

# WS-C3650-48PD-E

## Datasheet



[Get a Quote](#)

## Overview

Cisco Catalyst WS-C3650-48PD-E is the next generation of enterprise-level stable access layer switch and integrates with 48 POE+ Ethernet ports and 2 x 1G SFP, 2 x 10G SFP+ or 4 x 1G uplink ports in IP Services feature set.

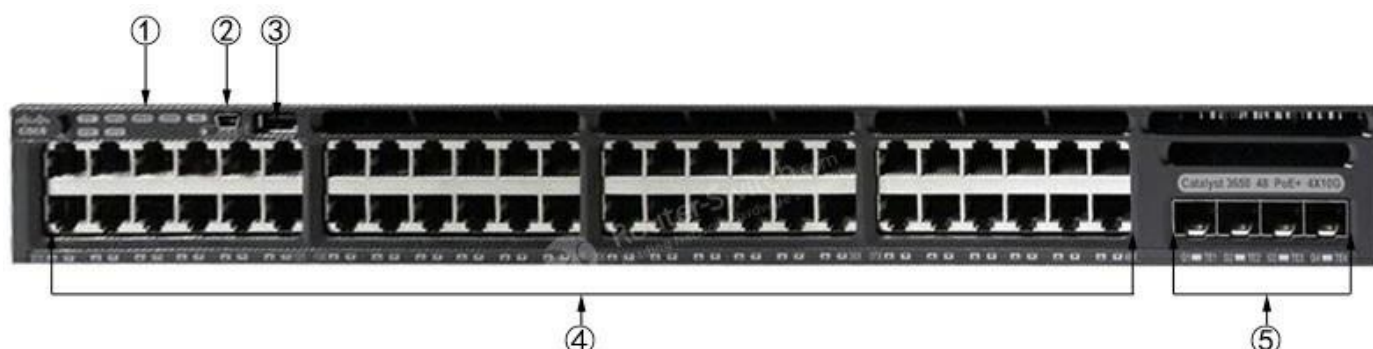
## Quick Specs

Table 1 shows the Quick Specs.

Product Code	WS-C3650-48PD-E
Enclosure Type	Rack-mountable - 1U
Feature Set	IP Services
Uplink Interfaces	2 x 1G SFP, 2 x 10G SFP+ OR 4 x 1G SFP uplinks
Ports	48 x 10/100/1000 POE Ethernet ports
Available PoE Power	390W
Maximum stacking number	9
Stack bandwidth	160Gbps
Forwarding Performance	104.16Mpps
Switching Capacity	176Gbps
RAM	4 GB
Flash Memory	2 GB
Number of AP per switch/stack	50
Number of wireless clients per switch/stack	1000
Dimensions	44.5 x 44.8 x 4.4 cm

## Product Details

Figure 1 shows the front panel of WS-C3650-48PQ-E for reference. WS-C3650-48PD-E has the similar front panel.

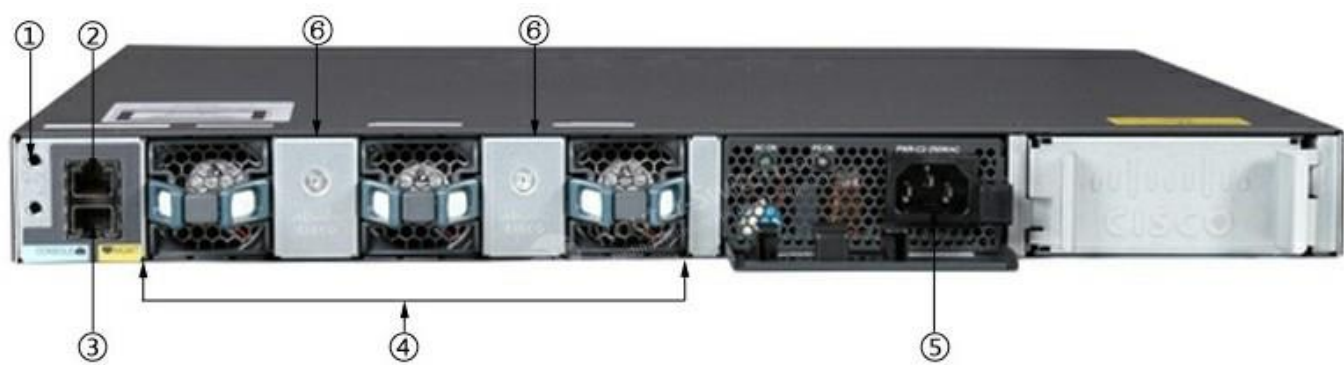


Note:

(1)	Status LEDs
(2)	USB mini-Type B (console) port
(3)	USB Type A storage port
(4)	48 x 10/100/1000 Ports
(5)	Uplink ports

· **WS-C3650-48PD-E** offers 48 x 10/100/1000 POE+ Ethernet Ports, that supports 390W POE power available with up to 30W per port.

