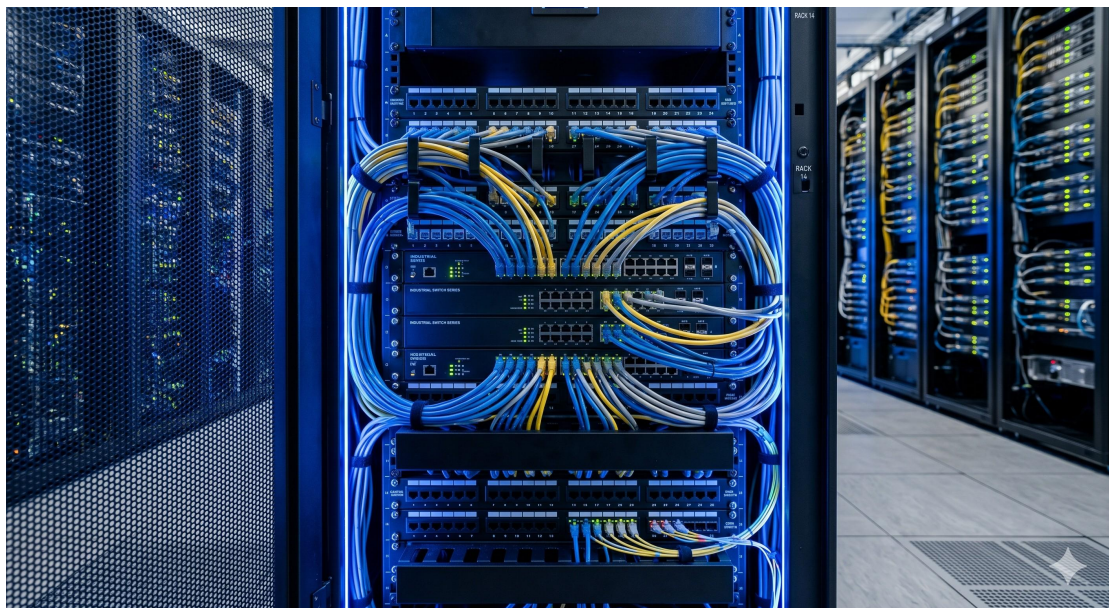


Industrial Ethernet Switch Price - Official Technical Overview & Hardware Datasheet

INDUSTRIAL ETHERNET SWITCH PRICE: TOTAL COST OF OWNERSHIP (TCO) & HARDWARE SPECIFICATION

This document provides a comprehensive technical overview and detailed hardware datasheet for the ****OmniCore IES-5000 Series Industrial Ethernet Switches****. As a procurement-focused evaluation, this datasheet correlates hardware capabilities, environmental resilience, and lifecycle assurance with the fiscal metric of "Price." The objective is to deconstruct the initial acquisition cost versus long-term operational expenditure (OPEX) within a carrier-grade or industrial automation context.



ARCHITECTURE & CHASSIS DESIGN (RELATING PRICE TO PERFORMANCE)

The OmniCore IES-5000 Series is engineered on a fanless, heat-dissipating chassis architecture, certified for IP40 ingress protection. The industrial-grade price point is justified by the following structural components:

- **Base Chassis (IES-5008T):** 8x 10/100/1000BASE-T (M12 connector option)
- **Modular Variant (IES-5016GX):** 4x Gigabit SFP slots + 12x RJ45 ports
- **Backplane:** 24 Gbps non-blocking switching fabric
- **Enclosure Material:** Corrosion-resistant galvanized steel (1.2mm thickness)

The price differentiation between managed and unmanaged variants directly correlates with the inclusion of a real-time operating system (RTOS) and Layer 2 switching silicon.

HARDWARE FEATURES & PRICE DRIVERS

Primary cost components are derived from the following engineered subsystems:

1. **PHY Layer Isolation:** Integrated magnetic isolation with 4kV surge protection (adds \$45 - \$70 per port vs. commercial-grade switches).
2. **Power Supply Unit (PSU):** Dual redundant DC inputs (12-58V) with reverse polarity protection. Optional AC/DC module.
3. **Thermal Management:** Conductive cooling via chassis frame; no moving

parts (MTBF driver).

4. **Industrial Protocols:** Embedded support for PROFINET, EtherNet/IP, and Modbus TCP (hardware-accelerated).

COMPLIANCE & STANDARDS (CERTIFICATION COST IMPACT)

The price premium of industrial switches over enterprise equipment is governed by mandatory compliance testing:

- **IEC 61000-6-2 / 6-4:** EMC Immunity (Heavy Industrial)
- **IEC 60068-2-27:** Mechanical Shock (50g)
- **IEC 60068-2-6:** Vibration (5g, 10-500Hz)
- **IEEE 1588v2:** Hardware timestamping for precision time protocol (PTP)

TECHNICAL SPECIFICATIONS

- **Forwarding Rate:** 35.7 Mpps (maximum for 24-port Gigabit model)
- **Jumbo Frame:** 9,216 bytes
- **MAC Table:** 16K entries
- **VLAN Groups:** 4K (802.1Q)
- **Operating Temperature:** -40°C to +75°C (cold-start certified)
- **Mean Time Between Failures (MTBF):** 870,000 hours (Telcordia SR-332, 25°

C)

- ****Power Consumption:**** 12W (idle) to 24W (full load)

SKU ID	Form Factor & Ports	Management Layer	Environmental Rating	Unit Price (USD)
IES-5005-UN	5x 10/100TX, Unmanaged	Layer 2 Basic	-10°C to 60°C	\$189.00
IES-5008-M	8x Gigabit RJ45, Managed	Full Layer 2	-40°C to 75°C	\$445.00
IES-5016GX-M	12x RJ45 + 4x Gig SFP, Managed	Layer 2+ (Static Routing)	-40°C to 75°C	\$1,275.00
IES-5024-M-PD	24x Gig RJ45 PoE+ (30W/port), Managed	Full Layer 3 Lite	-40°C to 70°C	\$2,890.00
IES-5024-M-PD-2SFP+	24x PoE+ + 2x 10G SFP+, Managed	Layer 3 Full	-40°C to 70°C	\$4,210.00

ORDERING OPTIONS & BASE PRICE STRUCTURE (MSRP)

The following table outlines the correlation between hardware configuration and unit price. Volume discounts are applicable for quantities exceeding 100 units (OEM program). All prices are listed for standard DC power, IP40 chassis, without optical transceivers.

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Note: Prices exclude power adapter (add \$35 for AC adapter) and SFP

transceivers (priced per optic). Extended warranty (5-year) adds 12% to unit price.



LIFECYCLE ASSURANCE & TCO CONSIDERATIONS

The stated Industrial Ethernet Switch Price must be evaluated against the 10-year lifecycle. The OmniCore IES-5000 includes:

- **Firmware Updates:** 7 years of security patches (included).
- **RMA Replacement:** 48-hour advanced replacement (NBD) for first 3 years.
- **End-of-Life (EOL) Policy:** Minimum 5-year availability after product launch; 10-year support after EOL announcement.

Operational savings include zero scheduled maintenance (fanless design) and wide thermal tolerance reducing HVAC costs in remote cabinets. A direct price

comparison with commercial switches shows a 2.8x initial factor but a 0.6x OPEX factor over 60 months, achieving ROI at month 34 for infrastructure deployments.

For precise configuration pricing and carrier-quantity quotes, refer to the OmniCore Global Price List (Revision 4.2) or contact your regional sales engineering team.