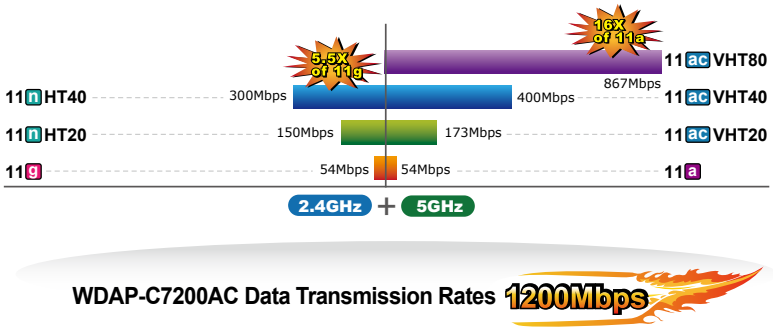
# 1200Mbps 802.11ac Dual Band Ceiling Mount Wireless Access Point

*Brand-new 11ac Wireless Technology*

The WDAP-C7200AC supports IEEE 802.11a/b/g/n/ac dual band standards with 2T2R MIMO technology; therefore, it provides the wireless speed up to 300+867Mbps, which is 16X faster than the 11a access point at 5GHz frequency and 5.5X faster than the 11g access point at 2.4GHz frequency. Moreover, the WDAP-C7200AC is equipped with Gigabit Ethernet Port. Compared with the general wireless APs, the WDAP-C7200AC offers faster transmission speed for the network applications and less interference to enhance data throughput. The incredible wireless speed makes it ideal for handling multiple HD movie streams, high-resolution on-line games, stereo music, VoIPs and data streams at the same time stably and smoothly.




WDAP-C7200AC Data Transmission Rates 1200Mbps

*11ac Innovations Bring Excellent Data Link Speed*

The WDAP-C7200AC is built-in with high power amplifier and 4 highly-sensitive antennas which provide stronger signal and excellent coverage even in the wide-ranging or bad environment. With adjustable transmit power option, the administrator can flexibly reduce or increase the output power for various environments, thus reducing interference to achieve maximum performance. To provide extremely high-

## Standard Compliant Hardware Interface

- Complies with IEEE 802.11ac (draft 2.0) and IEEE 802.11a/b/g/n standards
- 1 x 10/100/1000Base-TX Port with 1-port PoE (PD, Powered Device)
- IEEE 802.3at Power over Ethernet design

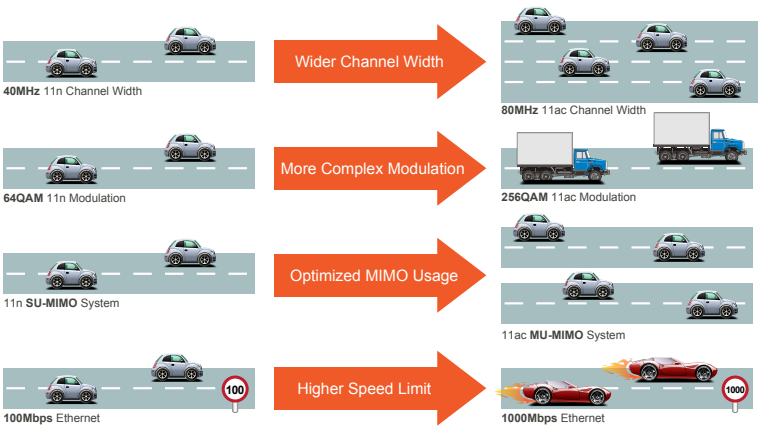
## RF Interface Characteristics

- Features 2.4GHz (802.11b/g/n) and 5GHz (802.11a/n/ac) concurrent dual band for more efficiency of carrying high load traffic
- 2T2R MIMO technology for enhanced throughput and coverage
- Provides multiple adjustable transmit power control
- High speed up to 1.2Gbps (300Mbps for 2.4GHz + 867Mbps for 5GHz) wireless data rate

