

Cisco Catalyst IE3400 Heavy Duty Series

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The Cisco Catalyst IE3400 Heavy Duty Series is Cisco’s next-generation, IP67-rated switching platform designed to provide enhanced network-based security, segmentation, and visibility in the most demanding industrial environments. The Cisco Catalyst IE3400 Heavy Duty Series switches extend the power of intent-based networking to the harshest Internet of Things (IoT) edge.

Product overview

The Cisco Catalyst IE3400 Heavy Duty Series switches deliver the advanced capabilities similar to the Cisco Catalyst IE3400 Rugged Series in environments that have heavy exposure to dust and water. These switches are available with 8, 16, or 24 Fast Ethernet (D-coded) or Gigabit Ethernet (X-coded) M12 interfaces. The switches can be wall mounted and deployed without a housing cabinet.

The IE3400 Heavy Duty Series switches are powered by Cisco IOS XE, a next-generation operating system with built-in security and trust, featuring Secure Boot, image signing, and the Cisco Trust Anchor module. Cisco IOS XE also provides API-driven configuration with open APIs and data models.

The IE3400 Heavy Duty Series can be managed with powerful tools such as Cisco Catalyst Center, and can be easily set up with a completely redesigned, user-friendly, modern GUI tool called WebUI. The platform also supports Flexible NetFlow for real-time visibility into traffic patterns and threat analysis with Cisco Stealthwatch.

The Cisco Catalyst IE3400 Heavy Duty Series offers edge compute capabilities to run IOx applications, enabling new capabilities in the OT network with no impact on switching performance. Choose between Cisco Cyber Vision to improve visibility of connected industrial assets or provide secure Zero-Trust Network Access (ZTNA) to industrial assets at scale with Secure Equipment Access.



Figure 1.
Front of IE-3400H-8T, IE-3400H-16T and IE-3400H-24T (from left to right)

Features and benefits

Table 1. IE3400H Features and benefits

| Feature | Benefit |
|---|---|
| Heavy-duty design and industry compliance | <p>Mount the switch close to where the work is done, in the most demanding environments.</p> <ul style="list-style-type: none"> • IP66/IP67 rated, providing protection against dust and submersion in water. • Hardened for vibration, shock and surge, electrical noise, and extreme temperatures (-40° C to 75° C [-40° F to 167° F]). • Compliant with industrial automation standards; supports Ethernet/IP Common Industrial Protocol (CIP). • Supports Supervisory Control And Data Acquisition (SCADA) protocol classification—Generic Object-Oriented Substation Events (GOOSE) messaging, Modbus TCP/IP. |
| Advanced network-based security | <p>Enjoy peace of mind with Cisco’s no-compromise security feature set, including:</p> <ul style="list-style-type: none"> • Flexible NetFlow for enhanced flow and threat visibility. • Cisco TrustSec® software-defined segmentation allows you to segment industrial devices and define security policies to each segment. It makes sure that devices can access only the resources and applications they should and isolates segments when threats are detected to avoid the spread of attacks. • Advanced security through support for Advanced Encryption Standard (AES)-256 with the powerful MACsec 256-bit encryption algorithm available on all models. • Hardware-anchored Secure Boot and Secure Unique Device Identification (SUDI) support for plug and play, to verify the identity of the hardware and software. |
| Next-generation switching features and innovations | <ul style="list-style-type: none"> • Same software image as the Cisco Catalyst IE3x00 Rugged Series, for access to Cisco’s latest innovations in switching. • Available with 8, 16, or 24 Fast Ethernet (M12 D-coded) ports or Gigabit Ethernet (M12 X-coded) ports. |
| Flexible management options | <ul style="list-style-type: none"> • Extend the power of intent-based networking with Cisco Catalyst Center. • Manage your network with the powerful Industrial Network Director. • Easily set up the switch with a completely redesigned, user-friendly, highly intuitive, and modern GUI called WebUI. • Gain real-time visibility into traffic patterns and threat analysis with Cisco Stealthwatch |
| Advanced Data plane features | <ul style="list-style-type: none"> • Parallel Redundancy Protocol (PRP) ¹ • Advanced security with SGT/SGACL |
| IPv6 Ready Logo - IPv6 Ready Logo Certified | <ul style="list-style-type: none"> • IPv6 Ready Logo Certified |

¹ Parallel Redundancy Protocol (PRP) is available on select ports only (1/1 - 1/4). Single instance of PRP is supported.

