP / L2TP	● / ● / ●	● / ● / ●	● / ● / ●
	WAN Failover	Cellular	Cellular/Ethernet	Cellular/Ethernet
	SD-WAN	●	-	●
Network	Routing	RIP V2, OSPF, static route	RIP V2, OSPF, static route	RIP V2, OSPF, static route
	IPv6 (RFC 2460)	●	●	●
	NAT	●	●	●
	DHCP Server/Client (LAN/WAN)	●	●	●
	802.1Q VLAN	●	●	●
	QoS	-	●	●
	DDNS	●	●	●
	MAC Address Clone	●	●	●
VPN	VPN Function	IPSec/Remote Server (Net-to-Net, Host-to-Net) GRE PPTP Server L2TP Server SSL Server/Client (Open VPN)	IPSec/Remote Server (Net-to-Net, Host-to-Net) GRE GRE-TAP PPTP Server L2TP Server SSL Server/Client (Open VPN) VLAN	IPSec/Remote Server (Net-to-Net, Host-to-Net) GRE PPTP Server L2TP Server SSL Server/Client (Open VPN)
	Encryption Methods	DES, 3DES, AES or AES-128/192/256 encrypting		
Wireless	Standard	IEEE 802.11 b/g/n 2.4 GHz	IEEE 802.11 b/g/n 2.4 GHz IEEE 802.11 a/n/ac 5 GHz	IEEE 802.11 b/g/n/ax 2.4 GHz IEEE 802.11 a/n/ac/ax 5 GHz
	Max. Data rate	Tx: 72 Mbps* for 2.4GHz Rx: 72 Mbps* for 2.4GHz	Tx: 150 Mbps* for 2.4 GHz and 433 Mbps* for 5 GHz Rx: 150 Mbps* for 2.4 GHz and 433 Mbps* for 5 GHz	Tx: 600 Mbps* for 2.4 GHz and 1200 Mbps* for 5 GHz Rx: 600 Mbps* for 2.4 GHz and 1200 Mbps* for 5 GHz
	Encryption	WPA/WPA2 Personal (TKIP/AES/AUTO), WPA2 Personal (TKIP/AES/AUTO), WPA/WPA2 Enterprise 802.1x Authenticator, WPA3 Personal	WPA/WPA2 Personal (TKIP/AES/AUTO), WPA2 Personal (TKIP/AES/AUTO), WPA/WPA2 Enterprise 802.1x Authenticator	WPA/WPA2 Personal (TKIP/AES/AUTO), WPA2 Personal (TKIP/AES/AUTO), WPA3 Personal, WPA/WPA2 Enterprise 802.1x Authenticator
	AP Controller for Managing APs (max.)	● (64)	-	● (64)
Security	Firewall	●	●	●
	Content Filtering (MAC/IP/Web)	●	●	●
	Port forwarding	●	●	●
	DMZ	●	●	●
	SSL (HTTPS)	●	●	●
Management	SNMP v1, v2c, v3	●	V1, V2c	●
	WEB Management	●	●	●
	Log	●	●	●
	Central Management System (CMS)	-	-	-
	PLANET NMS Management	●	●	●
	PLANET CloudViewerPro APP	●	-	●

Wireless Access Points



WPA3



MESH



Beamforming

Reduce the need for wiring in industrial environments with high-speed Wi-Fi access points.

Model		IAP-2400AX	IAP-1800AX	Model		WDAP-3000AX
Product Image				Product Image		
Description		11ax 5GHz AP	11ax Dual Band AP	Description		11ax Dual Band AP
Wireless	Standard	802.11 a/n/ac/ax Wi-Fi 6 technology	802.11ax/ac/b/g/n Wi-Fi 6 technology	Outdoor IP Level		IP67
	Max. Data Rate	5GHz: 2400Mbps	2.4GHz: 600Mbps 5GHz: 1200Mbps	Wireless	Standard	802.11ax/ac/b/g/n Wi-Fi 6 technology
	General Environment Performance	5GHz: Tx900/Rx900Mbps	2.4GHz: Tx300/Rx300Mbps 5GHz: Tx750/Rx750Mbps		Max. Data Rate	2.4GHz: 600Mbps 5GHz: 2400Mbps
	MIMO System	4T4R	2T2R		Antenna/Connector	4 x N-Type (F)
	Antenna/Connector	dual-band 4dBi antenna x4/ SMA type antenna connectors x4	dual-band 4dBi antenna x2/ SMA type antenna connectors x2		Max. TX Power	FCC : < 25dBm ETSI : EIRP < 20dBm
	Max. TX Power	FCC : < 23dBm ETSI : EIRP < 19dBm	FCC : < 23dBm ETSI : EIRP < 19dBm	Hardware	Network Interface	1 x 10/100/1000BASE-T
	1024 QAM	●	●		PoE	802.3at PoE+
	OFDMA	●	●	Operating Mode	Access Point	●
Hardware	Network Interface	5 x 10/100/1000BASE-T	5 x 10/100/1000BASE-T		Gateway	●
	USB	1 x USB 3.0	1 x USB 3.0		WDS Bridge	-
	DI/DO	2 DI, 2 DO	2 DI, 2 DO		Repeater	●
	Relay Alarm	●	●		WISP	●
	Power Requirements	Dual DC 9~54V	Dual DC 9~54V		Wi-Fi Mesh	●
Operating Mode	Access Point	●	●	Security	WEP	64-/128-bit
	Gateway	●	●		WPA/WPA2	●
	WDS Bridge	-	-		WPA3	●
	Repeater	●	●	WAN Type (In WISP Mode)	Dynamic IP	●
	WISP	●	●		Static IP	●
Wi-Fi Mesh	● (Feature supported in future)		PPPoE/PPTP/L2TP		● / - / -	
Security	WEP	64-/128-bit	64-/128-bit	Advanced	Multiple SSIDs	4+4 (2.4GHz+5GHz)
	WP3	●	●		802.1Q VLAN	●
	WPA/WPA2	●	●		AP Isolation	●
Advanced	Multiple SSIDs	4+4(5GHz)	4+4(2.4GHz+5GHz)		Max. Wireless Clients	128+128(2.4GHz+5GHz)
	802.1Q VLAN	●	●		IPv6	●
	Client Isolation	●	●		Captive Portal (Gateway Mode)	●
	Max. Wireless Clients	150(5GHz)	75+75(2.4GHz+5GHz)		RADIUS Server/Client (Gateway Mode)	●
	IPv6	●	●		PLANET DDNS (Gateway Mode)	●
	Port VLAN	●	●		SNMP	●
	Captive Portal (Gateway Mode)	●	●		Remote Management (CloudViewer/ CloudViewerPro)	●
	RADIUS Server/Client (Gateway Mode)	●	●		NMS APC	●
	PLANET DDNS (Gateway Mode)	●	●		Smart Discovery	●
	SNMP	●	●	Environment	Operating Temperature	-40 ~ 70 degrees C
	Remote Management (CloudViewer/ CloudViewerPro)	●	●		Operating Humidity	10 ~ 95% (non-condensing)
	NMS APC	●	●			
	Smart Discovery	●	●			
Environment	Operating Temperature	-40 ~ 75 degrees C	-40 ~ 75 degrees C			
	Operating Humidity	10 ~ 90% (non-condensing)	10 ~ 90% (non-condensing)			



PLANET Technology Corporation

11F., No 96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)

Tel: +886-2-2219-9518

Fax: +886-2-2219-9528

E-mail: sales@planet.com.tw

PLANET reserves the right to change specifications without prior notice. All brand names and trademarks are property of their respective owners.

© PLANET Technology Corporation DM-MIE0124