## Comprehensive Wireless Advanced Features

- Multiple Wireless Modes: AP, Client, WDS PtP/ PtMP, WDS Repeater, Universal Repeater
- Supports up to 10 multiple-SSIDs (2.4GHz+5GHz) to allow users to access different networks through a single AP
- Supports VLAN function to limit the clients to access the specific internal network resource
- Supports WMM (Wi-Fi Multimedia) and wireless QoS to enhance the efficiency of multimedia application
- Supports IAPP (Inter Access Point Protocol) and wireless roaming to enable clients to roam across different wireless networks
- Supports 5-level Transmitting Power Control to adapt various environments
- Supports wireless schedule to automatically enable or disable the wireless function based on predefined schedule

speed user experience, the WDAP-C7200AC adopts IEEE 802.11ac technology to extend the 802.11n 40MHz channel binding to 80MHz and the implementation of 256-QAM modulation where higher transmitting/receiving rates go up to 867Mbps in 5GHz less interference frequency band. In addition, the WDAP-C7200AC is equipped with Gigabit LAN port to eliminate the restriction of 100Mbps Fast Ethernet wired connection to let users fully enjoy the high speed provided by wireless. The IEEE 802.11ac also optimizes MU-MIMO (Multi-User MIMO) mechanism to serve multiple devices simultaneously.




**Go faster in wired & wireless**

Take Advantage of 11ac to Optimize Data Link Speed

## Secure Network Connection

- Advanced security: 64/128-bit WEP, WPA / WPA2, WPA-PSK / WPA2-PSK (TKIP/AES encryption) and 802.1x Radius Authentication
- Supports MAC address filtering

## Easy Installation & Management

- Flexible deployment with standard 802.3at PoE/ PD supported
- Web-based UI and Quick Setup Wizard for easy configuration
- Remote Management allows configuration from a remote site
- SNMP-based management interface
- System status monitoring includes DHCP Client and System Log

### *Ceiling Mount Designed for Highly-efficient Wireless Coverage*

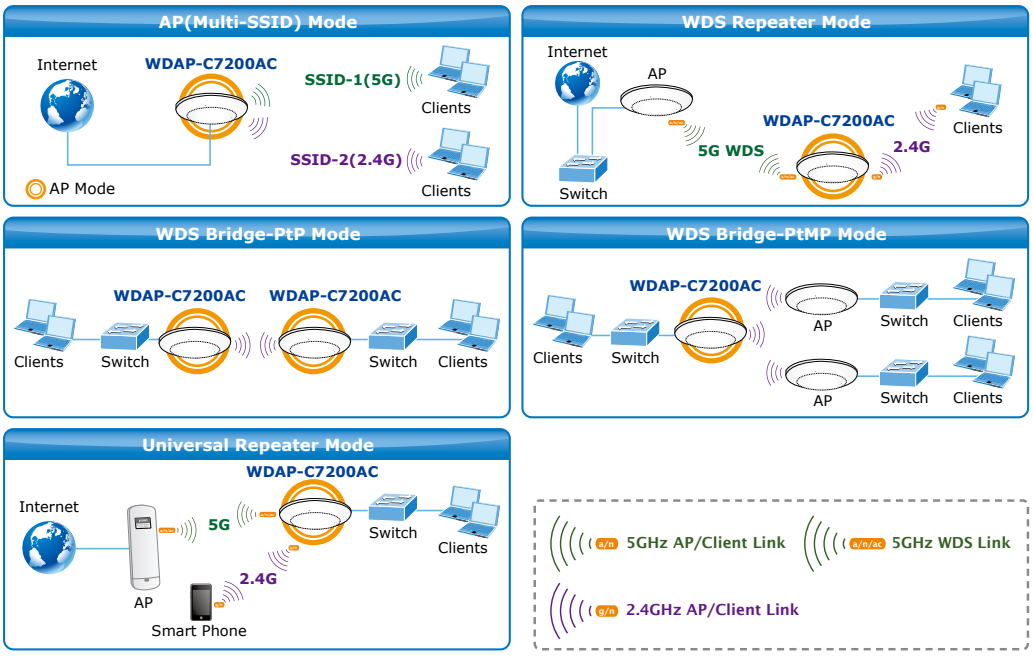
Featuring attractive flying saucer appearance and ceiling-mount design, the WDAP-C7200AC can be firmly installed on the ceiling or the wall conveniently. The ceiling-mount design is smartly integrated into the environment. Its streamlined body without the protruding antennas also gives effects of embellishment in the surroundings. Moreover, the WDAP-C7200AC is compliant with the IEEE 802.3at PoE standard, so it is easy and flexible in client-side installation. It is definitely nice to have this eye-catching access point mount on the ceilings and walls of villas, hotels, exhibit halls, and other establishments.