Figure 2 shows the back panel of WS-C3650-48PD-E.



Note#

(1)	Ground connector
(2)	CONSOLE (RJ-45 console port)
(3)	MGMT (RJ-45 10/100/1000 management port)
(4)	Fan module
(5)	Power supply modules
(6)	Stacking modules

Figure 3 shows the StackWise-160 Kit.

The Cisco Catalyst 3650 supports an optional stacking module that is based on the Cisco StackWise-160 technology which allows stacking up to 9 switches.



## The Modules and Accessories

Table 2 shows some recommended modules and accessories of this switch.

Models	Description
<a href="#">C3650-STACK-KIT=</a>	Cisco Catalyst 3650 Stack Module Spare
<a href="#">PWR-C2-640WAC=</a>	640W AC Config 2 Secondary Power Supply
<a href="#">CAB-CONSOLE-RJ45</a>	Console Cable 6ft with RJ45 and DB9F
<a href="#">CAB-CONSOLE-USB</a>	Console Cable 6 ft with USB Type A and mini-B

## Compare to Similar Items

Table 3 shows the comparison between **WS-C3650-48PD-E** and **WS-C3650-48PD-L**.

Models	WS-C3650-48PD-E	<a href="#">WS-C3650-48PD-L</a>
Feature Set	IP Services	LAN Base
Uplink Interfaces	2 x 1G SFP & 2 x 10G SFP+ OR 4 x 1G SFP uplink ports	2 x 1G SFP & 2 x 10G SFP+ OR 4 x 1G SFP uplink ports
Ports	48 x 10/100/1000 POE Ethernet ports	48 x 10/100/1000 POE Ethernet ports
Available PoE Power	390W	390W
StackWise-160	Optional	Optional

## Get more information

Do you have any question about the Cisco C3650-48PD-E switch?

Contact us now via [Live Chat](#) or [sales@gntme.com](mailto:sales@gntme.com)

## Specification

WS-C3650-48PD-E Specification	
Enclosure type	Rack-mountable - 1U
Ports	48 x 10/100/1000 (POE+) + 2 x 10G SFP+ & 2 x 1G SFP
Network management Interface	· Ethernet management port: RJ-45 connectors, 4-pair Cat-5 UTP cabling · Management console port: RJ-45-to-DB9 cable for PC connections
Available PoE Power	390W
Switching Capacity	176Gbps
Maximum stacking number	9
Stack Bandwidth	160Gbps
Forwarding Performance	104.16Mpps
FNF entries	48000
Maximum VLANs IDs	4,094
MAC Address Table Size	32K
CPU	Multicore CPU

RAM	4 G
Flash Memory	2 G
<b>Wireless</b>	
Number of AP per switch/stack	50
Number of wireless clients per switch/stack	1000
Total number of WLANs per switch	64
Wireless bandwidth per switch	up to 40Gbps
Supported Aironet AP series	3700, 3600, 3500, 2600, 1600, 1260, 1140, 1040
<b>Expansion / Connectivity</b>	
Console ports	USB (Type-B), Ethernet (RJ-45)
Expansion Slot(s)	power redundant slot
Accessory & Rack Mount Kits	<ul style="list-style-type: none"> <li>· ACC-KIT-T1: Accessory kit</li> <li>· RACK-KIT-T1: Rack mount kit</li> <li>· 4PT-KIT-T1: Extension rails and brackets for four-point mounting</li> </ul>
Stacking module & cable	<ul style="list-style-type: none"> <li>· C3650-STACK-KIT: Stack Module</li> <li>· STACK-T2-50CM: StackWise-160 stacking cable with a 0.5 m length</li> <li>· STACK-T2-1M: StackWise-160 stacking cable with a 1.0 m length</li> <li>· STACK-T2-3M: StackWise-160 stacking cable with a 3.0 m length</li> </ul>
Power supply	PWR-C2-1025WAC
Power Device	Power supply - redundant - plug-in module
Power Redundancy	optional
Voltage range (Auto)	100V-240V
Power Consumption of standalone (in Watts)	104.16 (max)
<b>Miscellaneous</b>	
Width	17.5 Inches (44.5 cm)
Depth	17.625 Inches (44.8 cm)
Height	1.73 Inches (4.4 cm)
Shipping Weight	17.49 Kg
Rack Mounting Kit	optional
MTBF in hours	383,760
Compliant Standards	<ul style="list-style-type: none"> <li>· IEEE 802.1D Spanning Tree Protocol</li> <li>· IEEE 802.1p CoS Prioritization</li> <li>· IEEE 802.1Q VLAN</li> <li>· IEEE 802.1s</li> <li>· IEEE 802.1w</li> <li>· IEEE 802.1X</li> <li>· IEEE 802.1X-Rev</li> <li>· IEEE 802.11</li> <li>· IEEE 802.1ab (LLDP)</li> <li>· IEEE 802.3ad</li> <li>· IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports</li> <li>· IEEE 802.3 10BASE-T</li> <li>· IEEE 802.3u 100BASE-TX</li> <li>· IEEE 802.3ab 1000BASE-T</li> <li>· IEEE 802.3z 1000BASE-X</li> <li>· RMON I and II standards</li> <li>· SNMP v1, v2c, and v3</li> </ul>