Other product highlights

- Swap Drive zero-configuration replacement helps ensure fast recovery.
- Precision Time Protocol (PTP, IEEE 1588v2) provides accurate clock synchronization with sub-microsecond accuracy.
- Support for model-driven programmability, including NETCONF, RESTCONF, and YANG.
- Alarm I/O for monitoring and signaling to external equipment.
- Single power source(mini-change connector) for switch operation.

Platform support

Table 2. Product feature set

| Product family | Platforms supported | Default IOS-XE feature set | Upgradeable to |
|----------------|--|----------------------------|-------------------|
| IE3000 | IE-3400H-8FT-E IE-3400H-16FT-E IE-3400H-24FT -E IE-3400H-8T-E IE-3400H-16T-E IE-3400H-24T-E | Network Essentials | Network Advantage |
| IE3000 | IE-3400H-8FT-A IE-3400H-16FT-A IE-3400H-24FT -A IE-3400H-8T-A IE-3400H-16T-A IE-3400H-24T-A | Network Advantage | N/A |

Table 3. Hardware configurations

| Product ID | Total M12 ports | 10/100 Fast Ethernet (D-code) ports | 10/100/1000 Gigabit Ethernet (X-code) ports |
|------------------------|-----------------|-------------------------------------|---|
| IE-3400H-8FT-E | 8 | 8 | |
| IE-3400H-8FT-A | 8 | 8 | |
| IE-3400H-8T-E | 8 | | 8 |
| IE-3400H-8T-A | 8 | | 8 |
| IE-3400H-16FT-E | 16 | 16 | |
| IE-3400H-16FT-A | 16 | 16 | |
| IE-3400H-16T-E | 16 | | 16 |
| IE-3400H-16T-A | 16 | | 16 |
| IE-3400H-24FT-E | 24 | 24 | |
| IE-3400H-24FT-A | 24 | 24 | |
| IE-3400H-24T-E | 24 | | 24 |
| IE-3400H-24T-A | 24 | | 24 |

Table 4. Hardware specifications

| Hardware specifications | IE-3400H-8FT | IE-3400H-8T | IE-3400H-16FT | IE-3400H-16T | IE-3400H-24FT | IE-3400H-24T |
|----------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Removable storage | SD card ¹ | SD card ¹ | SD card ¹ | SD card ¹ | SD card ¹ | SD card ¹ |
| Alarm^{2,3} | 1 alarm output relay, 1 alarm input | 1 alarm output relay, 1 alarm input | 1 alarm output relay, 1 alarm input | 1 alarm output relay, 1 alarm input | 1 alarm output relay, 1 alarm input | 1 alarm output relay, 1 alarm input |
| Console ports² | 1 | 1 | 1 | 1 | 1 | 1 |
| Power input | Mini-change, (single power source) | Mini-change, (single power source) | Mini-change, (single power source) | Mini-change, (single power source) | Mini-change, (single power source) | Mini-change, (single power source) |

¹ The SD card is optional and is not shipped by default with the switch.

² Using an M12 A-coded 5-pin connector.

³ Relay max. rating: 24VDC at 1A, 48VDC at 0.5A.