### *Full Support of Wireless Security Encryption and Wireless Value-added Features*

In aspect of security, besides 64/128-bit WEP encryption, the WDAP-C7200AC is integrated with WPA / WPA2, WPA-PSK / WPA2-PSK and 802.1x Radius authority to secure and protect your wireless LAN. It provides the wireless MAC filtering and SSID broadcast control to consolidate the wireless network security and prevent unauthorized wireless connection. Being an access point, the WDAP-C7200AC supports the VLAN function to allow multiple SSIDs (10 sets of SSIDs) to access Internal VLAN topology. Moreover, its Wi-Fi Multimedia (WMM) mechanism provides enhanced QoS over wireless connection for better performance in multimedia transmission like on-line gaming and video streaming, which are classified as a top priority.

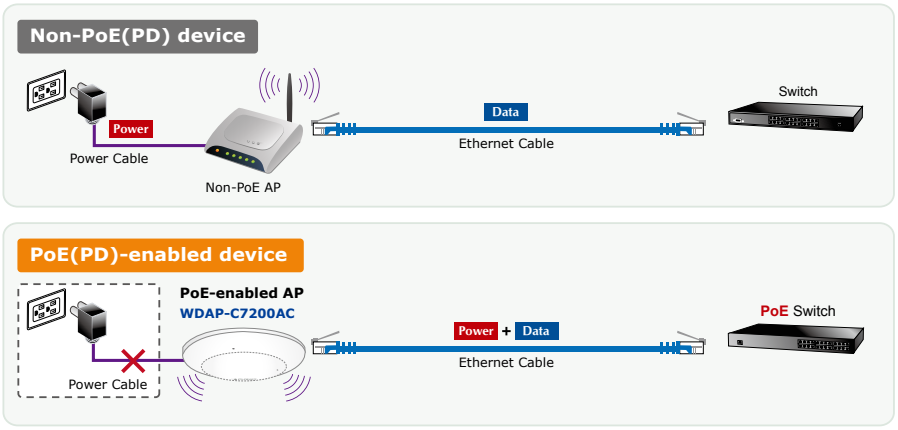
### *Multiple Operation Modes for Various Applications*

The WDAP-C7200AC supports AP, Client, WDS Bridge, Repeater and Universal Repeater modes, through which it provides more flexibility for users when wireless network is established. Compared with general wireless access point, the WDAP-C7200AC offers more powerful and flexible capability for wireless clients.



### *Flexible Deployment with PoE Feature*

Compliant with the IEEE 802.3at Power over Ethernet standard, the WDAP-C7200AC can be powered and networked by a single UTP cable. It thus reduces the needs of extra cables and dedicated electrical outlets on the wall, ceiling or any other place where it is difficult to reach. The wireless network deployment becomes more flexible and worry-free from the power outlet locations.




### *Easy Installation and Management*

With user-friendly Web UI and step-by-step Quick Setup Wizard, the WDAP-C7200AC is easy to install, even for users who never experience setting up a wireless network. Furthermore, with SNMP-based management interface, the WDAP-C7200AC is convenient to be managed and configured remotely in a small business wireless network.

