



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 long lasting 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.



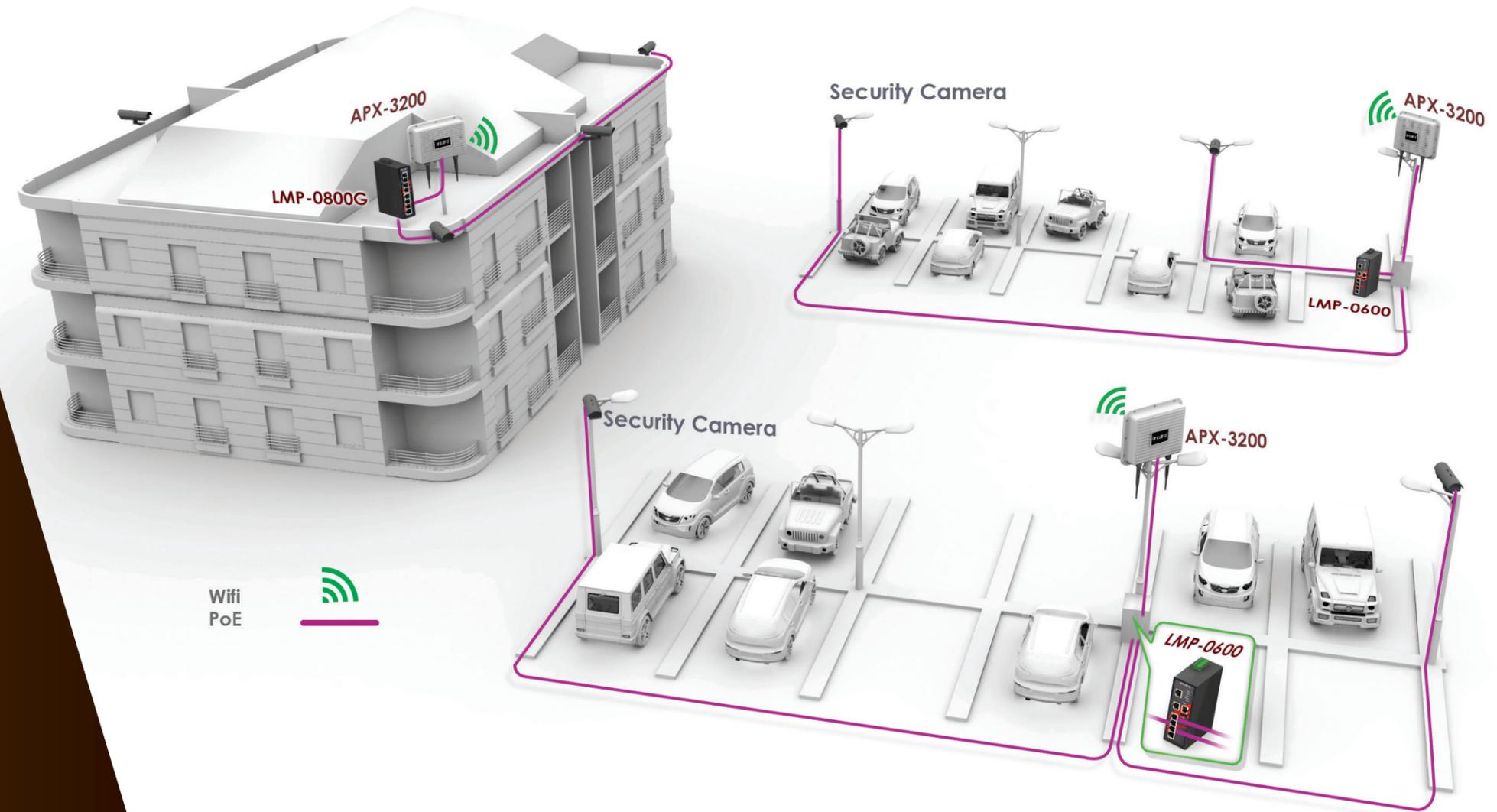
Parking Lot Surveillance

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.



Parking Lot Surveillance

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 might provide movement.