Table 5. Physical configurations

| Physical specifications | IE-3400H-8FT | IE-3400H-8T | IE-3400H-16FT | IE-3400H-16T | IE-3400H-24FT | IE-3400H-24T |
|--|---|---|--|--|--|--|
| Dimensions (H x W x D) | 9.58 x 7.90 x 3.15 in. 24.33 x 20.07 x 8.00 cm | 9.58 x 7.90 x 3.15 in. 24.33 x 20.07 x 8.00 cm | 9.58 x 10.90 x 3.15 in. 24.33 x 27.69 x 8.00 cm | 9.58 x 10.90 x 3.15 in. 24.33 x 27.69 x 8.00 cm | 9.58 x 13.90 x 3.15 in. 24.33 x 35.31 x 8.00 cm | 9.58 x 13.90 x 3.15 in. 24.33 x 35.31 x 8.00 cm |
| Weight (including mounting bracket) | 8.45 lb 3.83 kg | 8.45 lb 3.83 kg | 11.25 lb 5.10 kg | 11.25 lb 5.10 kg | 13.90 lb 6.30 kg | 13.90 lb 6.30 kg |
| Mounting | Wall mount | Wall mount | Wall mount | Wall mount | Wall mount | Wall mount |

Table 6. Performance and scalability features

| Resource | IE-3400H-8FT, IE-3400H-8T, IE-3400H-16FT, IE-3400H-16T, IE-3400H-24FT, IE-3400H-24T |
|---|---|
| Forwarding rate | Line rate for all ports for all packet sizes |
| Number of queues | 8 |
| Unicast MAC addresses | 8000 |
| IGMP multicast groups | 1000 |
| No. of Vlans | 256 |
| IPv4 Indirect routes¹ | 2000 |
| IPv6 Indirect routes¹ | 512 |

| Resource | IE-3400H-8FT, IE-3400H-8T, IE-3400H-16FT, IE-3400H-16T, IE-3400H-24FT, IE-3400H-24T |
|----------------------------------|---|
| Spanning Tree Protocol instances | 128 |
| Access Control Entries (PACLs) | 3024 |
| DRAM | 4 GB |
| Flash (user accessible) | 1.5 GB |
| SD card capacity ² | 4 GB |
| Jumbo Frames | 2000 bytes |

¹ Supported with Network Advantage license

² The SD card is optional and is not shipped by default with the switch.

Table 7. Power specifications

| Power specifications | IE-3400H-8FT | IE-3400H-16FT | IE-3400H-24FT | IE-3400H-8T | IE-3400H-16T | IE-3400H-24T |
|----------------------------------|--------------|---------------|---------------|--------------|--------------|--------------|
| Input voltage range (Absolute) | 9.6 to 60VDC | 9.6 to 60VDC | 9.6 to 60VDC | 9.6 to 60VDC | 9.6 to 60VDC | 9.6 to 60VDC |
| Input current @ (9.6V / 60V) | 3.0A/0.51A | 4.0A/0.65A | 4.6A/0.75A | 3.2A/0.54A | 4.4A/0.71A | 5.1A/0.83A |
| Power consumption @ (9.6V / 60V) | 28.8W/30.6W | 38.4W/39.0W | 44.2W/45.0W | 30.4W/32.2W | 41.6W/42.3W | 49.0W/49.8W |

Table 8. Power supply options

| Product ID | Description |
|-------------------|---|
| PWR-IE160W-67-DC= | IP67-rated PoE DC-DC power supply, Input:18V-60V Output: 54V, 3.1A max 160W |

