antaira®
making connectivity simple...

Industrial Networking for Surveillance, Access Control and Monitoring

Implementing a Reliable Security Network

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.
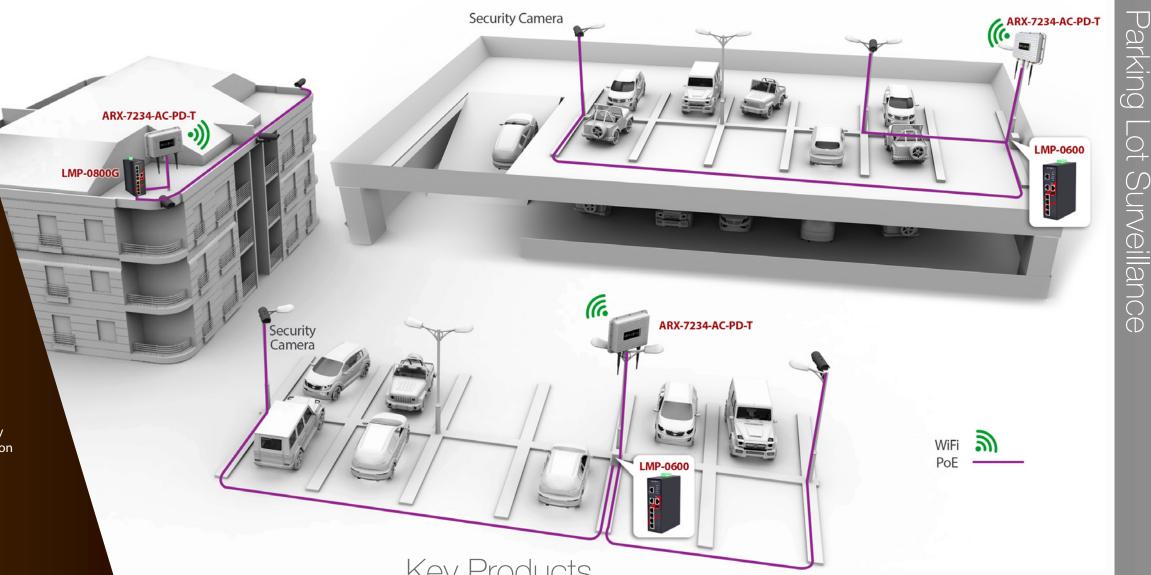
Application

Video surveillance technology plays an important role in improving security at many facilities worldwide. Statistics have shown that 80% of criminal acts reported to police at public centers and business offices occur in parking lots. To deter vandalism, theft, and other crimes, facilities are deploying video surveillance as part of a full range of security measures to remotely monitor/access/control site equipment from a central location.

Compared with an indoor setting, parking lots impose several additional requirements on surveillance networks, particularly because these environments are often in remote locations and subjected to a wide range of temperatures due to the outdoor location. Industrial Ethernet switches that support wide operating temperatures and PoE capabilities can fulfill these types of requirements. Managed Ethernet switches will ensure the ability to remotely monitor/access/control any equipment deployed in the parking lot from a central location.

Trenching or cabling wire from each camera in the parking lot back to the main building can be very expensive . Therefore, instead of physically trenching cable, wireless communication is the most cost efficient solution for sending video back to a central location.

Security Camera

ARX-7234-AC-PD-T

ARX-7234-AC-PD-T

LMP-0800G

LMP-0600

Security Camera

ARX-7234-AC-PD-T

LMP-0600

WiFi
PoE

Key Products

Antaira's Solutions & Benefits:

• **Antaira's Industrial Managed Ethernet Switch Series** provides layer 2 network management software allowing users to remotely monitor and manage the network. Managed switches provide standard features such as QoS, SNMP, IGMP, and IEEE 802.1Q. Additional PoE features, such as, remote PoE power management and automatic end device power recovery can also be managed.

• **Antaira's Industrial Wireless (IEEE 802.11) Series** provides an IP67 waterproof rating and extended operating temperature design to support harsh outdoor wireless network applications. The unit's omnidirectional antennas support connections from multiple directions simultaneously and are ideal in applications where the end device is moving around a centered access point.

