

Description	Specification
<p>Cisco IEM-3000-4PC=</p> 	<ul style="list-style-type: none"> • Expansion PoE module for IE-3000-4TC, IE-3000-8TC, IE-3000-4TC-E, and IE-3000-8TC-E switches, support 4 ports 10/100 PoE/PoE+. External power source is required (44-57 VDC for PoE/50-57 VDC for PoE+) • Minimum IOS release 15.0(2)EY2
<p>Cisco IEM-3000-4PC-4TC=</p> 	<ul style="list-style-type: none"> • Expansion PoE module for IE-3000-4TC, IE-3000-8TC, IE-3000-4TC-E, and IE-3000-8TC-E switches, support 4 ports 10/100 PoE/PoE+ and 4 ports non-PoE ports. External power source is required (44-57 VDC for PoE/50-57 VDC for PoE+) • Minimum IOS release 15.0(2)EY2
<p>Cisco PWR-IE65W-PC-AC=</p> 	<ul style="list-style-type: none"> • AC-DC Power Module for PoE solution, Input AC 100-240V/1.4A, 50-60Hz or Input DC 125-250V/1A. Output 54VDC/1.2 A, DIN-Rail Mount
<p>Cisco PWR-IE65W-PC-DC=</p> 	<ul style="list-style-type: none"> • DC-DC Power Module for PoE solution, Input DC 18-60 V/4.3A, Output DC 54V/1.2A, DIN-Rail Mount

Industrial Ethernet applications

The new Cisco IE 3000 Series is an ideal product for a variety of Industrial Ethernet applications:

- **Industrial automation:** The Cisco IE 3000 is designed to support a wide array of Industrial Ethernet protocols for automation. The Cisco IE 3000 features a Programmable Logic Controller (PLC) form-factor design with extended environmental ratings, convection cooling, DIN-rail mounting, redundant 24VDC power input, alarm relays, and surge/noise immunity. The Cisco IE 3000 software and configuration tools allow for easy setup, optimized for Industrial Ethernet applications (for example, EtherNet/IP). Multicast control, traffic prioritization, and security features are specified in default templates recommended for these protocols.

Table 3. Cisco IE 3000 Series switch hardware

Description	Specification
Performance	<ul style="list-style-type: none"> • Wire-speed switching, 16 Gbps switching fabric • Forwarding rate based on 64-byte packets: 6.5 Mpps • 128 MB DRAM • 64 MB Compact Flash memory • Configurable up to 8000 MAC addresses (Layer 2) • Configurable up to 2000 MAC addresses (Layer 3) • Configurable up to 256 IGMP multicast groups (Layer 2) • Configurable up to 1000 IGMP groups and multicast routes (Layer 3) • Configurable up to 3,000 unicast routes (Layer 3) • Support jumbo frames up to 9018 bytes on Gigabit uplink port and mini-jumbo frame (system MTU) up to 1998 bytes on both 10/100 and 10/100/1000 ports
Connectors and cabling	<ul style="list-style-type: none"> • 10BASE-T ports: RJ-45 connectors, two-pair Category 3, 4, or 5 Unshielded Twisted-Pair (UTP) cabling • 100BASE-TX ports: RJ-45 connectors, two-pair Category 5 UTP cabling • 1000BASE-T ports: RJ-45 connectors, four-pair Category 5 UTP cabling • 1000BASE-SX, -LX/LH, -ZX SFP-based ports: LC fiber connectors (single/multimode fiber) • 100BASE-LX10, -FX: LC fiber connectors (single/multimode fiber)
Indicators	<ul style="list-style-type: none"> • Per-port status LED: Link integrity, disabled, activity, speed, full-duplex indications • System-status LED: System, link status, link duplex, link speed, indications
Dimensions (H x W x D)	<ul style="list-style-type: none"> • Cisco IE-3000-4TC, Cisco IE-3000-4TC-E: 6.0"W x 5.8"H x 4.4"D (152mm W x 147mm H x 112mm D) • Cisco IE-3000-8TC, Cisco IE-3000-8TC-E: 6.0"W x 5.8"H x 4.4"D (152mm W x 147mm H x 112mm D) • Cisco IEM-3000-8TM=: 3.5"W x 5.8"H x 4.4"D (89mm W x 147mm H x 112mm D) • Cisco IEM-3000-8FM=: 3.5"W x 5.8"H x 4.4"D (89mm W x 147mm H x 112mm D) • Cisco IEM-3000-4SM=: 3.5"W x 5.8"H x 4.4"D (89mm W x 147mm H x 112mm D) • Cisco IEM-3000-8SM=: 3.5"W x 5.8"H x 4.4"D (89mm W x 147mm H x 112mm D) • Cisco IEM-3000-4PC=: 3.5"W x 5.8"H x 4.4"D (89mm W x 147mm H x 112mm D) • Cisco IEM-3000-4PC-4TC=: 3.5"W x 5.8"H x 4.4"D (89mm W x 147mm H x 112mm D) • Cisco PWR-IE50W-AC=: 2.0"W x 5.8"H x 4.4"D (51mm W x 147mm H x 112mm D) • Cisco PWR-IE50W-AC-IEC=: 2.0"W x 5.8"H x 4.4"D (51mm W x 147mm H x 112mm D) • Cisco PWR-IE65W-PC-AC=: 2.6"W x 5.9"H x 4.6"D (66mm W x 150mm H x 117mm D) • Cisco PWR-IE65W-PC-DC=: 2.6"W x 5.9"H x 4.6"D (66mm W x 150mm H x 117mm D)
Weight	<ul style="list-style-type: none"> • Cisco IE-3000-4TC, Cisco IE-3000-4TC-E: 4.4 lb (2.0 kg) • Cisco IE-3000-8TC, Cisco IE-3000-8TC-E: 4.4 lb (2.0 kg) • Cisco IEM-3000-8TM=: 2.2 lb (1.0 kg) • Cisco IEM-3000-8FM=: 3.2 lb (1.45 kg) • Cisco IEM-3000-4SM=: 2.5 lb (1.1 Kg) • Cisco IEM-3000-8SM=: 3.0 lb (1.38 Kg) • Cisco IEM-3000-4PC=: 2.4 (1.08 Kg) • Cisco IEM-3000-4PC-4TC=: 2.5 (1.16 Kg) • Cisco PWR-IE50W-AC=: 1.4 lb (0.65 kg) • Cisco PWR-IE50W-AC-IEC=: 1.4 lb (0.65kg) • Cisco PWR-IE65W-PC-DC=: 2.6 (1.18 Kg) • Cisco PWR-IE65W-PC-AC=: 2.7 (1.24 Kg)
Operating environment	<p>Operating temperature: -40C to +75C</p> <ul style="list-style-type: none"> • -40C to +70C (Vented Enclosure – 40 LFM Air Flow) • -40C to +60C (Sealed Enclosure – 0 LFM Air Flow) • -24C to +75C (Fan or Blower equipped Enclosure – 200 LFM Air Flow) • -40C to +85C (IEC 60068-2-2 Environmental Type Testing – 16 hours) • Storage temperature: -40C to +85C • Operating relative humidity: 10 to 95% (non-condensing) • Operating altitude: Up to 13,000 ft (3963m) • Storage altitude: Up to 15,000 ft (4573m)

