



Industrial Networking for Surveillance, Access Control and Monitoring

Implementing a Reliable Security Network

ABOUT ANTAIRA

Antaira Technologies is a leading global developer and manufacturer of high-quality industrial networking and communication product solutions. Since 2005, Antaira has offered a full spectrum of product lines that feature reliable Ethernet infrastructures, extended temperature tolerance, and rugged enclosure designs. Our product lines range from industrial Ethernet switches, industrial wireless devices, Ethernet media converters, and industrial serial communication connectivity. Our vast professional experience has allowed us to deploy a wide array of products worldwide in mission-critical applications across various markets, such as automation, transportation, security, water/wastewater, power/utility, oil and gas, and medical.

OUR COMMITMENT

▶ Product Warranty

All Antaira products are backed with a warranty of up to 5 years. We warrant products against defects in material and workmanship for up to 5 years from the date of purchase. This means that Antaira will happily repair or replace the defective products within warranty, provided the products were installed and used within specification. Antaira is committed and will stand behind all of its products assuring customers will receive the highest quality and most reliable products possible.

▶ Customer Service & Tech Support

Antaira's dedicated and competent team takes pride in delivering high-quality and prompt service to our customers. We go one step further when it comes to service. All incoming calls are routed to a live representative who can answer all inquiries quickly, whether it be pre-sales, post-sales or technical services. Antaira's technical support and RMA team have elite industry knowledge to ensure all issues are professionally and thoroughly resolved.

▶ Satisfaction Guarantee

Here at Antaira, every sale is backed by our 45-Day Satisfaction Guarantee. Within 45 days of your purchase date, if for any reason you are dissatisfied with your experience or your expectations were not met, Antaira will promptly exchange or replace your product, or provide a full refund. We are available 12 hours a day to help clarify any questions, comments, or concerns regarding all transactions.

▶ RoHS Directive

Antaira recognizes its environmental responsibility as a manufacturer and is dedicated to preserving the environment for future generations. We make it a priority to ensure that all our products are environmentally friendly. At Antaira, we not only make sure that our products are RoHS 2.0 compliant, but also all of our packing materials used to ship our products are compliant as well.

MARKET OVERVIEW

The demand for security monitoring is on the rise, and it is becoming one of the major growth engines within our global economy. The need for surveillance, access control, and safety have increased exponentially. No matter the area, security is critical for each operation and it is essential that security equipment be connected to ensure the safest environment possible.

In order to perform remote monitoring or management of pertinent security field equipment, reliable and well made network equipment is a key factor to continuously bring field site information back to a remote command center.

Antaira Technologies offers industrial grade network communication products, such as, industrial Ethernet switches, industrial Ethernet fiber media converters, industrial wireless devices, and industrial serial communication that thrive in a wide variety of security applications including campus security, remote surveillance, access control, mobile surveillance, and fire alarm monitoring.



Parking Security



Application

Cars are the chosen primary mode of transportation across America. This leads to parking structures and lots being under pressure to become safer for both the car and the people walking to-and-from them. Providing surveillance cameras throughout the parking area as well as access controlled gates have gone a long way to mitigate malicious behavior in these environments.

Application Requirements

- ▶ PoE Ethernet switches provide power to surveillance cameras
- ▶ Wireless networks provide connectivity from hard-to-reach locations
- ▶ Serial to wireless Ethernet connectivity is essential for some card access readers

Solutions

- ▶ **ARX-7235-AC-PD-T:** This option provides a wireless access point to tie in the remote network located in a hard-to-reach location.
- ▶ **LMP-0800G-T:** Provides fully manageable PoE power and data to the wireless access points and cameras.
- ▶ **STW-611C:** Provides connectivity from serial card readers to wireless Ethernet networks.

