



Cisco Catalyst IE3200 Rugged Series

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The Cisco Catalyst® IE3200 Rugged Series ushers in mainstream adoption of Gigabit Ethernet connectivity in a compact form factor for a wide variety of extended enterprise and industrial applications.

Product overview

The Cisco Catalyst IE3200 Rugged Series delivers high-speed Gigabit Ethernet connectivity in a compact form factor and is designed for a wide range of industrial applications where hardened products are required. The platform is built to withstand harsh environments in manufacturing, energy, transportation, mining, smart cities, and oil and gas. The IE3200 platform is also ideal for extended enterprise deployments in outdoor spaces, warehouses, and distribution centers.

These switches run Cisco IOS® XE, a next-generation operating system with built-in security and trust, featuring secure boot, image signing, and a Cisco® Trust anchor module. Cisco IOS® XE also provides API-driven configuration with open APIs and data models.

The Cisco Catalyst IE3200 Rugged Series can be managed with powerful management 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 IE3200 series supports power budget of up to 240W for PoE/PoE+, shared across 8 ports, and is ideal for connecting PoE-powered end devices such as IP cameras, phones, wireless access points, sensors, and more.





Figure 1.

Features and benefits

 Table 1.
 Features and benefits

Feature	Benefit
Robust industrial design	 Built for harsh environments and temperature ranges (-40°C to +75°C) Fanless, convection-cooled with no moving parts for extended durability Hardened for vibration, shock and surge, and electrical noise immunity Complies with multi-industry specifications for automation, ITS, and substation environments Improves uptime, performance, and safety of industrial systems and equipment Covers a wide range of Power over Ethernet (PoE) application requirements Alarm I/O for monitoring and signaling to external equipment
Full Gigabit Ethernet interfaces	 Provides secure access for new high-speed applications in the industrial space Packs up to 10 ports of GE - 2x1 Gigabit Small Form-Factor Pluggable (SFP) uplinks, plus 8x1 Gigabit copper RJ45 downlink ports (with PoE+ or non PoE) in a small form-factor base system Connects high-speed wireless access points (802.11n, 802.11ac) Enables High-Definition (HD) IP cameras and Programmable Logic Controllers (PLC) Delivers multiple rings and redundant ring topologies for new network configurations Extends geographical scalability where longer-distance connectivity is required
High-density industrial Power over Ethernet (PoE)	 Supports up to 8 PoE/PoE+ ports [Power budget - 240W] Controls costs by limiting wiring, distribution panels, and circuit breakers Reduces equipment needs, thus requiring less space and reducing heat dissipation Enables ready-to-use PoE devices, such as IP phones, cameras, and wireless access points
User-friendly GUI, called WebUI	 Allows easy configuration and monitoring Eliminates the need for more complex terminal emulation programs Reduces the cost of deployment
SwapDrive, a zero- configuration replacement	 True zero-configuration and simple switch replacement in the event of a failure No networking expertise required Helps ensure fast recovery

Products overview

 Table 2.
 Product feature sets

Product family	Platforms supported	Cisco IOS Software image (feature sets) supported
IE3000	IE3200	Network Essentials (default)

Product specifications

Table 3 highlights the hardware configuration for Cisco Catalyst IE3200 Rugged Series switches.

 Table 3.
 IE3200 Hardware configurations

Product number*	Total ports	10/100/1000 RJ45 Copper ports	100/1000 SFP ports	Software license (Default)	PoE/ PoE(+) budget
IE-3200-8T2S-E	10	8	2	Network Essentials	N.A.
IE-3200-8P2S-E	10	8	2	Network Essentials	240W

Table 4 highlights the hardware specifications for Cisco Catalyst IE3200 Rugged Series switches.

Table 4. IE3200 Hardware specifications

Hardware specification	Cisco IE-3200-8T2S-E	Cisco IE-3200-8P2S-E
PoE power budget	Not applicable	240W ¹
Removable storage	USB ^{2,3} , SD card ²	USB ^{2,3} , SD card ²
Alarms	2 alarms in, 1 alarm out	2 alarms in, 1 alarm out
Console ports	1 RS-232 (via RJ-45), 1 USB Mini Type B	1 RS-232 (via RJ-45), 1 USB Mini Type B
Power inputs	Dual DC power inputs	Dual DC power inputs

¹ In order to achieve the 240W power budget, the minimum power requirements as specified in Table 7 for the switch need to be considered when selecting a power supply.