System software / license	
System software	IOS IP Service
EnergyWise license	ENERGY-MGMT, ENERGY-MGT-100-K9
Access Point Licenses	<ul style="list-style-type: none"> <li>· L-LIC-CT3650-UPG: Primary upgrade license SKU for Cisco 3650 wireless controller (e-delivery)</li> <li>· L-LIC-CTIOS-1A: 1 access point adder license for Cisco IOS Software based wireless controller (e-delivery)</li> <li>· L-LIC-CTIOS-1A: 1 access point adder license for Cisco IOS Software based wireless controller (e-delivery)</li> <li>· LIC-CTIOS-1A: 1 access point adder license for the Cisco IOS Software based wireless controller (paper license)</li> </ul>
Features	<ul style="list-style-type: none"> <li>· EEM · RPS Support · IP service-level agreements (SLAs) · Advanced IP unicast routing protocols</li> <li>· Jumbo Frames · VLANs · Voice Vlan · VTPv2 · CDPv2 · LLDP · 802.3ad LACP and PAgP</li> <li>· PVST/PVST+</li> <li>· 802.1W/802.1S · Port Fast/Uplink Fast · Dynamic Trunking Protocol (DTP) · port CoS Trust and Override</li> <li>· Trusted Boundary · ACL Classification · ingress Policing · Auto QoS · Per VLAN policies · 802.1p queues</li> <li>· Scheduling · Priority Queuing · Configure CoS Priority Queues · Configure CoS Priority Queues</li> <li>· Configure Queue Weights · Configure Buffers and Thresholds · Class &amp; Policy Maps · Modify CoS and DSCP Mapping</li> <li>· Weighted Tail Drop · IGMPv1,v2,v3 and MLDv1, v2 · DHCP server · DSCP transparency · HSRP, VRRP, BGP</li> <li>· RIPv1, v2 EIGRP, PIM OSPF, OSPFv3, EIGRPv6, BGPv4, IS-ISv4 · VRF-lite · PIM-SM/DM, PIM sparse-dense mode, SSM · Flexible Netflow</li> </ul>
Advanced Network security	<ul style="list-style-type: none"> <li>· Port security · DHCP snooping · Dynamic ARP inspection (DAI) · IP source guard</li> <li>· The Unicast Reverse Path Forwarding (uRPF)</li> <li>· Bidirectional data support on a SPAN · User authentication</li> <li>· Private VLAN · Router and VLAN ACLs · complete identity and security</li> <li>· Multidomain authentication · MAC address notification</li> <li>· IGMP filtering · Cisco security VLAN ACL</li> <li>· Secure Shell (SSH) Protocol, Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3)</li> <li>· Port-based ACLs · TrustSec SXP · IEEE 802.1ae</li> <li>· TACACS+ and RADIUS authentication · Cisco standard and extended IP security router ACLs</li> <li>· Bridge protocol data unit (BPDU) Guard</li> <li>· Spanning Tree Root Guard (STRG) · Wireless end-to-end security</li> </ul>