Key Products



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



APX-3200
Industrial IP67 802.11 b/g/n Wireless AP/Bridge/Client
 • Industrial Grade Outdoor IP67 Hardened Enclosure
 • 2.4GHz High Power Output (800mW) Radio
 • WEP/WPA/WPA2/IEEE 802.1x Authentication Support

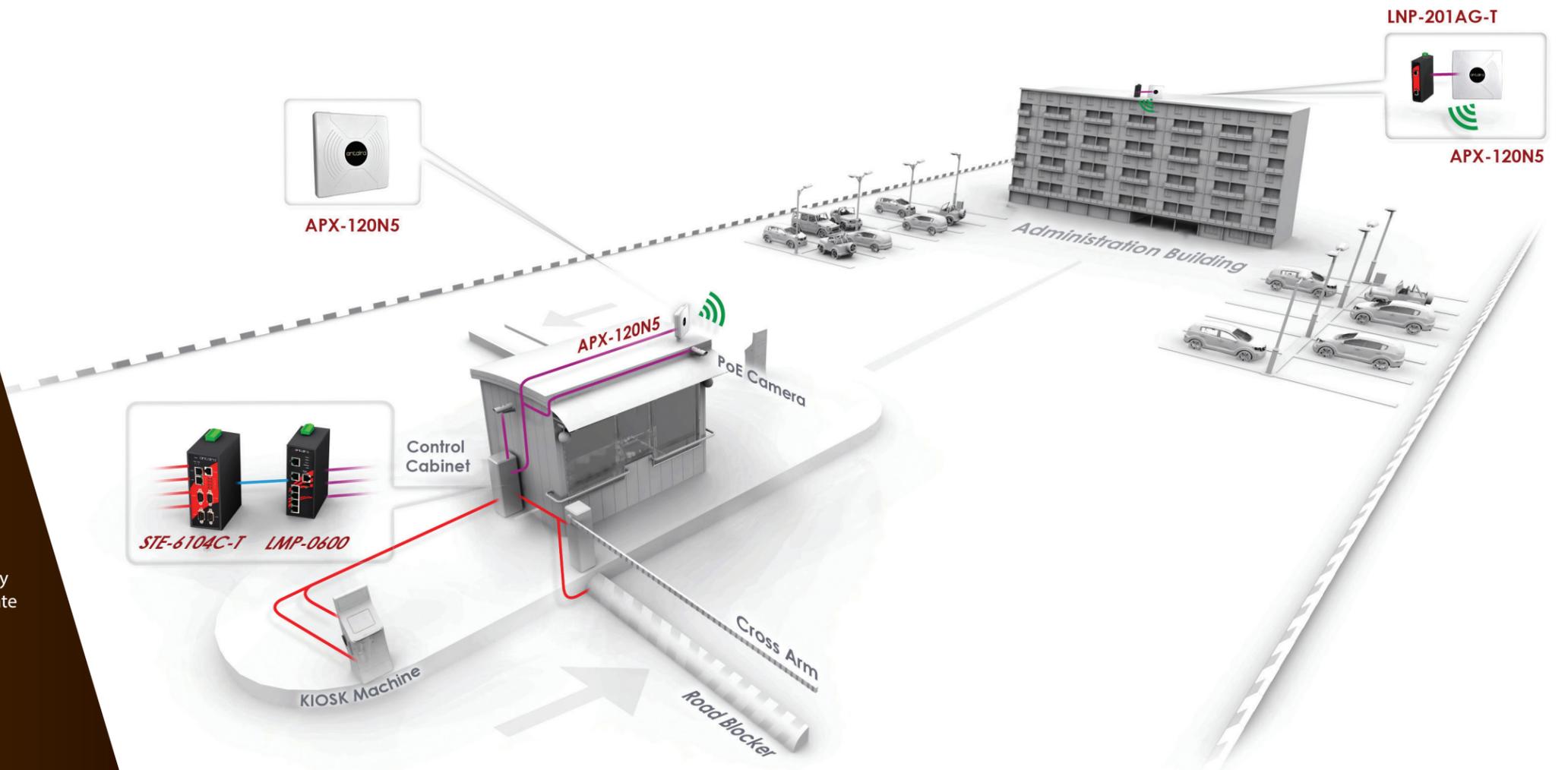
Gate Monitoring

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.