Key Products



LMP-0800G-T
8-Port Industrial PoE+ Light Layer 3 Managed Ethernet Switch, w/8*10/100/1000Tx Gigabit Ports, EOT -40-75C



ARX-7235-AC-PD-T
Industrial Outdoor IP67 Metal Housing IEEE 802.11a/b/g/n/ac Wireless Access Point / Client / Bridge / Repeater / Router / NAT / VPN with PoE PD



STW-611C
1-Port (RS232/422/485) Industrial IEEE802.11b/g/n Wireless Serial Device Server, w/Bridge Mode

Autonomous Surveillance



Application

As technology is constantly evolving, surveillance technology is also developing, especially autonomous surveillance. It has been proven that statically placed cameras have blind spots that can be easily averted at all times by criminals. However, one solution is autonomous surveillance which can come in the form of a robotic or mobile surveillance device. This type of surveillance brings unpredictability to the coverage of the static cameras while aiding in investigating anomalies quickly. This can all be done without human onsite supervision or in locations that may be hazardous to humans. These autonomous surveillance devices can be placed in locations such as hospitals or parks to ensure the safety and protection of citizens and the location it is placed in.

Application Requirements

- ▶ Wireless network to provide communication between the autonomous security robot and the area network
- ▶ Industrial switches to provide PoE power (48VDC) to sensors within the robot with only 24VDC
- ▶ Wireless client access on the robot
- ▶ PoE switches to provide PoE power and a 10 gig backbone to the static cameras and wireless access points

Solutions

- ▶ **ARS-7235-AC-T:** Provides a client connection from the robot to the wireless network.
- ▶ **ARX-7235-AC-PD-T:** Provides a wireless access point, where an IP67 device is required, providing a network which can be used by the robot to transmit information back to a security network.
- ▶ **LNP-0800G-24-T:** Used inside the robot to tie together the CPU and all the PoE sensors within the robot providing 48VDC to the sensors while running on only 24VDC.
- ▶ **LMP-1002G-10G-SFP:** Used to provide a security network to all the wireless access points providing them power while transferring large amounts of data on the 10 gig backbone back to the security center.

Key Products



ARS-7235-AC-T
Industrial Dual Radio IEEE 802.11a/b/g/n/ac Wireless Access Point/Client/Bridge/Repeater/Router



ARX-7235-AC-PD-T
Industrial Outdoor IP67 Metal Housing IEEE 802.11a/b/g/n/ac Wireless Access Point / Client / Bridge / Repeater / Router / NAT / VPN with PoE PD; EOT



LNP-0800G-24-T
8-Port Industrial PoE+ Unmanaged Ethernet Switch



LMP-1002G-10G-SFP
10-Port Industrial PoE+ Light Layer 3 Gigabit Managed Ethernet Switch



Application

Campus environments (school or business) present a challenging opportunity for security. Vigilance must be maintained at all hours of the day and night. Having security guards posted throughout campuses 24- hours a day is not cost-effective, nor efficient. Instead, campus emergency phones, referred to as blue light phones, can be implemented by sporadically placing them throughout the campus. These emergency phones can be connected via an Ethernet cable, typically fiber optic, or wireless making them quite flexible for installation. Individuals walking throughout campuses can feel at ease knowing that these blue light phones will be able to immediately connect them to a security system when in need of safety.

Application Requirements

- ▶ Wireless network in the area of installation
- ▶ Wireless client in the blue light phone
- ▶ PoE switch in the blue light phone to power PoE phone and other PoE devices (PLC for blue light, camera and motion sensors)
- ▶ PoE switch may have to run on 24VDC while providing 48VDC to PoE devices

Key Products



AMS-2111-T
Industrial IEEE 802.11b/g/n Wireless (Wi-Fi) LAN Access Point / Bridge / Client / Repeater with an Extended Operating Temp