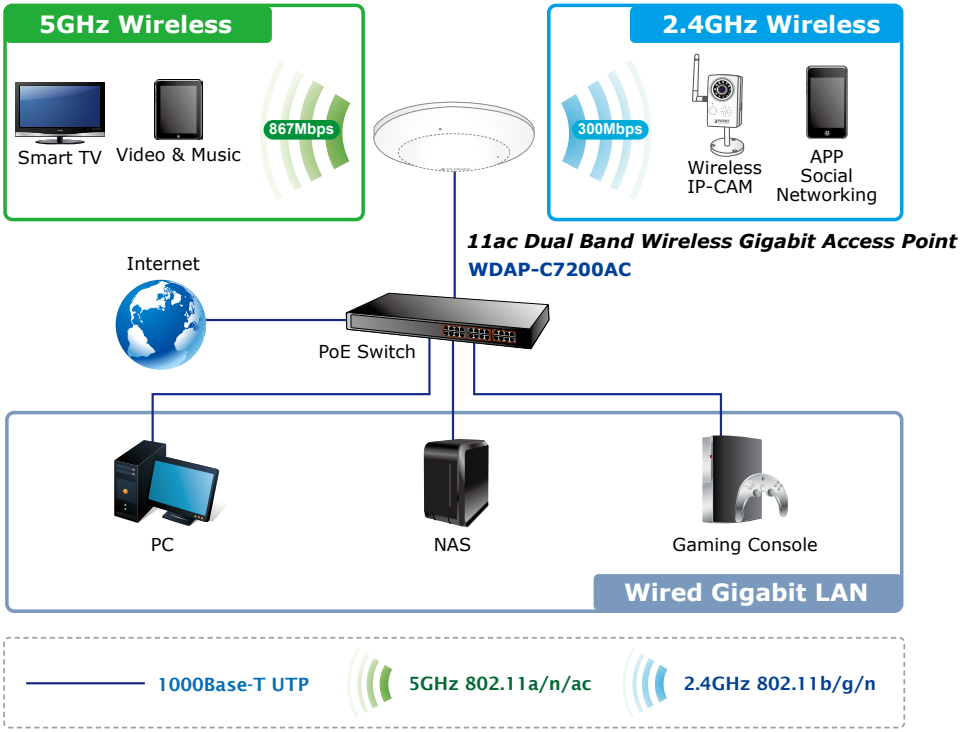
## Application

### *Ceiling-mount design makes it more attractive in room installation*

The WDAP-C7200AC adopts with the latest 802.11ac technology to provide extremely high speed wireless experience for users. With the stylish ceiling or wall-mount design, you don't need to spend extra time and cost to deploy the wireless network. Its fashionable flying saucer appearance adapted to the room can match any decor without affecting the original interior design. The WDAP-C7200AC supports standard 802.3at PoE power scheme, effectively reducing the cabling cost. The WDAP-C7200AC, with the Planet Smart Discovery Utility and SNMP supported, brings the most convenience to system administrators or machine operators. No expensive instruments or complex back-end subscriber managed systems are required for deployment.

*Extremely High-speed and Dual Band capability makes it more powerful in Wi-Fi transmission*

The WDAP-C7200AC delivers the Dual Band technology to avoid signal interference and ensure the best Wi-Fi performance. It allows you to check e-mail and surf the Internet via the 2.4GHz band and simultaneously watch High-Definition (HD) video or any other multimedia application via 5GHz band. Moreover, the Gigabit Ethernet port of the WDAP-C7200AC offer ultra-fast wired connections that utilize the maximum wireless bandwidth; therefore, users will have real wireless speed over 100Mbps. With outstanding stability of high-speed wireless transmission, the WDAP-C7200AC can provide users with excellent experience in multimedia streaming with your mobile devices anywhere, anytime.