Management	<div>• BRIDGE-MIB · CISCO-AUTH-FRAMEWORK-MIB</div> <div>• CISCO-BGP4-MIB, BGP4-MIB · CISCO-BRIDGE-EXT-MIB</div> <div>• CISCO-BULK-FILE-MIB · CISCO-CABLE-DIAG-MIB</div> <div>• CISCO-CALLHOME-MIB · CISCO-CEF-MIB</div> <div>• CISCO-CIRCUIT-INTERFACE-MIB</div> <div>• CISCO-ENTITY-VENDORTYPE-OID-MIB</div> <div>• CISCO-CONTEXT-MAPPING-MIB</div> <div>• CISCO-DEVICE-LOCATION-MIB · CISCO-DHCP-SNOOPING-MIB</div> <div>• CISCO-EIGRP-MIB</div> <div>• CISCO-EMBEDDED-EVENT-MGR-MIB</div> <div>• CISCO-ENTITY-FRU-CONTROL-MIB · CISCO-ENTITY-SENSOR-MIB</div> <div>• ENTITY-MIB · CISCO-ERR-DISABLE-MIB</div> <div>• CISCO-CONFIG-COPY-MIB · CISCO-FLOW-MONITOR-MIB</div> <div>• CISCO-FTP-CLIENT-MIB · CISCO-HSRP-EXT-MIB</div> <div>• CISCO-HSRP-MIB · CISCO-IETF-ISIS-MIB</div> <div>• CISCO-IF-EXTENSION-MIB · CISCO-IGMP-FILTER-MIB</div> <div>• CISCO-CONFIG-MAN-MIB · CISCO-IP-CBR-METRICS-MIB</div> <div>• CISCO-IPROUTE-MIB · CISCO-IP-STAT-MIB</div> <div>• CISCO-IP-URPF-MIB · CISCO-L2L3-INTERFACE-CONFIG-MIB</div> <div>• CISCO-LAG-MIB · CISCO-LICENSE-MGMT-MIB</div> <div>• CISCO-MAC-AUTH-BYPASS-MIB · CISCO-MAC-NOTIFICATION-MIB</div> <div>• CISCO-MDI-METRICS-MIB · CISCO-FLASH-MIB · CISCO-OSPF-MIB</div> <div>• CISCO-OSPF-TRAP-MIB · CISCO-PAE-MIB · CISCO-PAGP-MIB</div> <div>• CISCO-PIM-MIB · CISCO-PING-MIB · CISCO-PORT-QOS-MIB</div> <div>• CISCO-PORT-SECURITY-MIB · CISCO-PORT-STORM-CONTROL-MIB</div> <div>• CISCO-POWER-ETHERNET-EXT-MIB · CISCO-PRIVATE-VLAN-MIB</div> <div>• CISCO-PROCESS-MIB · CISCO-PRODUCTS-MIB · CISCO-RF-MIB</div> <div>• CISCO-RTP-METRICS-MIB · CISCO-RTTMON-MIB</div> <div>• CISCO-SMART-INSTALL-MIB</div> <div>• CISCO-SNMP-TARGET-EXT-MIB · CISCO-STACKMAKER-MIB</div> <div>• CISCO-MEMORY-POOL-MIB · CISCO-STP-EXTENSIONS-MIB</div> <div>• CISCO-SYSLOG-MIB · CISCO-TCP-MIB · CISCO-UDLDP-MIB</div> <div>• CISCO-VLAN-IFTABLE-RELATIONSHIP-MIB · CISCO-VLAN-MEMBERSHIP-MIB</div> <div>• CISCO-VTP-MIB · EtherLike-MIB</div> <div>• HC-RMON-MIB · IEEE8021-PAE-MIB · IEEE8023-LAG-MIB</div> <div>• IF-MIB · IGMP-MIB · IGMP-STD-MIB · IP-FORWARD-MIB</div> <div>• IP-MIB · IPROUTE-STD-MIB · LLDP-EXT-MED-MIB</div> <div>• LLDP-MIB · NOTIFICATION-LOG-MIB</div> <div>• OLD-CISCO-MEMORY-MIB · CISCO-CDP-MIB</div> <div>• POWER-ETHERNET-MIB · RMON2-MIB</div> <div>• RMON-MIB · SNMP-COMMUNITY-MIB · SNMP-FRAMEWORK-MIB</div> <div>• SNMP-MPD-MIB · SNMP-NOTIFICATION-MIB · SNMP-PROXY-MIB</div> <div>• SNMP-TARGET-MIB · SNMP-USM-MIB · SNMPv2-MIB</div> <div>• SNMP-VIEW-BASED-ACM-MIB · TCP-MIB · UDP-MIB</div> <div>• CISCO-IMAGE-MIB · CISCO-STACKWISE-MIB</div> <div>• AIRESPLACE-WIRELESS-MIB · CISCO-LWAPP-IDS-MIB</div> <div>• CISCO-LWAPP-AP-MIB · CISCO-LWAPP-CCX-RM-MIB</div> <div>• CISCO-LWAPP-CLIENT-ROAMING-MIB</div> <div>• CISCO-LWAPP-DOT11-CCX-CLIENT-DIAG-MIB</div> <div>• CISCO-LWAPP-DOT11-CCX-CLIENT-MIB</div> <div>• CISCO-LWAPP-DOT11-CLIENT-CCX-REPORTS-MIB</div> <div>• CISCO-LWAPP-DOT11-CLIENT-MIB · CISCO-LWAPP-DOT11-MIB</div> <div>• CISCO-LWAPP-DOWNLOAD-MIB · CISCO-LWAPP-LINKTEST-MIB</div> <div>• CISCO-LWAPP-MFP-MIB · CISCO-LWAPP-MOBILITY-EXT-MIB</div> <div>• CISCO-LWAPP-QOS-MIB · CISCO-LWAPP-REAP-MIB</div> <div>• CISCO-LWAPP-ROGUE-MIB · CISCO-LWAPP-RRM-MIB</div> <div>• CISCO-LWAPP-SI-MIB · CISCO-LWAPP-TSM-MIB</div> <div>• CISCO-LWAPP-WLAN-MIB · CISCO-LWAPP-WLAN-SECURITY-MIB</div>
Technical Support and Services	<div>• Cisco SMARTnet Service · Cisco Smart Foundation Service · Cisco SP Base Service</div> <div>• Cisco Focused Technical Support Services</div>
Environmental Ranges	
With AC power supply Operating environment and altitude	
Operating temperature up to 5000 ft (1500 m)	23°F to 113°F (-5°C to +45°C)
Operating temperature up to 10,000 ft (3000 m)	23°F to 104°F (-5°C to +40°C)
Short-term exception at sealevel with single fan failure	23°F to 113°F (-5°C to +45°C)
Short-term exception up to 5000 feet (1500 m)	23°F to 122°F (-5°C to 50°C)

