

## Highlights

- Critical component of the Defender for IoT solution which consists of the Defender Application (a value-added Application available on the ExtremeCloud™ Appliance), the Defender Adapter (SA201) and/or the ExtremeWireless 3912i Indoor Access Point
- Provides in-line protection of critical and potentially vulnerable wired IoT devices.
- Enforces policies that are centrally created by the Defender Application, ensuring that the IoT device it is connected to operates according to its expected behavior.
- Monitors and filters traffic with full L2-7 visibility.
- Provides network attachment of IoT devices to IPsec Tunnels, Fabric Connect Hyper-segments or VLANs.
- Offers an integrated IoT Radio for BLE/802.15.4 (iBeacon, Eddystone, Thread) to support extended connectivity of IoT sensors and devices as well as to help locate critical assets.
- Support for PoE pass-through, enabling efficient powering of attached devices such as IP cameras and IP phones.



# Defender Adapter

In-line Security for Vulnerable Wired Devices

## Product Overview

The Defender for IoT Adapter delivers enterprise-grade performance and personalized protection for vulnerable wired devices. Placed between the network and the device, the Defender Adapter works in conjunction with the Defender Application (a value add application on the ExtremeCloud Appliance) to secure, isolate, track and monitor IoT devices.

### Secures

The primary function of the Defender Adapter is to enforce policies that are centrally created by the Defender Application, ensuring that the IoT device connected to it operates according to its expected behavior.

The profile provides a list of authorized devices and traffic flows to limit what the IoT device receives and transmits, as well as who or what the device can communicate with. The Defender Adapter will then monitor all traffic to and from the device with full L2-7 visibility and block any traffic that is out of profile.

### Isolates

A unique attribute of the Defender for IoT solution is that it can isolate groups of IoT devices into their own secure zone / network segment. The role of the Defender Adapter is to ensure the secure attachment of IoT devices into the specified secure zone. These secure zones can be IPsec tunnels overlaid onto 3rd party networks, Fabric Connect virtualized hyper-segments, or just VLAN-based.

For Fabric Connect networks, support for auto-attach (IEEE draft 802.1Qcj) provides the ability for the Adapter to signal Fabric Attach to automatically create the required services (VLAN and ISID mapping) on the edge access switch, providing auto-provisioning from the network edge into the network core. If device moves to another point of attachment, the network service configuration moves with it.

### Tracks

The Defender Adapter is future proofed, with an integrated BTLE/802.15.4 radio for extended connectivity to Internet of Things (IoT) sensors and devices. This

includes support for support for Thread™ and other higher level IoT protocols that support sensor networks and smart building automation. Integrated iBeacon can be used for locating critical assets.

### Powers

The energy efficient Defender Adapter uses 802.3af Power over Ethernet (PoE) in normal operating mode. For deployments where the Defender Adapter is paired to a device that requires power, such as an IP camera or a phone, it supports PoE pass-through to that device when it is connected to an IEEE 802.3at PoE+ capable edge switch.

## Specifications

Product Features	Defender Adapter
<b>General</b>	
Maximum throughput	1 Gbps
Mode of operation	Semi-autonomous
Plug and play operation / zero touch deployment	✓
Internet of Things (IoT) Radio	Bluetooth Low Energy (BTLE) 4.1 802.15.4 -2011
<b>Multiple Operating Modes</b>	
Intelligent Thin Adapter	Encryption, Security and QoS
Distributed and Centralized Data Paths for client connectivity	✓
Application Based Distributed and Centralized Data Paths Within Same User/Device Session	✓
Device Fingerprinting Visibility	✓
Application /Layer 7 Visibility and Control	✓
Remote Sensor	✓
Hardware-Based, End-to-End Data and Control Plane Encryption	✓
SSL	✓
Policy Enforcement for Wired Clients (L2-L7 Access Control, QoS, Rate Limiting, and VLAN Containment)	✓
<b>IoT Radio</b>	
Gain	1.89 dBi
Frequency Bands	2.402 to 2.480 GHz (FCC/IC)
Wireless Modulation	BTLE: GFSK
<b>IoT Radio Sensitivity</b>	
Typical Receiver Sensitivity	dBm
BlueTooth Low Energy	-90
802.154	-100

## Specifications (cont.)

Product Features	Defender Adapter
<b>Quality of Service</b>	
Bonjour/Llmmr/UPNP Identification, Containment and Control	✓
Prioritizes Voice Over Data for Both Tagged and Untagged Traffic	✓
Rate Limiting (Rule and User-Based)	✓
Rule and Role Based Qos Processing	✓
<b>Interfaces</b>	
Uplink Port	1x 10/100/1000 Mbps Autosensing Ethernet Port
Device Port	1x 10/100/1000 Mbps Autosensing Ethernet Port - Port is PSE - Provides 802.3af PoE (Requires 802.3at power source)
<b>Mounting</b>	
Integrated Wall Mounting	✓
<b>Environmental</b>	
Operating	Temperature 0°C to +35°C (+32° F to +95°F) Humidity 0%-95% (noncondensing)
Storage	Temperature -50° C to +70° C (-58° F to +158°F)
Transportation	Temperature -50° C to +70° C (-58° F to +158°F)
<b>Wireless and EMC</b>	
Compliance	<ul style="list-style-type: none"> <li>• FCC CFR 47 Part 15, Class B</li> <li>• FCC Subpart C 15.247</li> <li>• RSS-247</li> <li>• ICES-003</li> <li>• EN 300 328</li> <li>• EN 301 489 1 &amp; 17</li> <li>• EN50385</li> <li>• EN 55032 (CISPR32)</li> <li>• AS/NZS + CISPR32</li> </ul>
Safety	<ul style="list-style-type: none"> <li>• IEC/EN 62368</li> <li>• IEC/EN 62368-1</li> <li>• AS/NZS 60950.1</li> </ul>
<b>Mechanical</b>	
Dimensions	3.8" L x 2.6" W x 1.4" H (9.6 x 6.6 x 3.6 cm)
Weight	0.15 kg (0.32 lbs)
Power Consumption (RMS — Excludes PSE Load)	Max: 3.9 W Idle: 3.6 W
Warranty	1 year warranty

## Ordering Information

Please verify product availability and certified countries before ordering.

Order Code	Description
<b>Adapter</b>	
39505	SA201: Defender Adapter 201 with two 10/100/1000 BASE-T ports (1 network port and 1 device port), power from POE/POE+, optional power adapter sold separately
<b>Power Supply</b>	
30512	Multi-region 12V Indoor External Power Supply
<b>Mid-Span PoE Device</b>	
PD-9001GR-ENT	Single Port, 1 Gigabit 802.3at PoE Midspan



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