# Specifications

| | | |
|---|---|---|
| Model | WDAP-C7200AC<br>1200Mbps 802.11ac Dual Band Ceiling Mount Wireless Access Point | |
| Hardware Specifications | | |
| Interfaces | LAN | 1 x 10/100/1000Base-T RJ45 port<br>Auto-negotiation and Auto MDI/MDI-X |
| Antennas | Gain: | 2 x 2.4GHz 2.5dBi PCB antenna<br>2 x 5GHz 4dBi PCB antenna |
| Reset Button | Reset button on the top cover<br>Press over 7 seconds to reset the device to factory default | |
| LED Indicators | PWR<br>Allow LED to turn off via software control | |
| Material | Plastic | |
| Dimensions (Φ x H) | 194 x 49 mm | |
| Weight | 300 ±5g | |
| Power Requirements | 802.3at PoE, 48-56V DC input | |
| Power Consumption | 20W (max.) | |
| Mounting | Ceiling Mount | |
| Wireless Interface Specifications | | |
| Standard | IEEE 802.11ac (Draft 2.0) 5GHz<br>IEEE 802.11a/n 5GHz<br>IEEE 802.11b/g/n 2.4GHz | |
| Antenna Structure | 802.11ac: 2T2R MU-MIMO<br>802.11n: 2T2R MIMO | |
| Modulation | DSSS | |
| Data Modulation | 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)<br>802.11a/g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM)<br>802.11b: DSSS (DBPSK / DQPSK / CCK) | |
| Band Mode | 2.4G / 5G concurrent mode | |
| Frequency Range | 2.4GHz | America/ FCC: 2.412~2.462GHz<br>Europe/ ETSI: 2.412~2.484GHz |
| | 5GHz | America/ FCC: 5.180~5.240GHz, 5.725~5.850GHz<br>Europe/ ETSI: 5.180~5.240GHz |
| Operating Channels | 2.4GHz | America/ FCC: 1~11<br>Europe/ ETSI: 1~13 |
| | 5GHz | **America/ FCC:**<br>36, 40, 44, 48, 149, 153, 157, 161, 165<br>**Europe/ ETSI:**<br>36, 40, 44, 48<br>5GHz channel list will vary in different countries according to their regulations. |
| Channel Width | 802.11ac: 20/40/80MHz<br>802.11n: 20/40MHz | |
| Data Transmission Rates | 802.11ac (VHT20, Nss2-MCS8): Up to 173.3Mbps<br>802.11ac (VHT40, Nss2-MCS9): Up to 400Mbps<br>802.11ac (VHT80, Nss2-MCS9): Up to 867Mbps | |
| | 802.11n (HT40): 270/243/216/162/108/81/54/27Mbps<br>135/121.5/108/81/54/40.5/27/13.5Mbps (dynamic) | |
| | 802.11n (HT20): 130/117/104/78/52/39/26/13Mbps<br>65/58.5/52/39/26/19.5/13/6.5Mbps (dynamic) | |
| | 802.11g: 54/48/36/24/18/12/9/6Mbps (dynamic) | |
| | 802.11b: 11/5.5/2/1Mbps (dynamic) | |
| Transmission Distance | 802.11ac (draft): up to 30m<br>802.11n: up to 70m<br>802.11g: up to 30m<br>The estimated transmission distance is based on the theory. The actual distance will vary in different environments. | |
| Max. RF Power | **5GHz:**<br>802.11ac (VHT20): 22dBm<br>802.11ac (VHT40): 22dBm<br>802.11ac (VHT80): 22dBm<br>802.11n (HT20): 22dBm<br>802.11n (HT40): 22dBm<br>802.11a: 22dBm<br>**2.4GHz:**<br>802.11n: 17 ±2.5dBm<br>802.11b/g: 20 ±2.5dBm | |

| | |
|---|---|
| Receive Sensitivity | 5GHz:<br>802.11ac (VHT20): -91dBm @ Nss1-MCS0, -64dBm @ Nss2-MCS8<br>802.11ac (VHT40): -89dBm @ Nss1-MCS0, -59dBm @ Nss2-MCS9<br>802.11ac (VHT80): -86dBm @ Nss1-MCS0, -56dBm @ Nss2-MCS9<br>802.11n (HT20): -92dBm @ MCS0, -71dBm @ MCS7<br>802.11n (HT40): -89dBm @ MCS0, -66dBm @ MCS15<br>802.11a: -93 @ 6Mbps, -75dBm @ 54Mbps |
| | 2.4GHz:<br>802.11n 20MHz (MCS7): -69dBm @10% PER<br>802.11n 40MHz (MCS15): -66dBm @10% PER<br>802.11g (54Mbps): -74dBm @10% PER<br>802.11b (11Mbps): -88dBm @10% PER |
| Software Features | |
| Wireless Mode | ■ Universal Repeater (AP+Client)<br>■ Repeater (WDS+AP)<br>■ AP (Access Point)<br>■ WDS PTP (Point to Point)<br>■ WDS PTMP (Point to Multipoint)<br>■ Client |
| Encryption Security | ■ WEP (64/128-bit) encryption security<br>■ WPA / WPA2 (TKIP/AES)<br>■ WPA-PSK / WPA2-PSK (TKIP/AES) |
| Wireless Security | Provides wireless LAN ACL (Access Control List) filtering<br>Wireless MAC address filtering<br>Supports WPS (Wi-Fi Protected Setup)<br>Enable/ Disable SSID Broadcast |
| Wireless Advanced | WMM (Wi-Fi Multimedia): 802.11e Wireless QoS<br>Multiple SSID: up to 5 at 2.4GHz and 5GHz, respectively<br>Wireless Isolation: Enables to isolate each connected wireless client from communicating with each other<br>IAPP (Inter Access Point Protocol): 802.11f Wireless Roaming<br>Provides Wireless Statistics |
| Max. Clients | Wire: 253<br>2.4GHz Wireless: 32<br>5GHz Wireless: 32 |
| LAN | Built-in DHCP server supporting static IP address distributing<br>Supports UPnP<br>Supports 802.1d Spanning Tree<br>Supports 802.1Q VLAN |
| System Management | Web-based (HTTP) management interface<br>SNTP time synchronize<br>Easy firmware upgrade<br>Supports Scheduling Reboot<br>Supports Smart Discovery Utility |
| Standards Conformance | |
| IEEE Standards | IEEE 802.11ac (Draft 2.0, 2T2R, up to 867Mbps)<br>IEEE 802.11n (2T2R, up to 300Mbps)<br>IEEE 802.11g<br>IEEE 802.11b<br>IEEE 802.11i<br>IEEE 802.3 10Base-T<br>IEEE 802.3u 100Base-TX<br>IEEE 802.3ab 1000Base-T<br>IEEE 802.3x Flow Control |
| Other Protocols and Standards | CSMA/CA, CSMA/CD, TCP/IP, DHCP, ICMP, SNTP |
| Environment & Certification | |
| Temperature | Operating: 0 ~ 50 degrees C<br>Storage: -40 ~ 70 degrees C |
| Humidity | Operating: 10 ~ 90% (non-condensing)<br>Storage: 5 ~ 90% (non-condensing) |
| Regulatory | FCC Part 15B & 15C, IC, RoHS |