LMP-0600
6-Port Industrial PoE+ Managed Ethernet Switch
• 6*10/100Tx (PSE:30W/Port)
• Redundant Ring Network Support w/ RSTP or ERPS (ITU-G.8032)
• Layer 2 Network Management Software Support: SNMP, VLAN, IGMP, and QoS

LMP-0800G
8-Port Industrial PoE+ Gigabit Managed Ethernet Switch
• 8*10/100/1000Tx (PSE:30W/Port)
• Redundant Ring Network Support w/ RSTP or ERPS (ITU-G.8032)
• Layer 2 Network Management Software Support: SNMP, VLAN, IGMP, and QoS

ARX-7234-AC-PD-T
Industrial Outdoor Dual Radio Wireless AP/Client/Bridge/Repeater
• IP67 Metal Housing
• WEP, WPA, WPA2, TKIP, AES
• PD (Powered Device) IEEE 802.3af/at Compliant
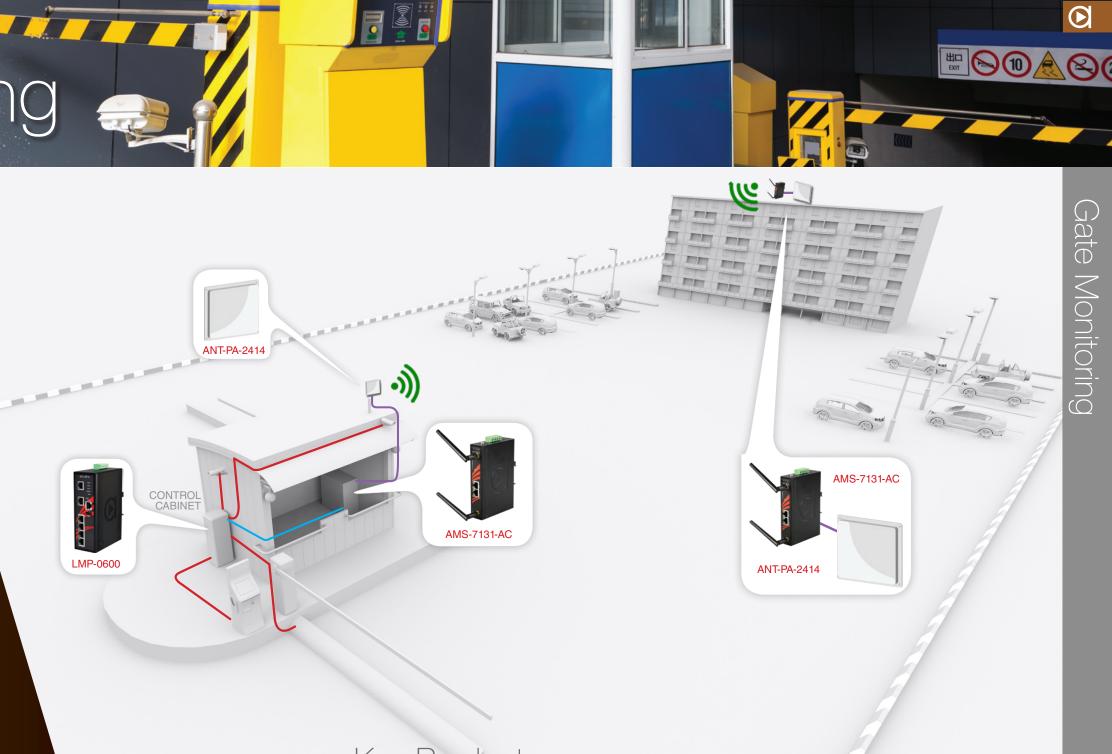
Gate Monitoring

Application

Most secured facilities provide limited access to the general public. Traditionally these facilities relied heavily upon security guards to monitor traffic to and from the facility. Today, additional access control and security surveillance equipment is being implemented in order to improve efficiency and provide remote monitoring support to security guards.