Table 9. Network Essentials and Advantage package features

| Features | | Network Essentials (default) | Network Advantage |
|---------------------------------|---|------------------------------|-------------------|
| Layer 2 switching | IEEE 802.1, 802.3 standard, Network Time Protocol (NTP), Unidirectional Link Detection Protocol (UDLD), Cisco Discovery Protocol, Link Layer Discovery Protocol (LLDP), unicast MAC filter, VLAN Trunk Protocol (VTP) v2 and v3, EtherChannel, voice VLAN, Q-in-Q tunneling, Per-VLAN Spanning Tree (PVST+), Multiple Spanning Tree Protocol (MSTP), Rapid Spanning Tree Protocol (RSTP) | Yes | Yes |
| Layer 2 Multicast | Internet Group Management Protocol (IGMP) v1, v2, v3 snooping, IGMP filtering, IGMP querier | Yes | Yes |
| Management | WebUI, MIB, SmartPort, Simple Network Management Protocol (SNMP), syslog, Locate switch, Dynamic Host Configuration Protocol (DHCP) server, Switched Port Analyzer (SPAN) session, Remote SPAN (RSPAN), Flow-based SPAN(FSPAN), Express setup, NETCONF, RESTCONF | Yes | Yes |
| Security | Port security, 802.1x, Dynamic Host Configuration Protocol (DHCP) snooping, dynamic ARP inspection, IP source guard, guest VLAN, MAC authentication bypass, 802.1x multidomain authentication, storm control - unicast, multicast, broadcast, SCP, SSH, SNMPv3, TACACS+, RADIUS server/client, MAC address notification, BPDU guard, Access Lists(PACL/RACL/VACL), SUDI 2099 (Secure Unique Device identifier), Full Flexible NetFlow (FNF), MACsec-128, FIPS 140-2 | Yes | Yes |
| Quality of Service (QoS) | Ingress policing, rate limit, egress queuing and shaping, auto QoS | Yes | Yes |
| IPv6 | IPv6 host support, SNMP over IPv6, HTTP/HTTP(s) over IPv6, SNMP over IPv6, Syslog over IPv6, DHCPv6 relay source, DHCPv6 bulk lease query (RFC 5460), IPv6 stateless Auto Config, SCP/SSH, Radius, TACACS+, NTP over IPv6, IPv6 VRF aware BGPv6, IPV6 ND cache expire, IPv6 support for TFTP, IPv6 DNS transport, IPv6 QoS, IPv6 FHS RA Guard, IPv6 FHS DHCPv6 Guard | Yes | Yes |
| Layer 3 routing | Inter-VLAN routing, static routing | Yes | Yes |
| Industrial Ethernet | CIP Ethernet/IP, IEEE 1588 PTP v2 (default and power), PROFINET | Yes | Yes |
| Redundancy | Resilient Ethernet Protocol (REP) ring, Fast REP, PROFINET-Media Redundancy Protocol (MRP) ring, Parallel Redundancy Protocol (PRP) ¹ , PTP over PRP | Yes | Yes |
| Utility | Dying gasp, SCADA protocol classification-GOOSE messaging, Modbus TCP/IP | Yes | Yes |
| Automation | YANG, NETCONF, RESTCONF | Yes | Yes |
| Industrial Management | Layer 2 switching with 1:1 switch Network Address Translation (L2NAT) ² | Yes | Yes |

| Features | | Network Essentials (default) | Network Advantage |
|-----------------------------|---|------------------------------|-------------------|
| IOx | Container (Native Docker), Cyber Vision, Secure Equipment Access | Yes | Yes |
| IP routing protocols | OSPF (v4 and v6), BGP (v4 and v6), ISIS (v4 and v6), RIP (v1 and v2), EIGRP (v4 and v6), Policy based routing(PBR), VRRP (v4 and v6), HSRP(v4 and v6) | No | Yes |
| Advanced security | Cisco TrustSec, Security Group Tag (SGT) inline tagging and Security Group ACLs (SGACL), MACsec-256 | No | Yes |
| Virtualization | Virtual Routing and Forwarding (VRF)-lite | No | Yes |
| IP Multicast | PIM Sparse Mode (PIM-SM), PIM dense mode (PIM-DM), and PIM sparse-dense mode, MSDP, Multicast routing BSR (IPv4/IPv6), Auto RP(IPv4), Embedded RP(IPv6) | No | Yes |

¹ Parallel Redundancy Protocol (PRP) is available on select ports only (1/1 - 1/4). Single instance of PRP is supported.

