

AirGuard Wireless Access Point

3e-525A-3



The AirGuard® wireless access point is packaged in a rugged weatherproof enclosure and conforms to 802.11a/b/g wireless standards. It provides access point, bridge / repeater, and mesh networking for wireless applications. The 3e-525A-3 with mobile power option (MP) is engineered specifically for vehicle operation. The 3e-525A-3 has passed FIPS 140-2 testing and validation, and was issued certificate #1023.

The wireless access point permits broad wireless network implementation with a single type of unit including 802.11a/b/g capabilities.

The access point can establish network links to laptops, PDAs and other wireless devices at data rates from 11 Mbps to up to 54 Mbps. For use in mesh networking, repeater or bridging applications, the AirGuard wireless access point also supports wireless signaling for link data rates up to 108 Mbps. This allows the wireless backbone to accommodate the data from several 802.11a/b/g systems.

The access point can be used for a variety of security measures. For less sensitive applications, the legacy WEP encryption algorithm system can be used. For federal government or military applications, AES or AES-CCM encryption is available. The AES algorithm has been approved by the National Institute of Standards and Technology (NIST). NIST's FIPS 140-2 standard is required on all U.S. government wireless installations.

AES is available for both access point as well as bridging. Additional security is available by adding the optional 3e-030 security server software to enable dynamic key exchange.

Configuration of the wireless LAN is easy with its https web interface. This interface includes the ability to manage all features of the device including bridge, AP, management and diagnostic functions. The access point can also be controlled via SNMP v1, v2 or v3.

The 3e-525A-3 operates on Power-over-Ethernet (PoE), saving the time and costs associated with powerline cabling. Alternatively, the mobile power option has a 9 to 36 VDC power port designed to accept variable input voltage with noise and over-voltage conditions typical of vehicle power systems.

BENEFITS

- Self-forming, self-healing mesh network
- Functions as an access point / bridge / repeater / mesh network
- Highly secure – AES 256 and FIPS 140-2 validation AES and 802.11i
- Dual radios - 802.11a/b/g for both AP and bridging modes with high data rate at 11 to 54Mbps
- Power-over-Ethernet standard 802.AF
- 802.1Q VLAN allows use of multiple SSIDs for varying service types over a common physical network
- Each VLAN can be assigned a unique security policy
- Wireless client load balancing
- Detects and reports rogue APs



3eTI

Ultra
ELECTRONICS

EXTERNAL PORTS / CONNECTORS

- One 10 / 100 Base-T WAN (UPLINK) Ethernet port
- One 10 / 100 Base-T LAN (LOCAL) Ethernet port
- One bridge antenna connector
- Two AP antenna connectors
- One ground connector
- Power input (MP)

LED INDICATORS

- Power
- WAN - Ethernet Uplink Indicator
- WLAN1 - AP activity light/link indicator
- WLAN2 - Bridge activity light/link indicator
- WLAN SS – Bridge signal strength indicator
- FIPS mode

ENVIRONMENTAL

- Operating temperature:
 - STD: -5° C to +65° C
 - EX or EP: -40° C to +70° C
- Storage temperature: -40° C to +80° C
- EMI: FCC Class A

WAN ETHERNET SETTINGS

- Fixed IP
- DHCP client
- Supports 10 / 100 Mbps full / half duplex auto negotiation

LAN ETHERNET SETTINGS

- Supports 10 / 100 Mbps full / half duplex auto negotiation
- DHCP server for local management

WIRELESS FEATURES

- Multiple EFs: 802.11a/b/g for bridging and AP with optional 4.9GHz
- RF power output:
 - STD: 100 mW X 2
 - EX: 120 mW X 2
 - EP: 120 mW, 600mW
- Multiple SSIDs / 802.1Q VLAN
- Operation modes:
 - Mesh
 - Access Point
 - Bridge / Repeater
- Channel number
 - Fixed channel
 - Automatic channel selection (optimum)
- IPv6 static addressing
- Self-forming, Self-healing mesh network
- Adjustable transmit power
- Security
 - Non-FIPS
 - WEP - 64-, 128-, and 152-bit
 - WPA / WPA2 – PSK
 - WPA / WPA2 – 802.1x –Dynamic Key
 - WPA /WPA2 – 802.11i AES-CCMP
 - FIPS 140-2 Mode
 - Diffie-Hellman Key Exchange
 - FIPS - AES - 128-, 192-, 256-bit
 - FIPS - 802.11i PSK and 802.1x
 - Enable / disable broadcast SSID
 - MAC address filtering
 - Rogue wireless AP detection with e-mail notification
 - NSA Suite B upgradeable
- Wireless AP and wireless client activities monitoring
 - Signal strength
 - MAC address listing of wireless clients

TOOLS AND UTILITIES

- Ping utility
- Trace route utility
- Firmware upgrade via web GUI
- Reboot device
- Factory default
- Configuration file transfers
- Remote Administration Access Control
- Radio TX off Control

DEVICE MANAGEMENT

- SNMP v1, v2, v3
- Web server, HTTPS

POWER REQUIREMENTS

- STD: 48 volts Power-over-Ethernet
- MP: 9 - 36 VDC for mobile power option
- Power consumption 10 watts (STD)

DIMENSIONS AND WEIGHT

- 9.25 x 8.25 x 3.00 inches
- 5.5 pounds

DESIGNED TO MEET MIL STANDARDS

- MIL-STD-901D Shock
- MIL-STD-167 Vibration
- DoD PKI
- MIL-STD-464/A Par 5-13 / EMCON
- MIL-HDBK-2036 DoD-STD-1399/301A

CERTIFICATIONS

- FIPS 140-2 validated
- WiFi interoperability certification
- NIAP EAL 4 Common Criteria certified

OPTIONS

- MP: Mobile power
- EP: Long range backhaul (non-FIPS)
- EX: Extended temperature and RF power
- 3e-49G-M: 4,9GHz Public Safety Band

ABOUT 3ETI

3e Technologies International (3eTI), an Ultra Electronics company, is a leading provider of highly secure wireless networks that enable critical systems security, infrastructure security and industrial automation for the military, government, industrial and utility markets. Its product portfolio includes proven and robust secure wireless mesh networks, sensor networks, cyber security, and perimeter security solutions, deployed for a range of applications, including military base security, onboard ship communications, rapidly deployable communications, and advanced metering infrastructure for SmartGrid programs. 3eTI's platforms are approved for use by the most stringent and demanding customers: the U.S. military.



3eTI

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