Key Products

Antaira's Solutions & Benefits:

- **Antaira's Serial Device Server Series** provide 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 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 pre-configured wireless bridge. Information such as username, password and SSID are provided to greatly reduce installation times.



- STE-6104C-T**
4-Port Serial Device Server
 • 4*RS232/422/485 (Software Selectable)
 • Dual LAN for Network or Data Redundant Applications
 • Modes: Virtual COM, TCP/UDP Server or Client, & Tunneling



- LNP-201AG-T**
Industrial IEEE 802.3at Gigabit PoE/PoE+ Injector
 • 2*10/100/1000Tx Ports (Data In x1 + PoE Out x1)
 • IEEE 802.3at Compliant (30W/Port)
 • Dual Power Input 24~48VDC

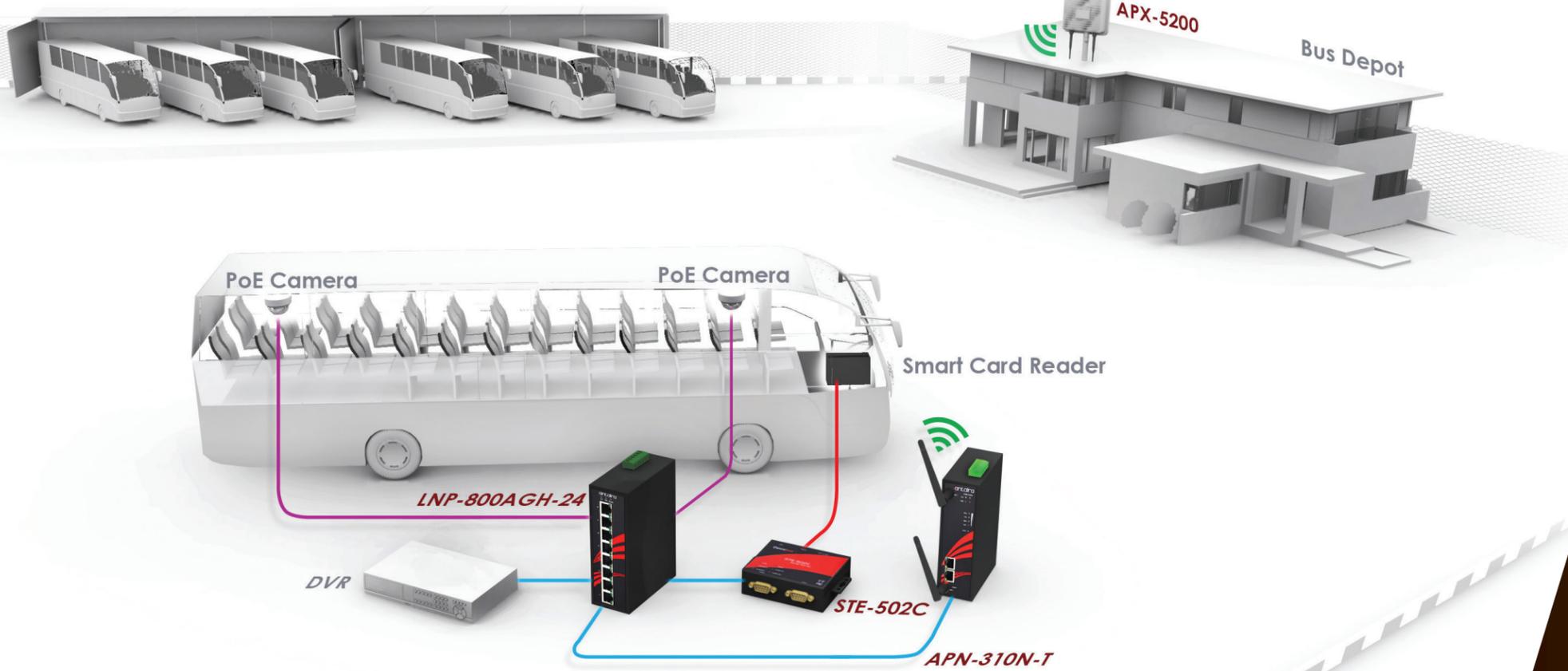


- LMP-0600**
6-Port Industrial PoE+ Managed Ethernet Switch
 • 6*10/100Tx (PSE:30W/Port)
 • Redundant Ring Network Support w/ RSTP or ERPS (ITU-G.8032)
 • Layer 2 Network Management Software Support: SNMP, VLAN, IGMP, and QoS



- APX-120N5**
Pre-Configured Wireless Bridge
 • IEEE 802.11a/n Compliant
 • PoE Powered Device
 • Built-in 5GHz 19dBi Dual-Polarization Antenna

Onboard Mobile Surveillance



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.