Table 5 highlights the physical configuration for Cisco Catalyst IE3200 Rugged Series switches.

Table 5. IE3200 physical configurations

Physical specifications	Cisco IE-3200-8T2S-E	Cisco IE-3200-8P2S-E
Dimensions (H x W x D)	6 in. X 3.6 in. X 5.3 in. 15.2 cm. x 9.1 cm. x 13.5 cm	6.0 in. X 3.6 in. X 5.3 in. 15.2 cm. x 9.1 cm. x 13.5 cm
Weight	3.8 lbs 1.7 kg	3.8 lbs 1.7 kg
Mounting	DIN rail	DIN rail

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

³ USB 2.0 to load system images and set configurations

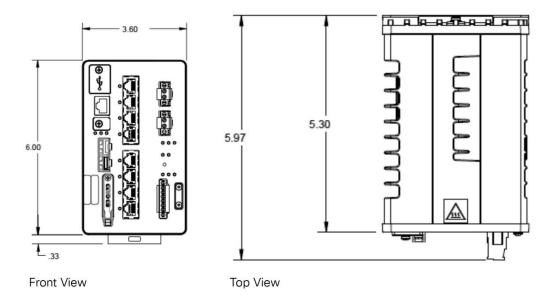


Figure 2.

Table 6 highlights the performance and scalability features for Cisco Catalyst IE3200 Rugged Series switches.

 Table 6.
 IE3200 performance and scalability features

Features	Cisco IE-3200-8T2S-E	Cisco IE-3200-8P2S-E
Forwarding rate	Line rate for all ports and all packet sizes	Line rate for all ports and all packet sizes
Number of queues	8	8
Unicast MAC addresses	8K	8K
Internet Group Management Protocol (IGMP) multicast groups	1K	1K
No. of VLANs	256	256
Spanning Tree Protocol (STP) instances	128	128
Access Control Entries (PACL/VACL/RACL)	3K	3K
DRAM	2 GB	2 GB
Flash (User Accessible)	1.5 GB	1.5 GB
SD card capacity ¹	4 GB	4 GB
Jumbo Frames	8996 bytes	8996 bytes

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

Table 7 highlights the power specifications for Cisco Catalyst IE3200 Rugged Series switches.

Table 7. IE3200 power specifications

Features	Cisco IE-3200-8T2S-E	Cisco IE-3200-8P2S-E
Input voltage range	Redundant DC input voltage: 9.6 to 60VDC	Redundant DC input voltage: 9.6 to 60VDC 48VDC is required for PoE and 54VDC is required for PoE+
Maximum Input current	2.4A	5.5A
Power consumption ¹	23W	32W

¹ Power consumption for non PoE supported model is measured at 12V and for the PoE supported model is measured at 54V. Power consumption does not include PoE power.

Table 8 highlights the power supply options for Cisco Catalyst IE3200 Rugged Series switches.

Table 8. Power supply options

Product Number	Wattage	Rated nominal input operating range	PoE/PoE+ support ¹	More Details
PWR-IE50W-AC=	50W	AC 100-240V/1.25A 50-60Hz or DC 125-250V/1.25A	No	
PWR-IE50W-AC-IEC=	50W	AC 90-264V	No	
PWR-IE50W-AC-L= ²	50W	AC 100-240V/1.2A 50-60Hz	No	
PWR-IE65W-PC-AC=	65W	AC 100-240V/1.4A 50-60Hz or DC 125-250V/1.0A	Yes	Click here for more details on these DIN Rail
PWR-IE65W-PC-DC=	65W	DC 24-48VDC/4.5A	Yes	power supplies
PWR-IE170W-PC-AC=	170W	AC 100-240V/2.3A 50-60Hz or DC 125-250V/2.1A	Yes	
PWR-IE170W-PC-DC=	170W	DC 12-54VDC/23A	Yes	
PWR-IE240W-PCAC-L= ²	240W	AC 100-240V/3.5A 50-60Hz	Yes	
PWR-IE480W-PCAC-L= ²	480W	AC 100-240V/6.0A 50-60Hz	Yes	

¹ The entire power budget for the switch and PoE ports needs to stay within the power supply wattage.

² The power supplies are not certified for smart grid and hazardous locations. These power supplies are IP20 rated.

Table 9 highlights the supported software features for Cisco Catalyst IE3200 Rugged Series switches.