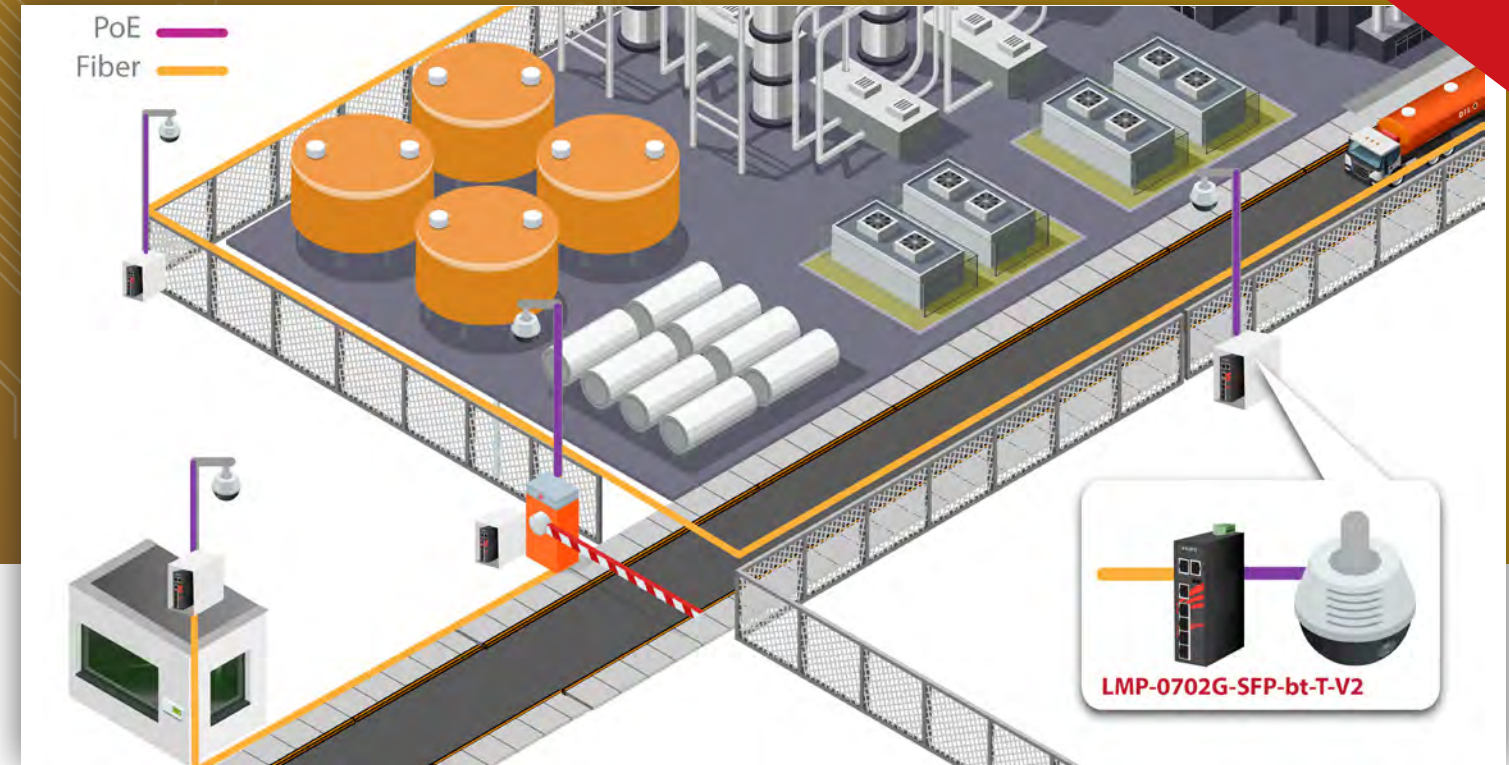
ARX-7235-AC-PD-T
Industrial Outdoor IP67 Metal Housing IEEE 802.11a/b/g/n/ac Wireless Access Point / Client / Bridge / Repeater / Router / NAT / VPN with PoE PD; Extended Operating Temp



LNP-0500G-24-T
5-Port Industrial PoE+ Unmanaged Gigabit Ethernet Switch with an Extended Operating Temp



LMP-0702G-SFP-24-T-V2
7-Port Industrial Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, w/4*10/100/1000Tx (30W/port), 1*10/100/1000Tx, and 2*100/1000 SFP Slots; 12-55 VDC Power Input; Version 2 Hardware



Application

A fenced security application usually requires gates which present a unique challenge. These gates are not always near a wired or fibered part of the security network. Additionally, older gate mechanisms use a serial interface which no longer is compatible directly with modern Ethernet networks. Combining serial with wireless and Ethernet can be tricky, but can be accomplished with Antaira's serial to wireless device (STW-611C). This device will allow both serial and Ethernet information to be sent over a WiFi connection, permitting an operator to control an older gate with a serial interface as well as gather data from Ethernet sensors.