Onboard Mobile Surveillance

Key Products

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 automatically transfer data wirelessly to a main infrastructure upon entering a designated area.



- 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



- APN-310N-T**
Industrial Wireless AP/Client/Bridge/Repeater
- Built-in 2*10/100Tx for Daisy Chain Applications
 - IEEE 802.11a/b/g/n Link up to 300Mbps
 - Wireless Security: WEP/WPA/WPA-PSK/IEEE 802.1x Authentication/RADIUS



- APX-5200**
Industrial IP67 802.11 b/g/n Wireless AP/Client/Bridge
- Two High Speed Gigabit RJ45 Ethernet Ports
 - 2.4GHz High Power Output (800mW) Radio
 - WEP/WPA/WPA2/IEEE 802.1x Authentication Support

Fire Alarm Panel Monitoring

Application

Safety is a valuable asset. In a fire alarm system, a variety of devices work together with fire alarm panels through visual and audible alerts when smoke, fire, carbon monoxide, or other emergencies are present. These fire alarm codes are then immediately reported to a local fire prevention control center. In most metropolitan areas, buildings are required to install multiple fire alarm panels on each floor in order to pass along fire alarm codes to trigger warning signals and expedite the evacuation process.

The principle of networking involves connecting several panels together to form a system that allows different panels to be monitored by one geographical monitoring system. Typical fire alarm panels are designed with proprietary serial protocols that transmit fire alarm code information. Due to distance and environmental concerns, a serial fiber network can be implemented to overcome the typical serial copper cable length limitation of 1.2Km.

A dual serial fiber network is also an effective way to decouple systems and reduce the risk of a portion of a facility going offline at any time due to system failure or maintenance requirements. Antaira's industrial serial to fiber media converters are designed to ensure 24/7 and long-lasting operation. Each unit inside the fire alarm panel supports dual fiber connections to prevent data loss to the fire prevention control center.



Antaira's Solutions & Benefits:

- **Antaira's Industrial Serial to Fiber Series** provides a redundant serial fiber network to prevent data loss and reliably transmit fire alarm code to a remote fire prevention control center.

Key Products



STF-502C
Industrial RS232/422/485 Serial to Fiber Converter
 • Supports 1-Port RS232 (DB9) or RS422/485 (Terminal Block) Serial
 • Provides Dual Serial Fiber Interface for Redundant Network
 • 15KV ESD and 2.5KV Isolation Protection



STF-501C
Industrial RS232/422/485 Serial to Fiber Converter
 • Supports 1-Port RS232 (DB9) or RS422/485 (Terminal Block) Serial
 • Supports Half Duplex Daisy Chain / Ring Topology Serial Fiber Network
 • 15KV ESD and 2.5KV Isolation Protection



STF-401C
Compact Industrial RS232/422/485 Serial to Fiber Interface
 • Supports 1-Port RS232 (DB9) or RS422/485 (Terminal Block) Serial Interface
 • Supports Multi-Mode Fiber in 2Km or Single-Mode Fiber up to 30Km
 • 15KV ESD Protection

Product Showcase

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.



LNP-0500G

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



LMP-0804G-SFP

8-Port Industrial PoE+ Gigabit Managed Ethernet Switch

- 4*10/100/1000 RJ45 Ports + 4*100/1000 SFP Fiber Ports
- USB Capabilities: Automatic Recovery, Rapid Configuration Setup and Data Logging
- PoE Features: PoE Keep Alive, Scheduled Power Cycle, Power Budget and Port Settings



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-1002C-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



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

Product Showcase

Industrial Wireless



APX-3200

Industrial Outdoor IP67 802.11b/g/n Wireless LAN AP/Bridge/Repeater

- Outdoor IP67 Waterproof Radio, PoE Powered
- Security Management: WEP/WPA/WPA2/WPA2-PSK/ IEEE 802.1x / RADIUS/HTTPS and SSH
- High Output Power 800mW