² Supported on select ports (1/1-1/2)

Table 10. Cisco Catalyst Center essentials and advantage package features

| Features | Cisco Catalyst Center Essentials | Cisco Catalyst Center Advantage |
|--|----------------------------------|---------------------------------|
| Element Management Discovery, Topology, Inventory, software image management | Yes | Yes |
| Basic Assurance Health dashboard - Network, Client monitoring; switch and wired client health monitoring | Yes | Yes |
| Assurance and Analytics Compliance, Custom Reports, Device 360 and Client 360 -Display device and client connectivity for granular troubleshooting | No | Yes |
| Basic Automation Cisco Network Plug-and-Play application | Yes | Yes |
| Element Management Patch/SMU | No | Yes |
| Software-defined Access Policy based automation and assurance for wired clients, the IE3400 Heavy Duty Series can function as an SD-Access Policy extended node in a REP ring Workflow | No | Yes |

Cisco Catalyst Center licenses for Industrial Ethernet switches are add-on/optional and not mandatory, and need to be purchased separately. These do not include Network Tier features. Network Advantage License is a mandatory requirement on the Switch for Cisco Catalyst Center Advantage License.

Table 11. Compliance specifications¹

| Description | Specification |
|--|--|
| ITE safety standards/certifications | UL/cUL Listing to UL/CSA 60950-1 UL/cUL Listing to UL/CSA 62368-1 CB to IEC 60950-1 with all country national deviations CB to IEC 62368-1 with all country national deviations |
| ICE and manufacturing safety standards/certifications | UL/cUL Listing to UL/CSA 61010-2-201 |
| Water and dust protection standards/ratings | IEC 60529: IP66/IP67 UL 50E, Type 4X rating UL/CSA/EN/IEC 60950-22 outdoor rating |
| Industrial Automation Control System | IEC 62443-4-1 IEC 62443-4-2 |
| EMC emissions and immunity compliance | Emissions (Class A): FCC 47 CFR Part 15 subpart B ICES-003 EN 55011 EN 55032/ CISPR 32 AS/NZS CISPR 32 CNS13438 Immunity: EN55024/CISPR 24 AS/NZS CISPR 24 |
| Shock and vibration | IEC 60068-2-6 Vibration: IEC 60068-2-6, IEC 255 21.1 Class 1 Vibration Test IEC 60068-2-27 (Shock) IEC 60068-2-31 (Shock) IEC 60068-2-32 (Shock) IEC 60068-2-64 (Vibration) |
| Industry standards | EN 61000-6-1 Immunity standards for light industrial ENV EN 61000-6-2 Immunity standards for industrial ENV EN 61000-6-4- Emission standard industrial ENV EN 61326-1 Industrial control ODVA Industrial Ethernet/IP PROFINET certification AREMA C and S section 11, 19 |

| Description | Specification |
|--|--|
| Automotive | UN ECE R10 ² E-Mark certification ² |
| Railway | EN50155:2021 (clauses 13.4.1-6, 13.4.9, 13.4.10, 13.4.13) ² EN50121-3-2:2021 ² EN50121-4:2021 ² EN61373:2010 ² EN50124-1:2017 ² AREMA C&S Manual: 2022 ² EN50153:2020 Clause 8.3 ² EN45545-2 ³ |
| Corrosive testing | IEC 60068-2-52 Salt mist testing IEC 60068-2-60 Flowing mixed gas corrosion |
| Humidity | IEC 60068 -2-3 IEC 60068-2-30 Relative humidity: 5% to 95% noncondensing |
| Operating temperature, environment, reliability | -40° C to +75° C (-40F to 167F) (with airflow) with 200 LFM airflow -40° C to +70° C (-40F to 158F) with 40 LFM airflow -40° C to + 60° C (-40F to 140F) with 0 LFM airflow -40° C to +85° C (-40F to 185F) (type tested to +85° C for 16 hours) IEC 60068-2-1 IEC 60068-2-2 Altitude: Up to 13,800 feet or 4,200 meters |
| Storage temperature | -40° C to +85° C (-40F to 185F) IEC 60068-2-14 Altitude: Up to 13,800 feet (4,200 m) |

¹ For more detailed information on safety approved power/thermal ratings refer the Hardware Installation Guide.