Application Requirements

- ▶ Must be able to interface older serial technology with modern Ethernet and wireless technology
- ▶ A need for an IP67 wireless access point for communication
- ▶ A PoE switch to power the access point and IP cameras while providing a fiber backbone for transporting the data back to the surveillance center

Key Products



ARY-7235-AC-PD
Industrial Outdoor IP67 Plastic Housing IEEE 802.11a/b/g/n/ac Wireless Access Point / Client / Bridge / Repeater / Router/ NAT / VPN with PoE PD



LMP-0702G-SFP-BT-T-V2
7-Port Industrial Gigabit PoE bt Light Layer 3 Managed Ethernet Switch



LMP-1002G-SFP-T
10-Port Industrial PoE+ Light Layer 3 Managed Ethernet Switch



STW-611C
1-Port (RS232/422/485) Industrial IEEE802.11b/g/n Wireless Serial Device Server, w/Bridge Mode

Solutions

- ▶ **ARY-7235-AC-PD:** This wireless unit is located inside the gate house and would be the access point the STW device would connect to.
- ▶ **LMP-0702G-SFP-BT-T-V2:** Modern cameras require the use of heaters, wipers, and lights to perform their task in various conditions. This requires up to 90 watts of power through PoE which can be provided by a 802.3bt switch.
- ▶ **LMP-1002G-SFP-T:** This industrial switch would power the ARY device and connect to the fiber back bone of the security network.
- ▶ **STW-611C:** This is a serial to WiFi device with an Ethernet port. The device is located at the gate arm and would be able to connect to the gate's serial interface as well as any local Ethernet interfaces (license plate reader) to bridge that information over a wireless connection to a security network.

Airport Perimeter Security



LMP-1002G-10G-SFP

Fiber

Application

Airport perimeter security is essential in making sure the airplanes remain safe while on the ground. Running fiber optic cables around the perimeter provides ring redundancy and high bandwidth which are both key elements to this application. Putting up fences and hoping for the best is no longer effective, especially when creating a wall of surveillance cameras is no longer cost prohibitive. Antaira's fiber optic ready switches ensure the protection of the airport runways by detecting unauthorized entrants.

Application Requirements

- ▶ Must have a redundancy built into the the architecture of the network
- ▶ High-resolution cameras require large amounts of bandwidth to transport the images back to the surveillance center
- ▶ Long distance communication is a must when running the perimeter of even a small airport
- ▶ Protection against foul weather such as lightning must also be considered