Table 9. Key supported software features

Network Essentials License (Perpetual)	Features
Layer 2 switching	IEEE 802.1, 802.3 standard, NTP, UDLD, CDP, LLDP, unicast MAC filter, PAgP, LACP, VTPv2, VTPv3, EtherChannel, Q-in-Q tunneling, voice VLAN, PVST+, MSTP, and RSTP
Multicast	IGMPv1, v2, v3 snooping, IGMP filtering, IGMP querier
Management	WebUI, MIB, SmartPort, SNMP, syslog, DHCP server, SPAN session, RSPAN, FSPAN, Express setup, 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, SUDI 2099 (Secure Unique Device identifier), Access Lists (PACL/RACL/VACL), 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, PROFINET-Media Redundancy Protocol (MRP), REP Preferred, Fast REP
Utility	Dying gasp, SCADA protocol classification - GOOSE messaging, MODBUS TCP/IP
Automation	YANG, NETCONF, RESTCONF

Table 10 highlights the details on Cisco DNA Essentials License for Cisco Catalyst IE3200 Rugged Series switches.

Table 10. Cisco IE3200 Cisco DNA Essentials License

Feature	Description
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

Cisco DNA 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.

Table 11 highlights the compliance specifications for Cisco Catalyst IE3200 Rugged Series switches.

Table 11. Compliance specifications¹

Descriptions	Specifications
Industrial Automation Control System	IEC 62443-4-1 IEC 62443-4-2
Electromagnetic emissions	FCC 47 CFR Part 15 subpart B Class A EN 55032/CISPR 32 Class A VCCI Class A AS/NZS CISPR 32 Class A CISPR 11 Class A ICES 003 Class A CNS 13438 Class A KN 32 Class A EN 300 386
Electromagnetic immunity	CISPR 24 EN 55024 KN 35 EN 61000-4-2 Electro Static Discharge (air - 15kV, contact - 8kV) EN 61000-4-3 Radiated RF (10V/m UTP, 20V/m STP) EN 61000-4-4 Electromagnetic Fast Transients (4kV) EN 61000-4-5 Surge (2KV/1KV Power, 4KV STP) EN 61000-4-6 Conducted RF (10Vrms UTP) EN 61000-4-10 Damped Oscillatory Magnetic Field (100 A/m) EN 61000-4-16 Conducted CM Disturbances (30V, Cont/300V, 1 sec) EN 61000-4-17 Ripple Immunity DC Power (10%) EN 61000-4-18 Damped Oscillatory Wave (2.5kV, 1MHz) EN-61000-4-29 DC Voltage Dips and interruptions
Industry standards	EN 61000-6-2 Industrial Immunity EN 61000-6-4 Industrial Emissions EN 61000-6-1 Light Industrial Immunity EN 61326-1 Measurement, Control and Laboratory Equipment IEEE 1613 Electric Power Stations Communications Networking EN/IEC 61850-3 Electric Substations Communications Networking EN50121-4 Railway - Signaling and Telecommunications Apparatus ODVA Industrial EtherNet/IP NEMA TS 2-2016 IP30

Descriptions	Specifications
Safety standards and certifications	Information technology equipment: UL/CSA 60950-1,CB to IEC 60950-1 with all country deviations UL/CSA 62368-1, CB to IEC 62368-1 with all country deviations² Industrial floor (control equipment): UL/CSA 61010-2-201 CB report and certificate to IEC/EN 61010-2-201 Hazardous locations: UL121201 (Class I, Div 2, groups A-D) CSA 213 (Class I, Div 2, groups A-D) UL/CSA 60079-0, -15 (Class I, Zone 2, Gc/IIC) IEC 60079-0, -15 IECEx test report (Class I, Zone 2, Gc/IIC) EN 60079-0, -15 ATEX certificate (Class I, Zone 2, Gc/IIC) Cabinet enclosure required
Operating environment	Operating temperature: -40°C to +70°C (40 LFM vented enclosure) -40°C to +60°C (sealed enclosure) -34°C to +75°C (Min. 200 LFM fan or blower-equipped enclosure) +85°C (type tested for 16 hours) Altitude: Up to 15,000 feet
Storage environment	Temperature: -40°C to +85°C Altitude: 15,000 feet IEC 60068-2-14
Humidity	Relative humidity of 5% to 95% non-condensing IEC 60068-2-78 IEC 60068-2-30
Shock and vibration	IEC 60068-2-27 (operational shock, 50G, 3ms, half sine) IEC 60068-2-27 (non-operational shock, 65-80G, 9ms, trapezoidal) MIL-STD-810, Method 514.4 IEC 60068-2-6 (vibration-sinusiodal, 5Hz-150Hz)
Corrosion	IEC 60068-2-52 (salt fog) IEC 60068-2-60 (flowing mixed gas)
Warranty	Five-year limited hardware warranty on all IE3200 product IDs and all Industrial Ethernet (IE) power supplies. See more information under the Warranty section

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

Table 12 highlights Mean-Time-Between-Failures (MTBF) for Cisco Catalyst IE3200 Rugged Series switches.