² Certifications are only applicable to Gigabit Ethernet SKUs.

³ Applicable to IE-3400H-8T-E, IE-3400H-8T-A, IE-3400H-16T-E, IE-3400H-16T-A, IE-3400H-24T-E, IE-3400H-24T-A.

Table 12. Mean Time Between Failures (MTBF) information

| Product detail | MTBF (in hours) |
|----------------|-----------------|
| IE-3400H-8FT | 566,908 |
| IE-3400H-16FT | 489,458 |
| IE-3400H-24FT | 439,475 |
| IE-3400H-8T | 566,908 |
| IE-3400H-16T | 489,458 |
| IE-3400H-24T | 439,475 |

Table 13. Industry standards

| Descriptions | Specifications |
|-----------------------|---|
| IEEE standards | <ul style="list-style-type: none"> IEEE 802.1D MAC Bridges, STP IEEE 802.1p Layer 2 COS prioritization IEEE 802.1q VLAN IEEE 802.1s MSTP IEEE 802.1w RSTP IEEE 802.1X Port Access Authentication IEEE 802.1AB LLDP IEEE 802.3ad Link Aggregation (LACP) |
| RFC compliance | <ul style="list-style-type: none"> IEEE 1588v2 PTP IEEE 802.3x full duplex on 10BASE-T IEEE 802.3 10BASE-T specification IEEE 802.3u 100BASE-TX specification IEEE 802.3ab 1000BASE-T specification |
| | <ul style="list-style-type: none"> RFC 768: UDP RFC 783: TFTP RFC 791: IPv4 protocol RFC 792: ICMP RFC 793: TCP RFC 826: ARP RFC 854: Telnet RFC 959: FTP RFC 1157: SNMPv1 RFC 1901, 1902-1907 SNMPv2 RFC 2273-2275: SNMPv3 RFC 2571: SNMP Management RFC 1166: IP Addresses RFC 1256: ICMP Router Discovery RFC 1305: NTP |
| | <ul style="list-style-type: none"> RFC 1492: TACACS+ RFC 1493: Bridge MIB Objects RFC 1534: DHCP and BOOTP interoperation RFC 1542: Bootstrap Protocol RFC 1643: Ethernet Interface MIB RFC 1757: RMON RFC 2068: HTTP RFC 2131, 2132: DHCP RFC 2236: IGMP v2 RFC 3376: IGMP v3 RFC 2474: DiffServ Precedence RFC 3046: DHCP Relay Agent Information Option RFC 3580: 802.1x RADIUS RFC 4250-4252 SSH Protocol |

