

ESN on the optical module



AI Overview

The ESN (Electronic Serial Number) on an optical module uniquely identifies the transceiver and can be queried using device commands or found on module labels.

What is ESN?

The ESN (Electronic Serial Number) is a unique identifier assigned to an optical transceiver. It serves as a digital fingerprint for the module, allowing network devices to recognize, track, and verify the module's authenticity and compatibility. On Huawei switches, the ESN is often aligned with the serial number (SN) printed on the module label and encoded in the 2D barcode for easy scanning and inventory management .

How to View ESN

On Huawei devices, you can query the ESN of an optical module using the command:

`display esn interface`

This command provides a table showing the vendor name, product number (PN), serial number (SN), manufacturing date, and certification status for each interface with an optical transceiver . For example, the output may indicate whether the module is custom-made (YES for Huawei modules) or standard (NO for third-party modules), and whether it is certified by Huawei Unified Security Gateway.

Importance of ESN...

Article Content

Jan 29, 2026

TYPICAL ESN SYSTEM W/ SHADES & CONTROLLED

QSN-4S16-S ENERGI SAVR NODE QS (ESN) WITH (4) SWITCHED OUTPUTS AND QS COMMUNICATION LINK DIMENSIONS:

Jun 23, 2026

Displaying the Device Serial Number

Displaying the Device Serial Number Context Each device has a unique equipment serial number (ESN). When you

Jul 10, 2026

What Is an Optical Module

On an optical network, a sender needs to convert electrical signals into optical signals before sending them to a receiver, and the

Apr 12, 2026

Chaotic Dynamical Enhanced Optical Physical Layer Encryption in

In this paper, we propose an optical physical layer encrypted scheme in an orthogonal frequency division multiplexed

Nov 17, 2025

Optical Echo State Network Reservoir Computing

Here, we propose an innovative way to realize an optical implementation of any desired ESN configuration. The

Nov 08, 2025

Before You Start

If Certified is YES, and VendorName is huawei in the display esn interface command output, the optical module has been certified by

May 04, 2026

What is Optical Transceiver: A Beginner Guide (2024)

What is an Optical Transceiver? An optical transceiver, also known as a fiber optic

Aug 11, 2025

The Key External Components of Optical Modules

An optical module serves as the backbone of modern fiber-optic communication. Its appearance often resembles a

Jul 20, 2026

Designing a Module for High-Speed Optical Communication

This article explores MPS optical module solutions to meet the design requirements of high-speed optical communication as well as

Feb 23, 2026

ESN-Driven joint decision strategy for a configurable security NOMA ...

This paper presents an Echo State Network (ESN)-Driven joint decision strategy for a configurable security Non

Mar 16, 2026

An Introduction to the Lutron Energi Savr Node

All Energi Savr Node modules are din rail mountable and need to be mounted inside an enclosure. This

Nov 23, 2025

[2504.08224] Optical Echo State Network Reservoir Computing

We propose an innovative design for an optical Echo State Network (ESN), an advanced type of reservoir computer

Jan 11, 2026

Obtaining the Serial Numbers of S Series Switches (V600)

Method 1: Obtaining the Optical Module Serial Number Using a Command Run the display interface interface-type

Apr 10, 2026

All Optical Echo State Network Reservoir Computing

We emphasize that the comparison between the software ESN and the all- optical ESN is not intended to show that

Jun 26, 2026

Optical module common faults and solutions

Customers in the use of optical modules will more or less encounter a variety of failure problems, such as optical

Jun 16, 2026

Low-Complexity Sparse ESN Equalization for Bandwidth-Constrained

We propose a sparse echo state network-based equalizer for high-speed IMDD short reach optical communication systems. Sparsity

Sep 09, 2025

ESN Codes and Definitions Overview | PDF

The document contains an extensive list of ESN codes and their definitions related to various materials including metals, plastics,

May 15, 2026

Understanding Optical Modules: Working Principles, Structures, and ...

Explore the working principles, structures, and performance metrics of optical modules, essential components of

Nov 30, 2025

How to Choose Optical Modules Correctly?

How Optical Modules Operate Transmitter Optical Sub Assembly (TOSA) The TOSA

Feb 15, 2026

All Optical Echo State Network Reservoir Computing

Wyant College of Optical Sciences, University of Arizona, Tucson, Arizona, USA
(Dated: September 16, 2025) We

May 14, 2026

IEEE-CIS-MITBIR/basic-echo-state-network

This repository provides a simple, step-by-step tutorial on implementing an Echo State Network (ESN) for forecasting the well-known

Dec 18, 2025

Understanding Optical Modules

This document explains optical modules, their types, and applications, providing a comprehensive understanding of their functionality

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://ntmmgroup.co.za>

Email: sales@ntmmgroup.co.za

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town,
7441, South Africa

This document is for informational purposes only. Specifications subject to
change without notice.