Key Products



INJ-C201G-bt-100-24-T
Industrial Gigabit Enhanced PoE++ Injector

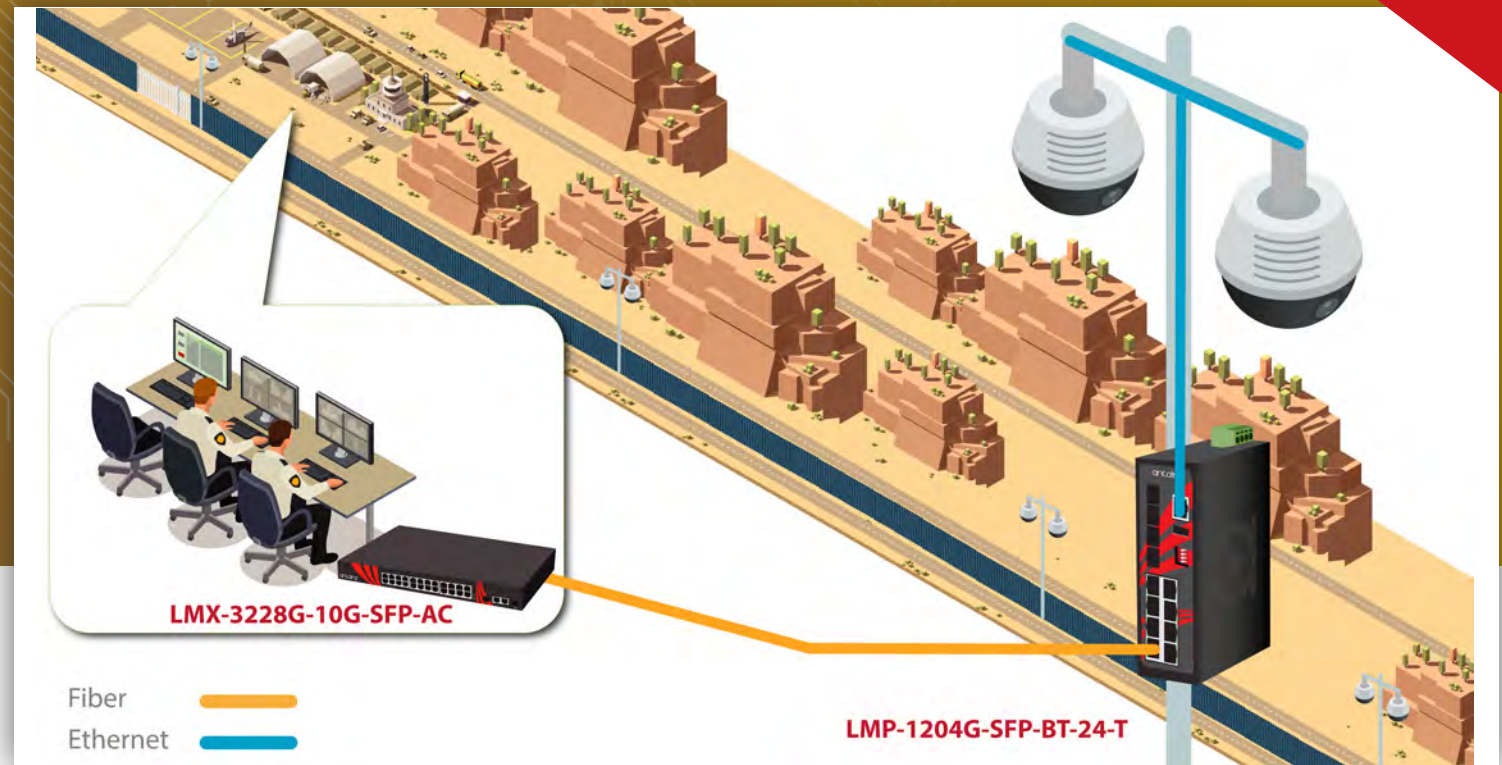


LMP-0702G-SFP-BT-T-V2
7-Port Industrial Gigabit PoE bt Light Layer 3
Managed Ethernet Switch



LMP-1002G-10G-SFP
10-Port Industrial PoE+ Light Layer 3
Gigabit Managed Ethernet Switch

Border Security



LMX-3228G-10G-SFP-AC

Fiber
Ethernet

LMP-1204G-SFP-BT-24-T

Application

Border security applications face several daunting challenges. There are long distances in both directions, unclear paths for ring redundancies and very harsh environments. The use of multi strand fiber over long distances allows sensors and cameras providing overlapping fields of surveillance to be connected together with Antaira switches. This allows for data to be brought back to surveillance centers for monitoring.