APX-5200

Industrial Gigabit Outdoor IP67 802.11b/g/n Wireless LAN AP/Bridge/Repeater

- Two Gigabit RJ45 Ethernet Ports for Daisy Chain Applications
- Outdoor IP67 Waterproof Radio, PoE Powered
- Security Management: WEP/WPA/WPA2/WPA2-PSK/ IEEE 802.1x / RADIUS/HTTPS and SSH



APX-5500

Industrial Gigabit Outdoor IP67 802.11a/n Wireless LAN AP/Bridge/Repeater

- Two Gigabit RJ45 Ethernet Ports for Daisy Chain Applications
- Outdoor IP67 Waterproof Radio, PoE Powered
- Security Management: WEP/WPA/WPA2/WPA2-PSK/ IEEE 802.1x / RADIUS/HTTPS and SSH



APX-5700

Industrial Dual Radio Gigabit Outdoor IP67 802.11a/b/g/n Wireless LAN AP/Bridge/Repeater

- Two Radios in a Single Enclosure Providing Simultaneous Independent 2.4 & 5GHz Wireless
- Two Gigabit RJ45 Ethernet Ports for Daisy Chain Applications
- Security Management: WEP/WPA/WPA2/WPA2-PSK/ IEEE 802.1x / RADIUS/HTTPS and SSH



APN-210N

Industrial 802.11b/g/n Wireless LAN AP/Bridge/Repeater

- Security Management: WEP/WPA/WPA2/WPA2-PSK/ IEEE 802.1x / RADIUS/HTTPS and SSH
- Daisy Chain Support to Reduce Usage of Switch Ports
- Easy to Use Web Based Configuration and Telnet



APN-310N

Industrial 802.11a/b/g/n Wireless LAN AP/Bridge/Repeater

- Security Management: WEP/WPA/WPA2/WPA2-PSK/ IEEE 802.1x / RADIUS/HTTPS and SSH
- Daisy Chain Support to Reduce Usage of Switch Ports
- Easy to Use Web Based Configuration and Telnet



APN-320N

Industrial Dual Radio 802.11a/b/g/n Wireless LAN AP/Bridge/Repeater

- Two Radios in a Single Enclosure Providing Simultaneous Independent 2.4 & 5GHz Wireless
- Built-in 4*10/100Tx RJ45 Ports for Client or Daisy Chain Applications
- Security Management: WEP/WPA/WPA2/WPA2-PSK/ IEEE 802.1x / RADIUS/HTTPS and SSH



APR-3100N

Industrial 802.11a/b/g/n Wireless AP/VPN/Router

- Ideal for VPN Tunneling Applications
- WAN Connection Type: Dynamic/Static IP, PPPoE, PPTP, and L2TP
- Security Management: WEP/WPA/WPA2/WPA2-PSK/ IEEE 802.1x / RADIUS/HTTPS and SSH

Product Showcase

Industrial Serial Communication



STE-501C

1-Port (RS232/422/485) Serial Device Server

- 15KV ESD Protection for Serial Signals
- Configuration: Web Console, Serial Console, Windows Utility or Telnet
- Operation Mode: TCP Server/Client, UDP and Virtual COM



STE-6104C-T

4-Port (RS232/422/485) Industrial Serial Device Server

- 4*RS232/422/485 (Software Selectable)
- Dual LAN for Network or Data Redundant Applications
- Supports Virtual COM, TCP/UDP Server or Client, and Tunneling Modes



STW-611C/612C

1/2-Port (RS232/422/485) IEEE 802.11b/g/n Serial Device Server

- 3-Way Communication: Simultaneous Serial, Ethernet and Wireless Communication
- Configuration: Web Console, Serial Console, Windows Utility or Telnet
- Operation Mode: TCP Server/Client, UDP and Virtual COM



STE-716A

16-Port 1U Rackmount Industrial RS232 Serial Device Server

- Build-in Dual 10/100 Ethernet for Daisy Chain, Network Redundancy or Data Redundancy
- Configuration: Web Console, Serial Console, Windows Utility or Telnet
- Operation Mode: TCP Server/Client, UDP and Virtual COM



