

## **Features**

- Includes all CPU, memory, peripheral interface modules, and control circuits for bump-inwire/stack encryption
- Ethernet, I2C, RS-232/422/486, and PCI / PCI Express interfaces for wired communication
- Two independent channels for 802.11a/g/n (3x3 MIMO) wireless communications
- Wireless Link Rates of up to 450 Mbps
- Wireless Access Points: Client, Access, and Mesh modes supported
- Encrypted VPN and VLAN, Deep Packet Inspection, and Port Authentication capabilities available
- Size: 2.7 in x 3.1 in x .2 in
- Voltage Input: +5 12V DC
- Power: 5.5W typical,
  7.5W maximum
- Samtec ERF8/ERM8 connectors
- · Real time clock

## Overview

At the heart of both CyberFence and WiFiProtect is a standalone COMSEC module ideal for rapid development of secure wired and wireless communication capabilities. Ultra's Edge Security Module is designed for easy integration into vulnerable edge-devices, including IoTs, IoMTs, IIoT, without disrupting network operations in critical infrastructure and tactical communications systems used by military, government, and industrial customers.

NIST certifications can take 16 months or more to complete. The Edge Security Module accelerates your development with FIPS 140-2, Common Criteria, and DoDIN APL certified cryptographic functions all self-contained within its own tamper boundary, eliminating any need for recertification.





# Ultra Cyber supports your team with expert custom carrier and radio card development, customizations, and certification services.

Ultra's Edge Security Module provides FIPS certified wired and wireless encryption in the following solutions:

- Ultra CyberFence
- Ultra WiFiProtect
- 900 Mhz WiFi Solution
- PacStar 464 Secure Wifi Access Point in support of US Marine Corps Networking On The Move (NOTM) program

# The Edge Security Module comes with two sets of ready-to-use firmware:



# WiFiProtect

- FIPS validated WiFi sub system including IEEE 802.11i KDF and AES\_CCM encryption
- FIPS validated IPsec IKEv2 module that provides trusted path for communication with external IT systems such as RADIUS, NTP and Log servers.
- Approved NSA CSfC WLAN component



# CyberFence

- VPN router based on IPsec/IKEv2
  - Microsoft Azure validated VPN device list
  - Fully interoperable with AWS site-to-site VPN and Google Cloud VPN
- Layer 2 VLAN Encryptor
- Industrial Control System (ICS)
   Cybersecurity sensor with
   protocols level deep packets
   inspection (DPI)

Ultra's WiFiProtect is listed as NSA CSfC WLAN Access System component. Vendors' products with the Edge Security Module can be CSfC approve with shortened time-frame.