Application Requirements

- ▶ The need for fiber optic transmission of data due to long distances
- ▶ Redundancy is needed on the fiber to prevent outages due to a single failure
- ▶ The ability to provide 48VDC to PoE devices when 24VDC power from solar arrays is the only power available
- ▶ Equipment that can survive tough and extreme environments

Key Products



LMP-1204G-SFP-BT-24-T
12-Port Industrial Gigabit IEEE
802.3bt PoE++ Light Layer 3
Managed Ethernet Switch



INJ-C201G-bt-100-24-T
Industrial Gigabit Enhanced
PoE++ Injector



LMX-2004G-SFP-T
20-Port Industrial Gigabit Light
Layer 3 Managed Ethernet Switch



LMX-3228G-10G-SFP-AC
32-Port Industrial Gigabit
Managed Ethernet Switch

Solutions

- ▶ **LMP-1204G-SFP-BT-24-T:** This managed PoE switch is ideal for locations where PoE is required to power cameras that require extra power up to 90 watts and where only 24VDC is available. This industrial switch is capable of several redundancy protocols.
- ▶ **INJ-C201G-bt-100-24-T:** Modern cameras require the use of heaters, wipers, and lights to perform their tasks in various conditions. This requires up to 100 watts of power through PoE which can be provided by adding this injector where needed.
- ▶ **LMX-2004G-SFP-T:** This managed switch provides 4 fiber slots allowing for redundant connections traveling in both directions along the border. This industrial switch is capable of several redundancy protocols.
- ▶ **LMX-3228G-10G-SFP-AC:** Back at the surveillance centers, there will typically be many fiber connections coming in from the border, having a rackmount switch that is able to terminate all of these fibers is important. This Ethernet switch can terminate up to 28 fiber connections making it ideal for many security applications that use fiber optics.

Industrial Managed Ethernet Switches

Industrial Unmanaged Ethernet Switches



LMP-0600-24

6-Port Industrial PoE+ Managed Ethernet Switch w/ Low Voltage Input

- 6*10/100 IEEE 802.3af/at Compliant with 30W/Port
- Redundant Low Power Input 12~36VDC, with Booster Technology for IEEE 802.3af/at
- Layer 2 Network Management: SNMP, QoS, VLAN and IGMP Snooping



LMP-1002G-SFP

10-Port Industrial PoE+ Gigabit Managed Ethernet Switch

- 8*10/100/1000 IEEE 802.3af/at Compliant with 30W/Port + 2*100/1000 SFP Fiber Ports
- Network Redundancy Support: RSTP, MSTP and G.8032 ERPS (<50ms Recovery Time)
- Layer 2 Network Management: SNMP, QoS, VLAN and IGMP Snooping



LMP-2004G-SFP

20-Port Industrial PoE+ Light Layer 3 Managed Ethernet Switch

- 16*10/100/1000Tx (30W/port)
- 4*100/1000 SFP Ports
- Supports IGMP v1/v2



LNP-C500G

5-Port Industrial PoE+ Gigabit Unmanaged Ethernet Switch

- 4*10/100/1000 IEEE 802.3af/at (30W/Port) + 1*10/100/1000Tx
- 9.6Kbyte Jumbo Frame Support
- High Surge (3,000 VDC) and ESD (6,000 VDC) Protection



LNP-0800-24

8-Port Industrial PoE+ Unmanaged Ethernet Switch w/ Low Voltage Input

- 8*10/100 IEEE 802.3af/at Compliant with 30W/Port
- Redundant Low Power Input 12~36VDC, with Booster Technology for IEEE 802.3af/at
- High Surge (3,000 VDC) and ESD (6,000 VDC) Protection



LNP-C501G-SFP-BT

5-Port Industrial Compact Gigabit IEEE 802.3bt PoE++ Unmanaged Ethernet Switch

- 4*10/100/1000TX (90W/Port)
- 1*100/1000 SFP Slot
- Supports PD Remote Rest Technology (PRRT)



LMX-3228G-10G-SFP-AC

32-Port Industrial Gigabit Managed Ethernet Switch

- 4*10/100/1000 RJ45 Ports
- 24*100/1000 SFP Slots
- 4*1G/10G SFP+ Slots with Single AC Power Supply