Short-term exception up to 10,000 feet (3000 m)	23°F to 113°F (-5°C to 45°C)
<b>With DC power supply Operating environment and altitude (NEBS)</b>	
Operating temperature up to 6000 ft (1800 m)	23°F to 113°F (-5°C to +45°C)
Operating temperature up to 10,000 ft (3000 m)	23°F to 104°F (-5°C to +40°C)
Operating temperature up to 13,000 ft (4000m)	23°F to 95°F (-5°C to 35°C)
Short-term exception up to 6,000 feet (1800 m)	23°F to 131°F (-5°C to +55°C)
Short-term exception up to 10,000 feet (3000 m)	23°F to 122°F (-5°C to +50°C)
Short-term exception up to 13,000 feet (4000 m)	23°F to 113°F (-5°C to +45°C)
Short-term exception at sealevel with single fan failure	23°F to 113°F (-5°C to +45°)
Storage environment	-40°F to 160°F (-40°C to 70°C)
Operating altitude	Up to 16,400 Feet (Up to 5000m)
Storage altitude	Up to 16,400 Feet (Up to 5000m)
Operating relative humidity	5% to 96% noncondensing
Storage relative humidity	5% to 96% noncondensing
Short-term exception at sealevel with single fan failure	23°F to 113°F
Storage environment	-40°F to 160°F

[Order Now](#)[Get a Quote](#)

## Why gntme.com

---

As a leading network hardware supplier, Router-switch.com focuses on original new ICT equipment of [Cisco](#), [Huawei](#), [HPE](#), [Dell](#), [Hikvision](#), [Juniper](#), [Fortinet](#), etc.



200+

Countries we Sold



18,000+

Customers Trusted



\$20,000,000

Inventory Available



50%-98%

Off Global List Price



100%

Safe Online Shopping

## Contact Us

---

- Contact:- [+971 4 2409 998](tel:+97142409998)  
WhatsApp:- [+971503841786](tel:+971503841786)  
Skype:- [imrank211](https://www.skype.com/user/imrank211)
- Email: [sales@gntme.com](mailto:sales@gntme.com)