

# 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 DNA Center and Industrial Network Director, 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®.



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

## Features and benefits

**Table 1.** IE3400H Features and benefits

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

<sup>1</sup> 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
<b>Removable storage</b>	SD card <sup>1</sup>	SD card <sup>1</sup>	SD card <sup>1</sup>	SD card <sup>1</sup>	SD card <sup>1</sup>	SD card <sup>1</sup>
<b>Alarm<sup>2,3</sup></b>	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
<b>Console ports<sup>2</sup></b>	1	1	1	1	1	1
<b>Power input</b>	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)

<sup>1</sup> The SD card is optional and is not shipped by default with the switch.

<sup>2</sup> Using an M12 A-coded 5-pin connector.

<sup>3</sup> 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
<b>Dimensions (H x W x D)</b>	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
<b>Weight (including mounting bracket)</b>	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
<b>Mounting</b>	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
<b>Forwarding rate</b>	Line rate for all ports for all packet sizes
<b>Number of queues</b>	8
<b>Unicast MAC addresses</b>	8000
<b>IGMP multicast groups</b>	1000
<b>No. of Vlans</b>	256
<b>IPv4 Indirect routes<sup>1</sup></b>	2000

Resource	IE-3400H-8FT, IE-3400H-8T, IE-3400H-16FT, IE-3400H-16T, IE-3400H-24FT, IE-3400H-24T
IPv6 Indirect routes <sup>1</sup>	512
Spanning Tree Protocol instances	128
Port Access Control Lists (PACLs)	1500
DRAM	4 GB
Flash (user accessible)	1.5 GB
SD card capacity <sup>2</sup>	4 GB
Jumbo Frames	2000 bytes

<sup>1</sup> Supported with Network Advantage license

<sup>2</sup> 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
PWR-IE180W-67-AC=	IP67-rated PoE AC-DC power supply, input 85-264VAC/88-300VDC, Output 54V, 3.1A max, 180Watts

**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)	✓	✓
Layer 2 Multicast	Internet Group Management Protocol (IGMP) v1, v2, v3 snooping, IGMP filtering, IGMP querier	✓	✓
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), Expresssetup, NETCONF, RESTCONF	✓	✓
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	✓	✓
Quality of Service (QoS)	Ingress policing, rate limit, egress queuing and shaping, auto QoS	✓	✓
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	✓	✓
Layer 3 routing	Inter-VLAN routing, static routing	✓	✓
Industrial Ethernet	CIP Ethernet/IP, IEEE 1588 PTP v2 (default and power), PROFINET	✓	✓
Redundancy	Resilient Ethernet Protocol (REP) ring, Fast REP, PROFINET-Media Redundancy Protocol (MRP) ring, Parallel Redundancy Protocol (PRP)1, PTP over PRP	✓	✓
Utility	Dying gasp, SCADA protocol classification-GOOSE messaging, Modbus TCP/IP	✓	✓
Automation	YANG, NETCONF, RESTCONF	✓	✓



Features		Network Essentials (default)	Network Advantage
Industrial Management	Layer 2 switching with 1:1 switch Network Address Translation (L2NAT) <sup>2</sup>	✓	✓
IOx	Container (Native docker)	✓	✓
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)	✗	✓
Advanced security	Cisco TrustSec, Security Group Tag (SGT) inline tagging and Security Group ACLs (SGACL), MACsec-256	✗	✓
Virtualization	Virtual Routing and Forwarding (VRF)-lite	✗	✓
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)	✗	✓

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

<sup>2</sup> Supported on select ports (1/1-1/2)

**Table 10.** Cisco DNA essentials and advantage package features

Features		Cisco DNA Essentials	Cisco DNA Advantage
Cisco DNA Center	Discovery, topology, inventory, software image management	✓	✓
Visibility	Cisco DNA Assurance, Device 360	✓	✓
Day-zero network bring-up automation	Cisco Network Plug-and-Play application	✓	✓
Software-defined access	Policy-based automation; the IE3400 Heavy Duty Series can function as an SD-Access policy extended node	✗	✓

Cisco DNA licenses for Industrial Ethernet switches are add-on/optional and not mandatory. These do not include Network Tier features.

**Table 11.** Compliance specifications<sup>1</sup>

Description	Specification
ITE safety standards/certifications	UL/cUL Listing to UL/CSA 60950-1 CB to IEC 60950-1 with all country national deviations
ICE and manufacturing safety standards/certifications	UL/cUL Listing to UL/CSA 61010-2-201

Description	Specification
<b>Water and dust protection standards/ratings</b>	IEC 60529: IP66/IP67 UL 50E, Type 4X rating UL/CSA/EN/IEC 60950-22 outdoor rating
<b>Industrial Automation Control System</b>	IEC 62443-4-1 IEC 62443-4-2
<b>EMC emissions and immunity compliance</b>	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
<b>Shock and vibration</b>	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)
<b>Industry standards</b>	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 (in progress)
<b>Corrosive testing</b>	IEC 60068-2-52 Salt mist testing IEC 60068-2-60 Flowing mixed gas corrosion
<b>Humidity</b>	IEC 60068 -2-3 IEC 60068-2-30 Relative humidity: 5% to 95% noncondensing
<b>Operating temperature, environment, reliability</b>	-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)

