

# The Choice for Secure Wireless



An EFJohnson company  
TECHNOLOGIES

## Advanced Metering

*Information Access with Information Assurance and Network Security*

### The Challenge

Provide a wireless network capable of device management, multi device modes of operation, as bridges, access points or clients, mesh networking, secure encryption, rugged infrastructure design to accommodate any potential installation environment, VLAN to allow multiple users, but vary levels of authorization and applied security policies, and PoE to preclude low power installation design concerns and expedite implementation.



### The Solution

3eTI's US designed and manufactured Air Guard™ 523-3 multi-mode secure wireless access points provide interconnection of building-level, advanced metering solutions in support of the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Over 5,000 3eTI Air Guard™ 523-3 are being installed at DOD installations in CA, WA and Military District of Washington as networked systems measuring energy usage, energy allocation and real time energy resource management to reduce energy consumption. 3eTI Air Guard™ wireless connectivity of smart meters helps DOD installations manage energy use, quality and cost. DOD installation managers estimate energy savings of over 10% with a fully installed system.

### The Benefits

3e-523-3 multi-mode wireless data points offers 802.11i wireless technology, FIPS 140-2 validated security and multiple operating modes including mesh, bridge, Access Point and client modes. Advantages include:

- **Compliance** with DOD policy for Secure Wireless networks (DODD 8100.2 and DISA Wireless STIG) to prevent unauthorized access and tampering.
- **Broad acceptance** and extensive deployments in Department of the Navy
- **MILSTD Qualifications** including HERO/HERP/HERF, EMI, etc.
- **Military Utility** Assessment Validation
- **Wi-Fi Alliance Certification**
- **Flexible** via open architecture, with solutions for fixed and **mobile networks** where conditions preclude wire installation; cheaper network installation delivers quick and quantifiable return on investment.
- **Validated** on DOD platforms since 2002.
- **Interoperable** with IP standards based networks utility and system controls
- **Cost Effective:** Less costly than comparable approved secure wireless products
  - Lower installation cost than similar wired systems
  - Can be integrated with existing wired systems and products
- **U.S.** publicly owned design, manufacturing and installation **small business**
  - Industry leading technology, low unit cost and faster, low voltage DC power supply requirement enables ease of use in battery, solar, or vehicle installations.

# AirGuard™ 3e-523-3

## FIPS 140-2 Secure Wireless Data Point



3e-523-3

### Benefits

- Reduces deployment costs and time
- Supports multiple wireless data points on highly secure WLAN
- Integrates with multiple device technologies through flexible interface
- Flexible: system additions or modifications easily accomplished with wireless connections
- Rapid time to market with embedded FIPS 140-2 validated™ module

### Features

- Stand-alone bridge mode data point
- Data & reports accessible via wireless LAN
- FIPS 140-2 Validated™ crypto modules
- IEEE 802.11a/b/g
- Available in outdoor-ready package

3e Technologies International's (3eTI) 3e-523-3 Wireless Data Point enables economical wireless interfacing of various devices supporting Ethernet or serial interfaces. With security-enhanced IEEE 802.11 wireless technology, costly installation cabling is eliminated. Any device installation can communicate to the data network wirelessly utilizing a 3eTI secure access point for connection to the wired network system. This system is transparent to the application software and provides network data security at a level appropriate for use in security-sensitive applications.

The 3e-523-3 is packaged in an outdoor-ready IP67 / NEMA 4 package. The IP67 packaging of the 3e-523-3 is ruggedized for demanding environments, and includes an integrated thermostatically controlled heater to allow operation down to a very low -40° C.

The 3e-523-3 provides highly flexible integration for rapid deployment and time to market. The compact 9 cm x 12 cm x 6 cm (enclosure dimensions without

connectors or antennas) form factor of the 3e-523-3 allows for easy installation in small spaces.

The 3e-523-3 provides connection ports to communicate with either Ethernet or serial data device signals. The low voltage DC power supply requirement enables ease of use in battery, solar, or vehicle installations. The 3e-523-3 connects Ethernet or serial data equipment to the monitoring system, allowing the system to be optimized, section by section, for the specific application.

As part of an application, the 3e-523-3 wireless data point provides a direct connection to the device using any of several communications interfaces. One Ethernet RJ-45 connector and a DB-15 connector supporting RS-232, RS-422, or RS-485 are provided. 3e-523-3 data points communicate with 3eTI wireless access points to form a secure wireless network for the device data.