Description	Specification
Mean Time Between Failures (MTBF)	<ul style="list-style-type: none"> • Cisco IE-3000-4TC, Cisco IE-3000-4TC-E: 363,942 • Cisco IE-3000-8TC, Cisco IE-3000-8TC-E: 329,451 • Cisco IEM-3000-8TM=: 926,999 • Cisco IEM-3000-8FM=: 264,689 • Cisco IEM-3000-4SM=: 8,887,990 • Cisco IEM-3000-8SM=: 7,732,890 • Cisco IEM-3000-4PC=: 1,494,990 • Cisco IEM-3000-4PC-4TC=: 1,291,440 • Cisco PWR-IE50W-AC=: 1,662,359 • Cisco PWR-IE50W-AC-IEC=: 1,662,359 • Cisco PWR-IE65W-PC-DC=: 2,468,430 • Cisco PWR-IE65W-PC-AC=: 2,488,401

Table 4. Power specifications for Cisco IE 3000 Series switches

Description	Specification
Maximum power consumption	<ul style="list-style-type: none"> • Cisco IE-3000-4TC, Cisco IE-3000-4TC-E: 15.1W • Cisco IE-3000-8TC, Cisco IE-3000-8TC-E: 15.7W • Cisco IEM-3000-8TM=: 2.8W • Cisco IEM-3000-8FM=: 10.1W • Cisco IEM-3000-4SM=: 7.6W • Cisco IEM-3000-8SM=: 12.2W • Cisco IEM-3000-4PC=: 7.3W • Cisco IEM-3000-4PC-4TC=: 7.9W
Input voltage and currents supported	<ul style="list-style-type: none"> • Cisco IE-3000-4TC, Cisco IE-3000-8TC, 18-60VDC • Cisco IEM-3000-4PC=: IEM-3000-4PC-4TC=: 44-57V input • Cisco PWR-IE50W-AC=: 100-240VAC/1.25A or 125-250VDC/1A • Cisco PWR-IE50W-AC-IEC=: 100-240VAC/1.25A, 50-60Hz • Cisco PWR-IE65W-PC-DC=: 18-60VDC/4.3A • Cisco PWR-IE65W-PC-AC=: 100-240VAC/1.4A or 125-250V/1A
Power rating	<ul style="list-style-type: none"> • Cisco IE-3000-4TC, Cisco IE-3000-4TC-E: .05KVA • Cisco IE-3000-8TC, Cisco IE-3000-8TC-E: .05KVA