In order to improve surveillance at the security gate, security equipment, such as PoE cameras, road blockers and badge readers might need to be added and connected to the network. Serial, fiber-optics, Ethernet and wireless are all different types of communication mediums that can be used to transport data from end security equipment to the network.

Obstacles such as distance, weather, and construction restrictions can provide limitations to how equipment can be connected. Laying hardwire cable or fiber optics from the security access gate to the main building can require expensive trenching and be time consuming.
Therefore, wireless communication equipment would be the most efficient way to network devices from the main building's control room to the security gate access location.

ANT-PA-2414

AMS-7131-AC

AMS-7131-AC

CONTROL CABINET

LMP-0600

ANT-PA-2414

Key Products

Antaira's Solutions & Benefits:

• **Antaira's Industrial Managed Ethernet Switch Series** provides layer 2 network management software allowing users to remotely monitor and manage the network. Managed switches also allow notifications of various events and warnings.

• **Antaira's Industrial Wireless (IEEE 802.11) Series** provides a long range point-to-point or point-to-multipoint wireless bridge. Information such as username, password and SSID are provided to greatly reduce installation times.

AMS-2111-T
Industrial Compact Wireless LAN Access Point/Client/Repeater
• Supports 2*10/100Base-TX WAN/LAN Ports
• Supports 2.4GHz
• Supports IEEE 802.11b/g/n

AMS-7131-AC
Industrial Wireless (WiFi) LAN Access Point/Client/Bridge/Repeater
• Supports 2*10/100Base-TX WAN/LAN Ports
• Supports IEEE 802.11 a/b/g/n/ac
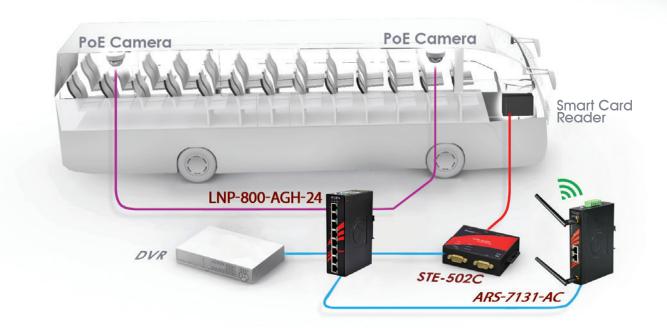• Supports both 2.4GHz and 5GHz

LMP-0600
6-Port Industrial PoE+ Managed Ethernet Switch
• 6*10/100Tx (PSE:30W/Port)
• Redundant Ring Network Support w/ RSTP or ERPS (ITU-G.8032)
• Layer 2 Network Management Software Support: SNMP, VLAN, IGMP, and QoS

ANT-AP-2414
14dBi 2.4 GHz Directional Outdoor Panel Antenna
• Lightweight Antenna
• DC Short Lightning Protection
• Outdoor Antenna for Public Hot Sports

Bus Depot

ARX-7131-AC-PD-T

PoE Camera   **PoE Camera**

Smart Card Reader

LNP-800-AGH-24

DVR

STE-502C

ARS-7131-AC

Application

Equipping fleets with mobile video surveillance systems has become an essential part of the transportation industry. The presence of cameras onboard buses can not only deter fights, vandalism, robberies and assaults, but can also be used in investigations regarding traffic accidents. The reliability of the networking equipment is pertinent in order to transmit on-board security footage to a central location, therefore industrial grade products that are certified to operate under the constant shock and vibration environment of an on-vehicle application are required.

When an event occurs, control room operators at the bus depot will then be notified of the recorded event and will process requests for wireless transfer of video and other data when the bus arrives back at the depot. The data that is stored on the bus is automatically transferred wirelessly to the control room when the bus arrives back at the depot. For this wireless application, a wireless client is installed aboard each bus. While the buses come into the depot, each bus can connect with the IP67 rated access point and wirelessly download on-board security footage quickly and reliably.