LMP-0702G-SFP-BT-T-V2

7-Port Industrial Gigabit IEEE 802.3bt PoE++ Light Layer 3 Managed Ethernet Switch

- 4*10/100/1000Tx (90W/Port)
- 1*10/100/1000Tx
- 2*100/1000 SFP Slots
- 48~55VDC Power Input
- EOT: -40°C to 75°C



LMP-1204G-SFP-BT-T

12-Port Industrial Gigabit IEEE 802.3bt PoE++ Light Layer 3 Managed Ethernet Switch

- 4*10/100/1000Tx (90W/Ports)
- 4*10/100/1000Tx (30/Ports)
- 4*100/1000 SFP Slots
- 48~55VDC Power Input
- EOT: -40°C to 75°C



LNP-1204G-SFP

12-Port Industrial PoE+ Gigabit Unmanaged Ethernet Switch

- 8*10/100/1000 IEEE 802.3af/at Compliant with 30W/Port + 4*100/1000 SFP Fiber Ports
- 9.6Kbyte Jumbo Frame Support
- Dual Rate Fiber, Supports Fast Ethernet or Gigabit Ethernet



INJ-C201G-BT-100-T

Industrial Gigabit Enhanced PoE++ Injector

- 1*10/100/1000Base-T(X) with Enhanced PoE-PSE (100W/Port)
- 1*10/100/1000Base-T(X)
- EOT: -40°C to 75°C



LNP-1002G-10G-SFP

10-Port Industrial PoE+ Unmanaged Ethernet Switch

- Supports 8-Port 10/100/1000Tx IEEE 802.3at PoE+ Compliant with 30W per Port, and 2-Port 100/1000 SFP
- 9.6Kbytes Jumbo Frame Support
- Redundant Power Input Design: 12~36VDC



ARX-7235-AC-PD-T

Industrial Dual Radio Wireless Access Point/
Client/Bridge/Repeater/Router

- Supports 2*10/100/1000Base-TX WAN/LAN Ports
- Supports IEEE 802.11a/b/g/n/ac
- Supports both 2.4GHz and 5GHz



AMY-5133-AC-PC

Industrial Outdoor Point-to-Point
Wireless Bridge



ARS-7235-AC-T

Industrial Dual Radio Wireless Access Point/
Client/Bridge/Repeater/Router

- Supports 2*10/100/1000Base-TX WAN/LAN Ports
- Supports IEEE 802.11a/b/g/n/ac
- Supports both 2.4GHz and 5GHz



ARS-7131 SERIES

Industrial Wireless (WiFi) LAN Access Point/
Client/Bridge/Repeater

- Supports AP, Client, Bridge, Router, and Repeater Mode
- 2*10/100Base-TX WAN/LAN Ports
- WPA, WPA2, TKIP, AES



ARY-7235-AC-PD

Industrial Outdoor IP67 Plastic Housing Dual
Radio Wireless AP/Client/Bridge/Repeater/VPN
with PoE PD

- IP67 Plastic Housing
- Dual Radios (2.4GHz/5GHz Concurrent)
- Supports IEEE 802.11a/b/g/n/ac



AMS-2111 SERIES

Industrial IEEE 802.11b/g/n Wireless (Wi-Fi) LAN
Access Point/Bridge/Client/Repeater

- Supports IEEE 802.11 b/g/n
- Qualcomm/Atheros AR9331 SoC
- Compact IP30 Industrial Wireless Design



ARS-7235-5E Series

Industrial 5-Port Gigabit Ethernet with Dual
Radio IEEE 802.11a/b/g/n/ac Wireless Access
Point / Client / Bridge / Repeater / Router / NAT /
VPN

- Supports 5*10/100/1000Base-TX WAN/LAN Ports
- Industrial 2x2 MIMO
- Supports IEEE 802.11a/b/g/n/ac



STW-611C

1-Port (RS-232 / 422 / 485) Industrial 802.11b/g/n
Wireless Serial Device Server, Client Mode