Table 12. MTBF information

Parameter	Cisco IE-3200-8T2S-E	Cisco IE-3200-8P2S-E
Rated MTBF (hours)	641,150	613,125

Table 13 highlights information about management and standards for Cisco Catalyst IE3200 Rugged Series switches.

Table 13. Management and standards

Descriptions	Specifications	
IEEE standards	IEEE 802.1D MAC Bridges, STP	IEEE 802.3ad Link Aggregation (LACP)
	IEEE 802.1p Layer2 COS prioritization	IEEE 802.3ah 100BASE-X SMF/MMF only
	IEEE 802.1q VLAN	IEEE 802.3x full duplex on 10BASE-T
	IEEE 802.1s Multiple Spanning-Trees	IEEE 802.3 10BASE-T specification
	IEEE 802.1w Rapid Spanning-Tree	IEEE 802.3u 100BASE-TX specification
	IEEE 802.1x Port Access Authentication	IEEE 802.3ab 1000BASE-T specification
	IEEE 802.1AB LLDP	IEEE 802.3z 1000BASE-X specification
	IEEE 1588v2 PTP Precision Time Protocol	IEEE 802.3af Power over Ethernet
		IEEE 802.3at Power over Ethernet plus
RFC compliance	RFC 768: UDP	RFC 1492: TACACS+
	RFC 783: TFTP	RFC 1493: Bridge MIB Objects
	RFC 791: IPv4 protocol	RFC 1534: DHCP and BOOTP interoperation
	RFC 792: ICMP	RFC 1542: Bootstrap Protocol
	RFC 793: TCP	RFC 1643: Ethernet Interface MIB
	RFC 826: ARP	RFC 1757: RMON
	RFC 854: Telnet	RFC 2068: HTTP
	RFC 959: FTP	RFC 2131, 2132: DHCP
	RFC 1157: SNMPv1	RFC 2236: IGMP v2
	RFC 1901,1902-1907 SNMPv2	RFC 3376: IGMP v3
	RFC 2273-2275: SNMPv3	RFC 2474: DiffServ Precedence
	RFC 2571: SNMP Management	RFC 3046: DHCP Relay Agent Information
	RFC 1166: IP Addresses	Option
	RFC 1256: ICMP Router Discovery	RFC 3580: 802.1x RADIUS
	RFC 1305: NTP	RFC 4250-4252 SSH Protocol
	RFC 951: BootP	RFC 5460: DHCPv6 bulk lease query

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

Table 14 highlights information about supported SFPs for Cisco Catalyst IE3200 Rugged Series switches.