In addition, power available on-vehicle is typically limited to 12VDC which can provide additional power challenges for PoE cameras, typically requiring 48VDC. Using voltage booster technology, an industrial grade PoE switch, designated with a -24, can use a low voltage input of 12~36VDC, and increase the power output to 48~55VDC required for PoE applications.

Antaira's Solutions & Benefits:

• **Antaira's Serial Device Server Series** provides a serial RS232/422/485 to TCP/IP Ethernet conversion that allows legacy serial equipment to make use of an Ethernet infrastructure for data transmission.

• **Antaira's Industrial Gigabit PoE Unmanaged Ethernet Switch Series** provides high gigabit bandwidth communication capable of supporting jumbo frames. Antaira's line of PoE switches has low voltage input options (12~36VDC) that utilize voltage booster technology capable of providing high power, backwards compatible PoE (IEEE 802.3at) standard.

• **Antaira's Industrial Wireless (IEEE 802.11) Series** provides rugged solutions for mobile, on-vehicle, wireless networks to auto-matically transfer data wirelessly to a main infrastructure upon entering a designated area.

Key Products

LNP-800AGH-24
8-Port Industrial PoE+ Unmanaged Ethernet Switch
• 8*10/100/1000Tx (PSE: 30W/port)
• Supports Jumbo Frame 9.6Kbytes
• Redundant Low Power Input 12~36VDC (w/ Voltage Booster)

STE-502C
2-Port RS232/422/485 Serial Device Server
• Modes: Virtual COM, TCP/UDP Server or Client, & Tunneling
• Configuration via Web Console, Telnet, or Windows Utility
• Shock, Free Fall, and Vibration Resistant

ARS-7131-AC
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

ARX-7234-AC-PD-T
Industrial Outdoor Dual Radio Wireless AP/Client/Bridge/Repeater
• IP67 Metal Housing
• WEP, WPA, WPA2, TKIP, AES
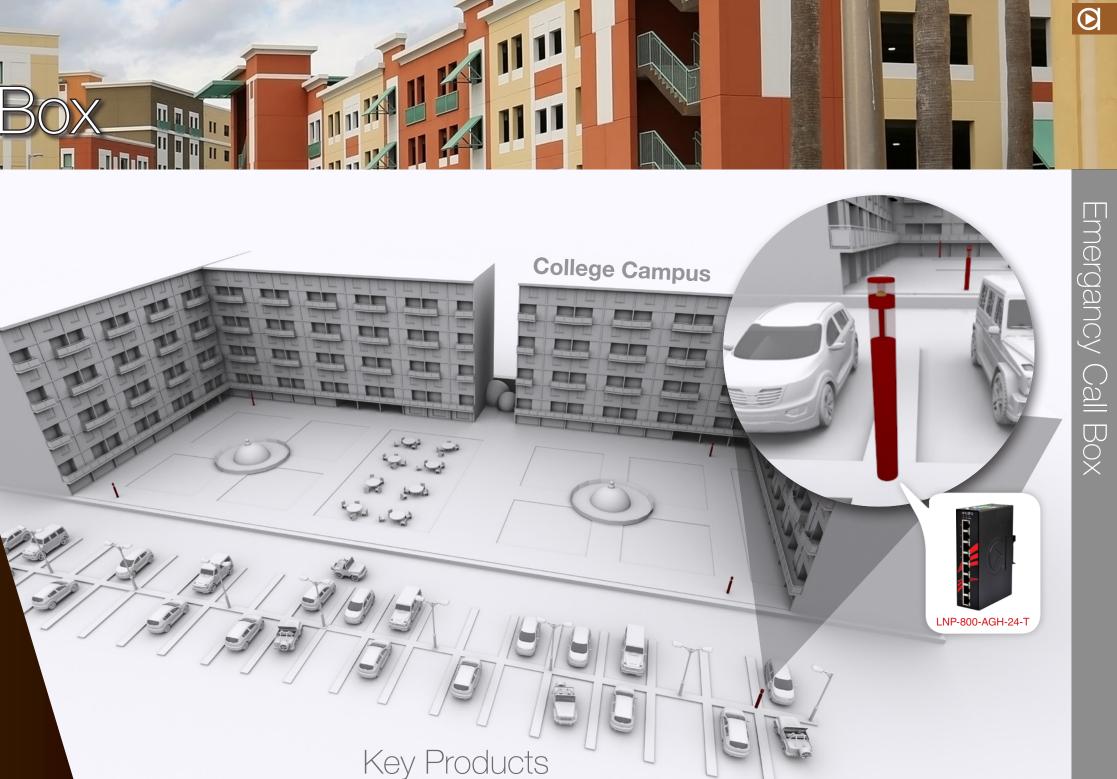• PD (Powered Device) IEEE 802.3af/at Compliant