| Descriptions | Specifications | |
|-------------------------|---|--|
| SNMP MIB objects | 802.1X MIB CISCO-DHCP-SNOOPING-MIB CISCO-UDLD-MIB CISCO-ENVMON-MIB CISCO-PRIVATE-VLAN-MIB CISCO-PAE-MIB Cisco-Port-QoS-MIB CISCO-ERR-DISABLE-MIB CISCO- PROCESS-MIB LLDP-MIB CiscoMACNotification-MIB CISCO-CONFIG-COPY-MIB LLDP-MED-MIB Bridge-MIB CISCO-CAR-MIB CISCO-LAG-MIB CISCO-SYSLOG-MIB CISCO-FTP-CLIENT-MIB CISCO-VLAN-IFTABLE-RELATIONSHIP-MIB CISCO-VLAN-MEMBERSHIP-MIB Cisco-REP-MIB CISCO-PORT-STORM-CONTROL-MIB CISCO-CDP-MIB CISCO-IP-STAT-MIB CISCO-LICENSE-MGMT-MIB CISCO-STP-EXTN-MIB CISCO-VTP-MIB IEEE8023-LAG-MIB SMON-MIB CISCO-ACCESS-ENVMON-MIB CISCO-CALLHOME-MIB CISCO-CONFIG-MAN-MIB CISCO-FLASH-MIB CISCO-ENTITY-SENSOR-MIB IP-MIB CISCO-PAGP-MIB | CISCO-IF-EXTENSION-MIB CISCO-IMAGE-MIB CISCO-MEMORY-POOL-MIB CISCO-PING-MIB SNMP-TARGET-EXT-MIB IF_MIB ENTITY-MIB LLDP-EXT-PNO-MIB NOTIFICATION-LOG-MIB OLD-CISCO-CPU-MIB ETHERLIKE-MIB OLD-CISCO-SYSTEM-MIB OLD-CISCO-MEMORY-MIB RMON-MIB SNMP-COMMUNITY-MIB SNMP-FRAMEWORK-MIB SNMP-PROXY-MIB SNMP-MPD-MIB SNMP-NOTIFICATION-MIB SNMP-TARGET-MIB SNMP-USM-MIB CISCO-DATACOLLECTION-MIB CISCO-CABLE-DIAG-MIB CISCO -PORT-SECURITY-MIB BULK_FILE_MIB NAC-NAD-MIB CISCO-ENTITY-ALARAM-MIB SNMP-VIEW-BASED-ACM-MIB CISCO-MAC-AUTH-BYPASS-MIB CISCO-AUTH-FRAMEWORK-MIB CISCO-BRIDGE-Ext-MIB SNMPv2-MIB CISCO-ENTITY-VENDORTYPE-OID-MIB CISCO-PRODUCTS-MIB IP-FORWARD-MIB BGP-CISCO-BGP-MIBv2 |

Ordering information

Table 14. Ordering information

| Product ID | Description |
|--------------------------|--|
| IE-3400H-8FT-E | Catalyst IE3400 Heavy Duty w/ 8 FE M12 interfaces, IP67, Network Essentials |
| IE-3400H-16FT-E | Catalyst IE3400 Heavy Duty w/ 16 FE M12 interfaces, IP67, Network Essentials |
| IE-3400H-24FT-E | Catalyst IE3400 Heavy Duty w/ 24 FE M12 interfaces, IP67, Network Essentials |
| IE-3400H-8FT-A | Catalyst IE3400 Heavy Duty w/ 8 FE M12 interfaces, IP67, Network Advantage |
| IE-3400H-16FT-A | Catalyst IE3400 Heavy Duty w/ 16 FE M12 interfaces, IP67, Network Advantage |
| IE-3400H-24FT-A | Catalyst IE3400 Heavy Duty w/ 24 FE M12 interfaces, IP67, Network Advantage |
| IE-3400H-8T-E | Catalyst IE3400 Heavy Duty w/ 8 GE M12 interfaces, IP67, Network Essentials |
| IE-3400H-16T-E | Catalyst IE3400 Heavy Duty w/ 16 GE M12 interfaces, IP67, Network Essentials |
| IE-3400H-24T-E | Catalyst IE3400 Heavy Duty w/ 24 GE M12 interfaces, IP67, Network Essentials |
| IE-3400H-8T-A | Catalyst IE3400 Heavy Duty w/ 8 GE M12 interfaces, IP67, Network Advantage |
| IE-3400H-16T-A | Catalyst IE3400 Heavy Duty w/ 16 GE M12 interfaces, IP67, Network Advantage |
| IE-3400H-24T-A | Catalyst IE3400 Heavy Duty w/ 24 GE M12 interfaces, IP67, Network Advantage |
| PWR-IE160W-67-DC= | IP67-rated DC-DC power supply |
| SD-IE-4GB | IE 4GB SD Memory card |
| CAB-CONSOLE-M12= | Console Cable 6ft with M12 and DB9F for Cisco Catalyst IE3400 Heavy Duty Series Switch |
| IE3400H-NW-A= | Cisco Network Advantage license for IE3400 Heavy Duty Series |
| IE3400H-DNA-E | Cisco Catalyst Center Essentials license for IE3400 Heavy Duty Series |
| IE3400H-DNA-E-3Y | IE 3400 Cisco Catalyst Center Essentials, 3 Year Term license |
| IE3400H-DNA-E-5Y | IE 3400 Cisco Catalyst Center Essentials, 5 Year Term license |
| IE3400H-DNA-E-7Y | IE 3400 Cisco Catalyst Center Essentials, 7 Year Term license |
| IE3400H-DNA-A | Cisco Catalyst Center Advantage license for IE3400 Heavy Duty Series |
| IE3400H-DNA-A-3Y | IE 3400 Cisco Catalyst Center Advantage, 3 Year Term license |