Table 5. Cisco IE 3000 Cisco DNA Essentials

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

Table 6. SFP transceivers support for Cisco IE 3000 Series switches

Part number	Specification	SFP type	Max distance	Cable type	Temp range*	DOM support
GLC-FE-100FX-RGD=	100BASE-FX	FE	2km	MMF	IND	Yes
GLC-FE-100LX-RGD	100BASE-LX10	FE	10km	SMF	IND	Yes
GLC-FE-T-I=	100BASE-T	FE	100m	Copper	IND	NA
GLC-FE-100FX=	100BASE-FX	FE	2km	MMF	COM	No
GLC-FE-100LX=	100BASE-LX10	FE	10km	SMF	COM	No
GLC-FE-100EX=	100BASE-EX	FE	40km	SMF	COM	No
GLC-FE-100ZX=	100BASE-ZX	FE	80km	SMF	COM	No
GLC-FE-100BX-D=	100BASE-BX10	FE	10km	SMF	COM	No

Description	Specification
IE-3000-8TC-E	<ul style="list-style-type: none"> Industrial Ethernet switch 8 Ethernet 10/100 ports and 2 dual-purpose uplinks (each dual-purpose uplink port has 1 10/100/1000 Ethernet port and 1 SFP-based Gigabit Ethernet port, 1 port active) Each switch supports 2 Cisco IEM-3000-8TM= modules, 1 Cisco IEM-3000-8FM= module, or 1 Cisco IEM-3000-8TM= module and 1 Cisco IEM-3000-8FM= module Layer 3 IP Services image installed
IEM-3000-8TM=	<ul style="list-style-type: none"> Expansion Copper module for Cisco IE-3000-4TC and IE-3000-8TC switches 8 10/100 TX ports
IEM-3000-8FM=	<ul style="list-style-type: none"> Expansion Fiber module for Cisco IE-3000-4TC and IE-3000-8TC switches 8 100 FX ports
IEM-3000-4SM=	<ul style="list-style-type: none"> Expansion SFP module for Cisco IE-3000-4TC and IE-3000-8TC switches 4 100M SFP ports
IEM-3000-8SM=	<ul style="list-style-type: none"> Expansion SFP module for Cisco IE-3000-4TC and IE-3000-8TC switches 8 100M SFP ports
IEM-3000-4PC=	<ul style="list-style-type: none"> Expansion PoE/PoE+ module for Cisco IE-3000-4TC and IE-3000-8TC switches 4 10/100 PoE/PoE+ ports External PoE power source (44-57 VDC for PoE/50-57 VDC for PoE+)
IEM-3000-4PC-4TC=	<ul style="list-style-type: none"> Expansion PoE/PoE+ module for Cisco IE-3000-4TC and IE-3000-8TC switches 4 non-PoE ports and 4 10/100 PoE/PoE+ ports External PoE power source (44-57 VDC for PoE/50-57 VDC for PoE+)
PWR-IE50W-AC=	<ul style="list-style-type: none"> Expansion power module for IE-3000-4TC and IE-3000-8TC switches
PWR-IE50W-AC-IEC=	<ul style="list-style-type: none"> Expansion power module for IE-3000-4TC and IE-3000-8TC switches
PWR-IE65W-PC-AC=	<ul style="list-style-type: none"> AC-DC, 54VDC power module to support 65 watts for PoE/PoE+ modules
PWR-IE65W-PC-DC=	<ul style="list-style-type: none"> DC-DC, 54VDC power module to support 65 watts for PoE/PoE+ modules
CAB-SM-LCSC-1M	<ul style="list-style-type: none"> 1m-fiber single-mode LC-to-SC connectors
CAB-SM-LCSC-5M	<ul style="list-style-type: none"> 5m-fiber single-mode LC-to-SC connectors
CF-IE3000=	<ul style="list-style-type: none"> IE 3000 Compact Flash
PWR-IE3000-CLP=	<ul style="list-style-type: none"> IE 3000 Power Transformer Spare connector clip
PWR-IE3000-CNCT=	<ul style="list-style-type: none"> IE 3000 Power Spare connector
LPNL-IE3000=	<ul style="list-style-type: none"> IE 3000 Left Panel Spare
RPNL-IE3000=	<ul style="list-style-type: none"> IE 3000 Right Panel Spare
DINCLP-IE3000=	<ul style="list-style-type: none"> Din-rail clip 4 pack Spare
BMP-IE3000=	<ul style="list-style-type: none"> Din-rail clip bumper 4 pack Spare
STK-RACKMNT-2955=	<ul style="list-style-type: none"> Din-rail adapter for rack mounting
IE-SW-SPARE	<ul style="list-style-type: none"> Spare IOS software upgrade part number (L2 to L3 features)
IE3000-DNA-E-L	<ul style="list-style-type: none"> Cisco DNA Essentials license
IE3000-DNA-E-L-3Y	<ul style="list-style-type: none"> Cisco DNA Essentials 3-year term license option
IE3000-DNA-E-L-5Y	<ul style="list-style-type: none"> Cisco DNA Essentials 5-year term license option