Application

Blue emergency phones are commonly found outdoors on college campuses nationwide. These emergency phones have been implemented on campuses as a safety tactic for students. Originally they operated on very little power and were just a two-way communication between a student and campus police. To further improve campus safety and security, campuses are implementing more advanced blue emergency phones that are equipped with additional security devices such as IP cameras, loudspeakers, and sirens.

However, an operating issue with power availability occurs as these devices are usually powered with 12-36 volts while standardized PSE devices typically are designed to accept 48 volts in and supply 48 volts out for PoE. To combat the issue, campuses will typically purchase a separate, bulky step-up transformer to be placed inside the emergency system enclosure to achieve the necessary 48 volts. However, this fix is not economical or efficient for schools as enclosure space is limited inside the emergency phone system.

The most economical and efficient solution for schools and campuses is to utilize a low voltage PoE switch. Antaira Technologies offers a wide array of standardized low voltage(12-36VDC) PoE switches to power on and supply the full IEEE 802.3 af/at PoE in a single device. This eliminates the need for a separate step-up transformer and saves the much-needed networking space in the enclosure by using just one small form factor device.

College Campus

LNP-800-AGH-24-T

Key Products

Antaira's Solutions & Benefits:

• **Antaira's Industrial Gigabit PoE Unmanaged Low Voltage Ethernet Switch Series** provides high gigabit bandwidth communication capable of supporting jumbo frames. Antaira's line of PoE switches has low voltage input options (12~36VDC) that utilize voltage booster technology capable of providing high power, backwards compatible PoE (IEEE 802.3at) standard.

• **Antaira's Industrial Wireless (IEEE 802.11) Series** provides a wireless solution that will bring data back to the main campus security office if data and power are unavailable to reach the emergency phone through hardwiring. In this situation where power is unavailable, emergency phones can be powered through solar panels placed on top of the phone structures.

LNP-800-AGH-24-T
8-Port Industrial PoE+ Unmanaged Ethernet Switch
• Supports P.S.E. Based on IEEE 802.3at Standard up to 30 Watts per Port
• Support Auto MDI/MDI-X Function
• Redundant Power Input Design: 12~36VDC

AMS-7131-AC
Industrial Wireless (WiFi) LAN Access Point/ Client/Bridge/Repeater
• Supports 2*10/100Base-TX WAN/LAN Ports
• Supports IEEE 802.11 a/b/g/n/ac
• Supports both 2.4GHz and 5GHz

LNP-0802C-SFP-24
8-Port Industrial PoE+ Unmanaged Ethernet Switch
• Supports 6-Port 10/100Tx IEEE 802.3at PoE+ Compliant with 30W pe Port, 2*Gigabit Combo Ports (2*10/100/1000Tx RJ45, and 2*100/1000 SFP Slots)
• Supports Auto MDI/MDI-X Function
• Redundant Power Input Design: 12~36VDC (Voltage Booster)

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
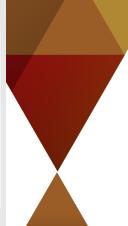
LMP-0602-M

6-Port Industrial PoE+ Managed Ethernet Switch

- 4*10/100 IEEE 802.3af/at Compliant with 30W/Port + 2*100Fx (SC,ST,WDM Options)
- Network Redundancy Support: RSTP,MSTP and G.8032 ERPS (<50ms Recovery Time)
- Easy to Use Web Based Configuration or CLI / Telnet Configuration Option.