## Ordering Information

| | |
|---|---|
| WDAP-C7200AC | 1200Mbps 802.11ac Dual Band Ceiling Mount Wireless Access Point |

## Related Wireless Products

| | |
|---|---|
| WDRT-750AC | 750Mbps 802.11ac Wireless Broadband Router |
| WDL-U600AC | 433Mbps 802.11ac Dual Band Wireless USB Adapter |
| WDL-U700 | 300Mbps Dual Band 802.11n Wireless USB Adapter |
| WNL-U556M | 300Mbps 802.11n Wireless Micro USB Adapter |
| WNL-U554A | 802.11n Wireless USB 2.0 Adapter External 3dBi Antenna |
| WNL-9501 | 802.11n Wireless PCI Express Adapter |

To have the best performance and wireless connection, we sincerely advise you to match with the above related products.

## Related PoE Products

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|---|---|
| POE-161 | IEEE 802.3at Gigabit High Power over Ethernet Injector (external power) |
| POE-163 | IEEE 802.3at Gigabit High Power over Ethernet Injector (internal power) |
| WGSD-10020HP | 8-Port 10/100/1000Mbps + 2 100/1000X SFP Managed 802.3at PoE Switch |
| WGSW-20160HP | 16-Port 10/100/1000Mbps 802.3at PoE + 4-Port Gigabit TP / SFP Combo Managed Switch |
| WGSW-24040HP/ WGSW-24040HP4 | 24-Port 10/100/1000Mbps 802.3at PoE+ with 4 Shared SFP Managed Switch |
| WGSW-48040HP | L2+ 48-Port 10/100/1000T 802.3at PoE + 4-Port Shared 100/1000X SFP Managed Switch |
| SGSW-24040HP | 24-Port 10/100/1000Mbps with 4 Shared SFP 802.3at PoE Managed Stackable Switch |
| GSW-1600HP | 16-Port 10/100/1000Mbps 802.3at PoE+ Ethernet Switch |
| GSD-808HP | 8-Port 10/100/1000bps 802.3at PoE Desktop Switch |
| GSD-808HP2 | 8-Port 10/100/1000Mbps 802.3at PoE Desktop Switch - 240W |
| HPOE-460 | 4-Port IEEE 802.3at High Power over Ethernet Injector Hub |
| IGS-10020HPT | Industrial 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Managed Switch with Wide Operating Temperature |
| IGS-504HPT | Industrial 5-Port Gigabit Switch w/ 4-Port 802.3at PoE+ |
| IGS-624HPT | Industrial 4-Port 10/100/1000T 802.3at PoE+ w/ 2-Port 100/1000X SFP Ethernet Switch |

**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
Email: sales@planet.com.tw www.planet.com.tw



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