IMP-100A Series

1-Port 10/100Tx to 100Fx Industrial IEEE 802.3af PoE Media Converter

- Supports Single or Multi-Mode Fiber with SC, SC or WDM Connections
- Built-in Link-Fault-Pass-Through(LFP) and Link Loss Forwarding (LLF)
- High Surge (3,000 VDC) and ESD (6,000 VDC) Protection



IVC-4011-T

Industrial Ethernet Extender, 4-Port RJ45 (LAN), 1-Port BNC and 1-Port RJ11

- Communication Distance: Ethernet 100M, Coaxial Cable 2.4Km, Telephone(RJ11) 1.4Km
- All-in-One Design, Master / Slave Selectable via DIP Switch
- Selectable Target Band Plan and Target SNR Margin



FCU-5002-SFP+

Unmanaged 10G Fiber Media Converter

- Supports 10 Gigabit Fiber to Fiber Full Duplex Conversion
- LED Indicators for Link and Power Status
- Fully Compatible with the FCU-RACK16 Series



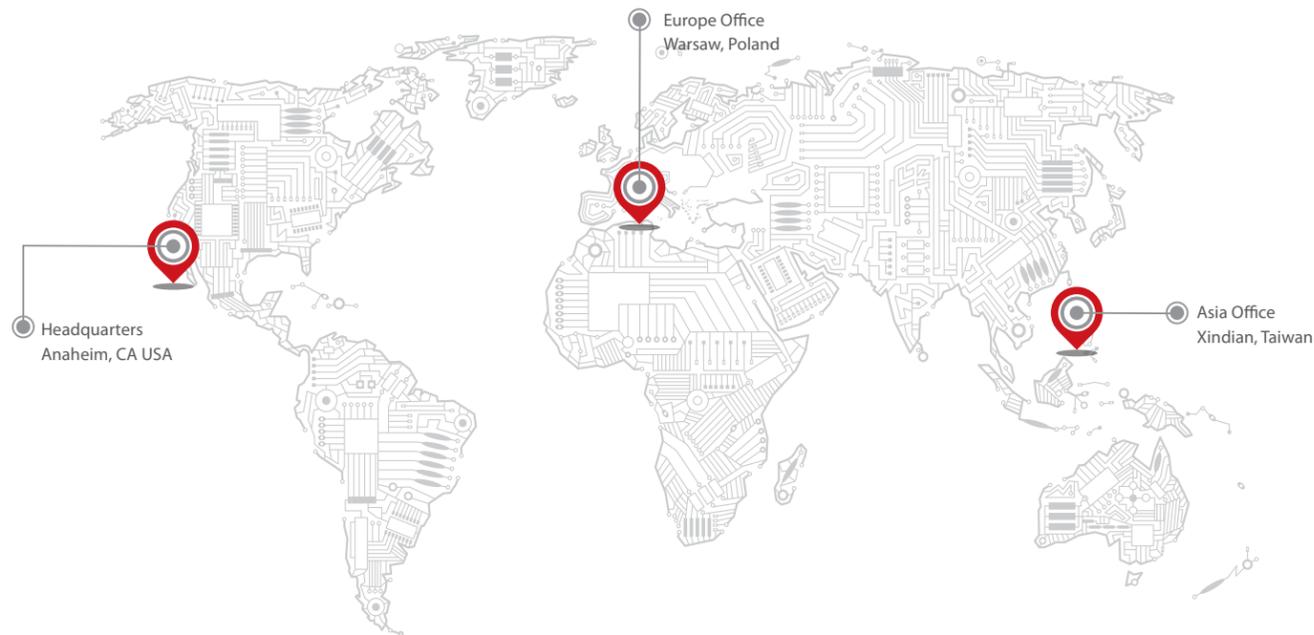
FCU-Rack16-AC

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 Supply System

About Antaira

Antaira Worldwide



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

At Antaira, we strive to meet our customers' needs by going above and beyond industry standards. Every sale is backed by our 45-Day Satisfaction Guarantee. If for any reason our customers are unsatisfied with their experience or their expectations were not met, Antaira will provide a full refund within 45 days of the purchase date. Our friendly customer service representatives are available 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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