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

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-1202M-SFP

10-Port Industrial PoE+ Unmanaged Ethernet Switch

- 8*10/100 IEEE 802.3af/at Compliant with 30W/Port + 2*Gigabit Combo (2*100/1000Tx / 2*100/1000) SFP Fiber Ports
- Dual Rate Fiber, Supports Fast Ethernet or Gigabit Ethernet
- High Surge (3,000 VDC) and ESD (6,000 VDC) Protection

LMX-1600G SERIES

16-Port Industrial Gigabit Managed Ethernet Switch

- 16*10/100/1000Tx RJ45 Ports
- IPv4/IPv6, and DHCP Option 66/67/82
- Modbus/TCP Protocol for Device Management and Monitoring

LNP-2004G-SFP

20-Port Industrial PoE+ Gigabit Unmanaged Ethernet Switch

- 16*10/100/1000Tx (30W/Port) + 4*100/1000 SFP ports
- Supports Auto MDI/MDI-X Function
- Redundant Power Input Design: 48~55VDC

LNX-2012GN-SFP

20-Port Industrial Gigabit Managed Ethernet Switch

- w/8*10/100/1000Tx and, + 12*100/1000 SFP Slot
- Redundant Ring, MSTP/RSTP/STP (IEEE 802.1s/w/D) for Ethernet Redundancy
- Supports SNMP v1/v2c/v3, RMON and 802.1Q VLAN Network Management

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

LNP-1600G

16-Port Industrial PoE+ Unmanaged Ethernet Switch

- 16-Port IEEE 802.3at compliant PoE+ Function with 30W/Port
- Supports Auto MDI/MDI-X Function
- Redundant Power Input Design – 48~55VDC

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

Product Showcase

ARX-7234-AC-PD-T

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

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

ARY-7234-AC-PD

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

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

ARS-7234-AC-T

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

- Dual Radios (2.4GHz/5GHz Concurrent)
- Reverse Polarity Protection
- Supports Ethernet Gigabit WAN/LAN Port

ARS-7131-AC 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

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

AMS-7131-AC SERIES

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

- Supports AP, Client, Bridge, Router, and Repeater Mode
- Daisy Chain Support to Reduce Usage of Switch Ports
- Secured Management by HTTPS and SSH

AMS-7131 SERIES

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

- Supports IEEE 802.11 a/b/g/n
- Supports 2*10/100Base-TX WAN/LAN Ports
- WPA, WPA2, TKIP, AES

ARS-7231-AC SERIES

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

- Industrial Dual Radio 802.11 a/b/g/n/ac WiFi Access Point/ Client/Bridge/Repeater with Router Capabilities
- 2*10/100Base-TX WAN/LAN port
- IEEE 802.11 a/b/g/n/ac

Low Voltage PoE

Ethernet Media Converters

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 Gigabit 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

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-1204G-SFP-T

12-Port Industrial Gigabit PoE+ Managed Ethernet Switch

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

LNP-2004G-SFP SERIES

20-Port Industrial Gigabit PoE+ Unmanaged Ethernet Switch

- 4-Port 100/1000 Auto Sensing SFP Slots
- Built-in Relay for Power Redundancy Failure Warning
- RJ45 Port Support Auto MDI/MDI-X Function

FCU-3002A-WA-S1

Compact single-mode gigibit 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/u/ab 10/100/1000BaseT
- Auto-Crossover for MDI/MDIX in TP Port

FCU-3002A-WB-S1

Compact single-mode gigibit 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/u/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

About Antaira

Antaira Worldwide

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Antaira Technologies is a leading 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 devices. 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, oil and gas, power/ utility and medical.

Mission Statement

As a leader and trusted partner in the industrial device networking field, Antaira is committed to providing quality products and value-added service to its customers and channel partners to create solutions that deliver a worldwide advancement for a wide array of applications.
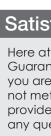
Our Commitment

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.

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