Description	Specification
	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)

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

**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	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)	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
RFC compliance	RFC 768: UDP RFC 783: TFTP RFC 791: IPv4 protocol RFC 792: ICMP RFC 793: TCP RFC 826: ARP RFC 854: Telnet	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

Descriptions	Specifications	
	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	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
<b>SNMP MIB objects</b>	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-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

Descriptions	Specifications	
	CISCO-ACCESS-ENVMON-MIB CISCO-CALLHOME-MIB CISCO-CONFIG-MAN-MIB CISCO-FLASH-MIB CISCO-ENTITY-SENSOR-MIB IP-MIB CISCO-PAGP-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
<b>IE-3400H-8FT-E</b>	Catalyst IE3400 Heavy Duty w/ 8 FE M12 interfaces, IP67, Network Essentials
<b>IE-3400H-16FT-E</b>	Catalyst IE3400 Heavy Duty w/ 16 FE M12 interfaces, IP67, Network Essentials
<b>IE-3400H-24FT-E</b>	Catalyst IE3400 Heavy Duty w/ 24 FE M12 interfaces, IP67, Network Essentials
<b>IE-3400H-8FT-A</b>	Catalyst IE3400 Heavy Duty w/ 8 FE M12 interfaces, IP67, Network Advantage
<b>IE-3400H-16FT-A</b>	Catalyst IE3400 Heavy Duty w/ 16 FE M12 interfaces, IP67, Network Advantage
<b>IE-3400H-24FT-A</b>	Catalyst IE3400 Heavy Duty w/ 24 FE M12 interfaces, IP67, Network Advantage
<b>IE-3400H-8T-E</b>	Catalyst IE3400 Heavy Duty w/ 8 GE M12 interfaces, IP67, Network Essentials
<b>IE-3400H-16T-E</b>	Catalyst IE3400 Heavy Duty w/ 16 GE M12 interfaces, IP67, Network Essentials
<b>IE-3400H-24T-E</b>	Catalyst IE3400 Heavy Duty w/ 24 GE M12 interfaces, IP67, Network Essentials
<b>IE-3400H-8T-A</b>	Catalyst IE3400 Heavy Duty w/ 8 GE M12 interfaces, IP67, Network Advantage
<b>IE-3400H-16T-A</b>	Catalyst IE3400 Heavy Duty w/ 16 GE M12 interfaces, IP67, Network Advantage
<b>IE-3400H-24T-A</b>	Catalyst IE3400 Heavy Duty w/ 24 GE M12 interfaces, IP67, Network Advantage
<b>PWR-IE160W-67-DC=</b>	IP67-rated DC-DC power supply
<b>PWR-IE180W-67-AC=</b>	IP-67-rated AC-DC power supply
<b>SD-IE-4GB</b>	IE 4GB SD Memory card
<b>CAB-CONSOLE-M12=</b>	Console Cable 6ft with M12 and DB9F for Cisco Catalyst IE3400 Heavy Duty Series Switch
<b>IE3400H-NW-A=</b>	Cisco Network Advantage license for IE3400 Heavy Duty Series
<b>IE3400H-DNA-E</b>	Cisco DNA Essentials license for IE3400 Heavy Duty Series

Product ID	Description
IE3400H-DNA-A	Cisco DNA Advantage license for IE3400 Heavy Duty Series
IE3400H-DNA-E-3Y	IE 3400 DNA Essentials, 3 Year Term license
IE3400H-DNA-E-5Y	IE 3400 DNA Essentials, 5 Year Term license
IE3400H-DNA-A-3Y	IE 3400 DNA Advantage, 3 Year Term license
IE3400H-DNA-A-5Y	IE 3400 DNA Advantage, 5 Year Term license
LIC-MRP-MGR-XE=	MRP Ring Manager License
LIC-MRP-CLIENT-XE=	MRP Ring Client License

## Connectors and Cabling

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

## 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

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's [Corporate Social Responsibility](#) (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	<a href="#">Materials</a>
Information on electronic waste laws and regulations, including products, batteries, and packaging	<a href="#">WEEE compliance</a>

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

## Cisco and partner services

<https://www.cisco.com/web/services>

## Call to action

### Security in the Harshest IoT Edge with the Power of Intent-Based Networking

Need to connect machines, devices, and robots in a demanding environment with security features that are easy to deploy and manage? You can do it now with the Cisco Catalyst IE3400 Heavy Duty Series switches. For additional information, visit <https://www.cisco.com/go/ie3400h>.

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## Document history

New or Revised Topic	Described In	Date
Added new product numbers to hardware configurations and updated software features. Added Gigabit Ethernet IE3400H ordering information	Table 3, 6,9,10,14	01/24/2020
Minor updates to improve readability and added/updated features.	Table 2, 3, 6 & 9	02/07/2020