- Supports 1-Port 10/100Tx RJ45 Ethernet Port
- Power Input Design - 9~48VDC
- Serial Data Throughput Rate: 110~921.6Kbps



LNP-1002G-10G-SFP-24

10-Port Industrial PoE+ 10G Unmanaged Switch

- 8*10/100/1000TX RJ45 (PSE:30W/Port) + 2*10G SFP+ ports
- IEEE 802.3af/at compliant
- Power Input: 24VDC to 55VDC



LNP-0800-24

8-Port Industrial PoE+ Unmanaged Ethernet Switch

- 8-Port 10/100Tx Ethernet with IEEE 802.3 Compliant PoE+
- IP30 Rugged Aluminum Case Design
- Store-and-Forward Switching Architecture



LMP-1204G-SFP-T

12-Port Industrial Gigabit PoE+ Managed Ethernet Switch

- 8*10/100/1000Tx IEEE 802.3af/at Compliant with 30W/Port, and 4*100/1000Fx SFP Fiber Slots
- IPv4/IPv6, and DHCP Option 66/67/82
- IGMP v1/v2 for Multicast Traffic Filtering



IMP-C1000-SFP

Compact Industrial Gigabit PoE+ Ethernet-to-Fiber Media Converter

- 1*10/100/1000TX (PSE: 30W) to 1*100/1000 SFP Slot
- Embedded 1 Port PoE Injector Function
- Redundant Power Input: 48~55VDC



IMC-C1000-ST-M-T

Compact Industrial Gigabit Ethernet Media Converter

- 10/100/1000TX to ST Connector Multi-Mode 1000Mbps Fixed Fiber
- RJ45 Port Support Auto MDI / MDI-X Function
- Redundant Power Input: 12~48VDC



EVC-3101

Ethernet over VDSL2 Converter

- 1*10/100/1000Tx + 1*VDSL2/RJ11, 1*Phone - 30a
- 1*RJ11 connector for VDSL port with VDSL connection
- Compact design VDSL2 Profile 30a CO/CPE bridge solution 1*10/100/1000Base-Tx LAN port



LMP-2004G-SFP

20-Port Industrial PoE+ Light Layer 3 Managed Ethernet Switch

- 16*10/100/1000Tx (30W/port)
- 4*100/1000 SFP Ports
- Supports IGMP v1/v2



LNP-0500G-BT-24-T

5-Port Industrial Gigabit IEEE 802.3bt PoE++ Unmanaged Ethernet Switch

- 4*10/100/1000Tx (90W/Port)
- 1*10/100/1000Tx
- 12~55VDC Power Input
- EOT: -40°C~75°C



INJ-C201G-BT-24-100-T

Industrial Gigabit Enhanced PoE++ Injector

- 1*10/100/1000Base-T(X) with Enhanced PoE-PSE (100W/Port)
- 1*10/100/1000Base-T(X)
- Booster Version 9~55VDC
- EOT: -40°C to 75°C



FCU-3002A-WA-S1

Compact Single-Mode Gigabit Fiber to 10/100/1000 Ethernet WDM Media Converter

- 10/100/1000TX To 1000LX Single Fiber (WDM-B), Single-Mode 10KM, TX1550nm - RX1310nm
- IEEE 802.3/4/ab 10/100/1000BaseT
- Auto-Crossover for MDI/MDIX in TP Port



FCU-3002A-WB-S1

Compact Single-Mode Gigabit Fiber to 10/100/1000 Ethernet WDM Media Converter

- 10/100/1000TX To 1000LX Single Fiber (WDM-B), Single-Mode 10KM, TX1550nm - RX1310nm
- IEEE 802.3/4/ab 10/100/1000BaseT
- Auto-Crossover for MDI/MDIX in TP Port



FCU-RACK16-AC

16-Slot Unmanaged Universal Media Converter Rack

- Supports up to 16 FCU series media converters
- Hot-swappable media converters, redundant power supplies and fans
- Load sharing power systems



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