| Product ID | Description |
|--------------------|--|
| IE3400H-DNA-A-5Y | IE 3400 Cisco Catalyst Center Advantage, 5 Year Term license |
| IE3400H-DNA-A-7Y | IE 3400 Cisco Catalyst Center Advantage, 7 Year Term license |
| LIC-MRP-MGR-XE= | MRP Ring Manager License |
| LIC-MRP-CLIENT-XE= | MRP Ring Client License |

* MRP Feature Licenses are not required from release IOS XE 17.7.1 onwards. Please refer to the IOS XE 17.7.1 [Release Notes](#).

Connectors and Cabling

Table 15. Connectors and Cabling

| Type | Options |
|----------------------------|---|
| Data Cables | <ul style="list-style-type: none"> • Copper 100Base-T M12 D coded 4-Pin connector • Copper GE M12 X coded-8-Pin- connector |
| Alarm Cable | <ul style="list-style-type: none"> • M12 A-Coded 5-Pin connector |
| Console Cable | <ul style="list-style-type: none"> • M12 A Coded 5-Pin connector |
| Power Supply Cables | <ul style="list-style-type: none"> • Power cord for IP67 switch power input, Mini-Change A-Size single-ended cord set, 4 poles, female to pigtail, 16 AWG PVC cable. Molex part#130006-0737 https://www.molex.com/customer.html?supplierPN=1300060737 • Power cord, IP67 Power supply output to IP67 switch input: Mini-Change A-size double-Ended Cordset, 4 poles male to female. 16 AWG, TPE cable. Molex Part #130010-0863 https://www.molex.com/customer.html?supplierPN=1300100863 • Power cable for AC-DC power source, Mini-change A-size single-ended cord set, Power cord, IP67 AC power supply input, 3 pins, female insert on one end to pigtail, 16 AWG PVC cable, Molex part# 130006-2419 https://www.molex.com/customer.html?supplierPN=1300062419 https://www.molex.com/customer.html?supplierPN=1300060223 • Power cord, IP67 DC power supply input: 2 pole female power cord to open for input DC connector https://www.molex.com/customer.html?supplierPN=1300060091 |

Warranty information

There is a 5-year limited hardware warranty on all Cisco Catalyst IE3400 Heavy Duty Series switches. For more details, visit <https://www.cisco.com/c/en/us/products/warranties/warranty-doc-c99-740591.html>.

Cisco environmental sustainability

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Document history

| New or Revised Topic | Described In | Date |
|--|---|-------------------|
| DNA name change to Catalyst Center | Entire datasheet | October 19, 2023 |
| Updated AREMA | Table 11 | December 19, 2022 |
| Added new product numbers to hardware configurations and updated software features. Added Gigabit Ethernet IE3400H ordering information | Table 3 , 6 , 9 , 10 , 14 | January 24, 2020 |
| Minor updates to improve readability and added/updated features. | Table 2 , 3 , 6 and 9 | February 07, 2020 |

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