TRANSPORTATION & BUS SURVEILLANCE: MOBILE SECURITY

As public transportation is becoming more popular in North America, following successful models used in foreign transportation systems can help guide our decisions and processes concerning public safety initiatives.

Adding surveillance to improve the safety of public transportation is one such example. A European bus company was looking for an industrial Power over Ethernet (PoE) switch to connect critical components of its mobile security system. Installations on the bus included six security cameras, a network video recorder (NVR) and a Wi-Fi router, that all required communication and power. Devices used in transportation surveillance systems such as on buses or trains have a unique set of requirements and specifications that are crucial to their operability and efficiency. Devices must be compact and rugged to maximize available space, reduce crowding and survive extreme temperature conditions and harsh environments.

Comtrol’s RocketLinx ES7110-VB (voltage boost) switch is used in this security configuration to ensure quality system performance and to meet the system specifications. As cameras send data and video to the NVR, it is transferred wirelessly from the bus to a remote monitoring room via the Wi-Fi router. The RocketLinx ES7110-VB has eight 10/100BASE-TX PoE injector ports for directly powering remote equipment and reducing wiring and installation costs, and two Gigabit uplink ports for megapixel video transmission and high-quality streaming data and video. Additionally, the switch provides a 12/24VDC power input boost to 48VDC, eliminating the need for a separate power supply or voltage converter to conserve space and cost.

Featuring a DIN rail mount and measuring less than two inches in width, the ES7110-VB works well with limited space and other equipment placement in a surveillance system. Dual redundant independent power inputs for potential power loss enables a backup power supply to compensate for loss of main power and maintain camera operation. The rugged IP30 enclosure protects the switch from vibration and shock, while the -25°C to +60°C operating temperature allows for installation in a variety of environments.

Comtrol’s RocketLinx Power over Ethernet switches are engineered for industrial applications such as IP video surveillance or wireless broadband, where the power source is not conveniently located. With rugged, drip-proof housings, redundant power inputs and performance command-line interfaces, these PoE switches provide reliable networking solutions.

With both managed and unmanaged models available, the RocketLinx ES series of switches provide cost-effective networking solutions delivering the industry’s best rugged Ethernet switch technologies.

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RocketLinx™ ES7110-VB
Part Number: 32049-4 Voltage Boost

KEY FEATURES AND BENEFITS

- 10-Port Industrial PoE unmanaged switch
- Voltage boost technology supporting 12/24VDC power sources for transportation and industrial applications
- Eight 10/100BASE-TX PoE injector ports and two 10/100/1000BASE-TX uplink ports
- Plug-and-play rugged PoE switch
- IEEE 802.3af compliant PoE with a total output power budget of 65W (15.4W maximum on each port)
- Two Gigabit uplink ports supporting high bandwidth applications such as IP surveillance
- QoS support for optimizing video and VoIP stream
- Wide operating temperature range for installation in harsh environments (-25° to +60°C)
- Alarm Relay for failure and event notification
- Industrial-grade aluminum IP30 housing
- DIN rail/wall mount installation
- UL listed

PRODUCT DESCRIPTION

The RocketLinx ES7110-VB is an IEEE 802.3af compliant PoE switch designed for connecting a wide range of industrial PoE equipment such as IP surveillance cameras, wireless access points, point-of-sale systems, and other devices utilizing 12/24V vehicle power sources or 24V standard industrial power.

The RocketLinx ES7110-VB is equipped with eight 10/100BASE-TX PoE injector ports, with each port delivering power up to 15.4W, and two 10/100/1000BASE-TX (Gigabit) Ethernet uplink ports for transferring data to the network. The ES7110-VB supports QoS, which ensures high quality video traffic transmission by adjusting the data transfer priority.

The ES7110-VB features convenient wiring with a standard 4-pin industrial terminal block for power input and a fault relay alarm contact output. Additionally, each Ethernet port has a Port Link Alarm, which can be configured to automatically trigger on connection issues, warning administrators of abnormal operating conditions and ensuring quick resolution to network issues.

In addition to advanced PoE and networking capabilities, the ES7110-VB is designed for industrial applications and deployment in harsh conditions. With an IP30 rigid aluminum housing and extended operating temperature range, consistent operation is ensured in environments such as mass transit vehicles, factories, and outdoor settings.