Table 14. SFP Support

Part Number	Specifications	SFP type	Temperature range ¹	Maximum distance	Cable type	Dom support
GLC-FE-100FX-RGD	100BASE-FX	FE	IND	2 km	Multimode fiber (MMF)	No
GLC-FE-100LX-RGD	100BASE-LX10	FE	IND	10 km	Single-mode fiber (SMF)	No
GLC-FE-100FX	100BASE-FX	FE	COM	2 km	MMF	No
GLC-FE-100LX	100BASE-LX10	FE	COM	10 km	SMF	No
GLC-FE-100EX	100BASE-EX	FE	COM	40 km	SMF	No
GLC-FE-100ZX	100BASE-ZX	FE	COM	80 km	SMF	No
GLC-FE-100BX-U	100BASE-BX10	FE	СОМ	10 km	SMF	No
GLC-FE-100BX-D	100BASE-BX10	FE	COM	10 km	SMF	No
GLC-SX-MM-RGD	1000BASE-SX	GE	IND	220-550 m	MMF	Yes
GLC-LX-SM-RGD	1000BASE-LX/LH	GE	IND	550 m/10 km	MMF/SMF	Yes
GLC-ZX-SM-RGD	1000BASE-ZX	GE	IND	70 km	SMF	Yes
SFP-GE-S	1000BASE-SX	GE	EXT	220-550 m	MMF	Yes
SFP-GE-L	1000BASE-LX/LH	GE	EXT	550 m/10 km	MMF/SMF	Yes
SFP-GE-Z	1000BASE-ZX	GE	EXT	70 km	SMF	Yes
GLC-BX-U	1000BASE-BX10	GE	COM	10 km	SMF	Yes
GLC-BX-D	1000BASE-BX10	GE	COM	10 km	SMF	Yes
GLC-SX-MM	1000BASE-SX	GE	COM	220-550 m	MMF	Yes
GLC-LH-SM	1000BASE-LX/LH	GE	COM	550 m/10 km	MMF/SMF	Yes
GLC-ZX-SM	1000BASE-ZX	GE	СОМ	70 km	SMF	Yes
GLC-EX-SMD	1000BASE-EX	GE	СОМ	40 km	SMF	Yes
GLC-TE	1000BASE-T	GE	EXT	100 m	Cat5e	No
GLC-BX40-U-I=	1000BASE-BX40	GE	IND	40km	SMF	Yes
GLC-BX40-D-I=	1000BASE-BX40	GE	IND	40km	SMF	Yes

Part Number	Specifications	SFP type	Temperature range ¹	Maximum distance	Cable type	Dom support
GLC-BX40-DA-I=	1000BASE-BX40	GE	IND	40km	SMF	Yes
GLC-BX80-U-I=	1000BASE-BX80	GE	IND	80km	SMF	Yes
GLC-BX80-D-I=	1000BASE-BX80	GE	IND	80km	SMF	Yes
GLC-SX-MMD=	1000BASE-SX	GE	EXT	550m	MMF	Yes
GLC-LH-SMD=	1000BASE-LX/LH	GE	EXT	550m/10km	MMF/SMF	Yes
GLC-ZX-SMD=	1000BASE-ZX	GE	EXT	70km	SMF	Yes
GLC-T-RGD=	1000BASE-T	GE	IND	100m	Copper	NA

¹ If non-industrial SFPs (EXT, COM) are used, the switch operating temperature must be derated.

Ordering information

Table 15 lists the ordering information for fixed system and memory that are commonly used with the Cisco Catalyst IE3200 switches.

 Table 15.
 Ordering information

Part number	Product description
IE-3200-8T2S-E	Catalyst IE3200 w/ 8 GE Copper and 2 GE SFP, Fixed System, Network Essentials
IE-3200-8P2S-E	Catalyst IE3200 w/ 8 GE PoE/PoE+ and 2 GE SFP, Fixed System, Network Essentials
SD-IE-4GB=	Industrial Ethernet (IE) 4-GB SD memory card for IE
STK-RACK-DINRAIL=	19" DIN Rail mount kit
IE3200-DNA-E	Cisco DNA Essentials license for IE3200 Series
IE3200-DNA-E-3Y	IE 3200 Cisco DNA Essentials, 3 Year Term license
IE3200-DNA-E-5Y	IE 3200 Cisco DNA Essentials, 5 Year Term license
LIC-MRP-MGR-XE=	MRP Ring Manager License
LIC-MRP-CLIENT-XE=	MRP Ring Client License

Warranty

Five-year limited HW warranty on all IE3200 PIDs and all IE Power Supplies (see table 8 above). See link below for more details on warranty 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 <u>Corporate Social Responsibility</u> (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	<u>Materials</u>
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

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Document history

New or Revised Topic	Described In	Date
Added IEC 60068-2-6 (vibration-sinusiodal, 5Hz-150Hz)	Table 11	11/18/2020
Added measures in metric system; updated name of standard: EN 61000-4-10 Damped Oscillatory Magnetic Field (100 A/m) & removed "test in progress" from IEEE 1613 & EN/IEC 61850-3	Table 5 and Table 11	10/06/2020
Revised: PoE/PoE+ budget language clarification	Overview and Table 1	12/17/2019
Added Hardware configurations; updated hardware specifications; updated power specifications	Table 3, Table 4, Table 7	12/17/2019
Added PWR-IE50W-AC-IEC= to Power Supply Options; Added details on IPv6 support and PROFINET support on key supported software features	Table 8 and Table 9	12/17/2019
Added new part numbers on SFP support	Table 14	12/17/2019
Fixed descriptions on product description in ordering information	Table 15	12/17/2019

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