Cisco Catalyst ESS9300 Embedded Series Switch

Overview

The Cisco® Catalyst® ESS9300 Embedded Series Switch delivers the high-speed and security capabilities needed for real-time, high-bandwidth, mission-critical networking. The 1/10GE switch comes in a ruggedized, ultracompact form-factor making it ideal for mobile and embedded networks that operate in extreme environments. It enables partners and integrators to build custom solutions for specialized use cases.
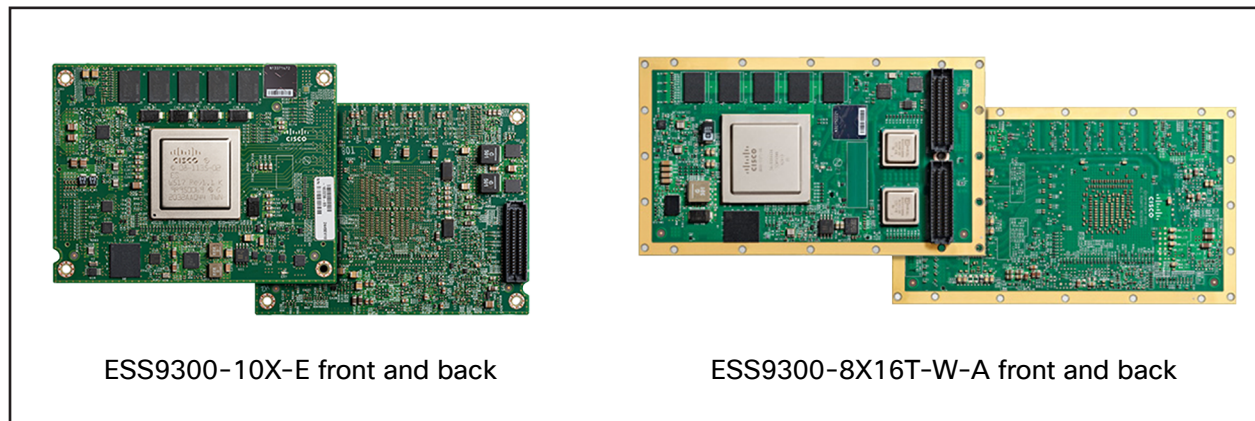

ESS9300-10X-E front and back   ESS9300-8X16T-W-A front and back

Figure 1.   Catalyst ESS9300 Embedded Series is available in two configurations

What is Catalyst ESS9300 Embedded Series switch?

Catalyst ESS9300 is designed for embedded networking applications requiring low power, small size, and ruggedization.

- 10x 10GE or 8x 10GE and 16x 1GE ports

- Advanced security features including secure boot and zeroization

- Advanced next-generation Cisco IOS XE Software

- Low power consumption: 35W or less

Benefits

- **High-bandwidth (up to 10GE)** to meet the need to process high volumes of data.

- **Crucial security features** to protect networks from cyber threats.

- **High port density and low power** consumption in a small-form-factor.

- **Easy to integrate** into compact solutions due to its size, weight, and power.

- **Reliable operation** in extreme temperatures, shock, and vibration.

- **Feature-rich platform** with next-generation Cisco IOS® XE.

- **Scalable with simplicity** and unified management using Cisco Catalyst Center.

- **Compliant with open standards,** available as CMOSS/SOSA and OpenVPX XMC+ architecture aligned, that pairs with Curtiss-Wright carrier card which fits into a VPX chassis. Placed in military vehicles, this chassis provides secure and reliable communications in the battlefield.

Why Cisco?

Cisco brings decades of leadership in networking to industrial and mobile environments. The Cisco Catalyst ESS9300 uses the reliable and extensive Cisco IOS XE Software, enabling consistent end-to-end solutions from remote environments to headquarters and investment protection.

A rich ecosystem of products, including the Cisco Embedded Service 3300 Series Switches and the Cisco 6300 Series Embedded Service Routers, facilitates the development of new systems that work transparently with existing network infrastructure. The embedded switch allows for flexible integration into systems integrator solutions.

Visit these webpages to find out more about our embedded product portfolio:

· **https://www.cisco.com/go/ess9300**.

· **https://www.cisco.com/go/embedded**.

Commitment to open standards

Catalyst ESS9300 is available as an OpenVPX XMC+ card designed to fit with a carrier card for use in Sensor Open Systems Architecture (SOSA) and C5ISR/EW Modular Open Suite of Standards (CMOSS) aligned system architectures. US Department of Defense has adopted these standards due to their high performance, modularity, interoperability, and scalability. By adopting these standards, the military can benefit from reduced development costs, faster time-to-market, and increased system flexibility. The ESS-9300-8X16T-W-A pairs with a carrier card built with Cisco partner Curtiss-Wright and together they fit in a rugged VPX chassis. This chassis goes inside military vehicles to provide critical secure communications even in the harshest battlefield conditions.

How can you use the ESS9300?

Custom built solutions

Using their industry expertise, technical knowledge, and complementary technologies, Cisco partners can use Catalyst ESS9300 to build tailored, scalable, and innovative solutions that meet specific operational requirements.

Tactical data centers

Deploy ESS9300 switches in a tactical environment, giving soldiers the ability to roll these systems onto and off of aircraft or tactical ground combat vehicles. The advanced, secure, high-speed tactical network enables users to rapidly deploy on-the-move IT systems into foxholes or tent command posts.

Next-generation combat vehicles

Integrators can use the ESS9300 to securely and reliably connect tactical armored vehicles on the move.

Mining and oil and gas

The ESS9300 can also be used for other extremely rugged applications to monitor and analyze data, as well as support applications that require high-quality voice, video, and data connectivity.

These are just a few of the use cases in which the ESS9300 can be used.