



25 de enero de

Página 1 de 1

PROCURADURIA

FORMULARIO DE INFORMACIÓN SOBRE EL OFERENTE

NOMBRE DEL DEPARTAMENTO O UNIDAD FUNCIONAL QUE GENERA EL FORMULARIO

Fecha: 25/1/20223

1. Nombre/ Razón Social del Oferente: FL BETANCES & ASOCIADOS SRL.
2. Si se trata de una asociación temporal o Consorcio, nombre jurídico de cada miembro:
3. RNC/ Cédula/ Pasaporte del Oferente: 1-3006714-7
4. RPE del Oferente: 5659
5. Domicilio legal del Oferente: C/ ARMANDO OSCAR PACHECO, 9, URB FERNANDEZ
6. Información del Representante autorizado del Oferente: Nombre: Tamara Bartulis – Marlyn Marte Dirección: C/ ARMANDO OSCAR PACHECO, 9, URB FERNANDEZ Números de teléfono y fax: 809-732-3792 ext:233-251 Dirección de correo electrónico: tbartulis@flbetances.com mmarte@flbetances.com





PROCURADURIA

No. EXPEDIENTE

PROCURADURIA-DAF-
CM-2023-0004

25 de enero de

Página 1 de 2

PRESENTACIÓN DE OFERTA

Señores
PROCURADURIA

Nosotros, los suscritos, declaramos que:

- a) Hemos examinado y no tenemos reservas a los Pliegos de Condiciones para la Licitación de referencia, incluyendo las siguientes enmiendas/ adendas realizadas a los mismos:

" MATERIALES DE REDES PARA VARIAS DEPENDENCIAS ".

- b) De conformidad con los Pliegos de Condiciones y según el plan de entrega especificado en el Programa de Suministros/ Cronograma de Ejecución, nos comprometemos a suministrar los siguientes bienes y servicios conexos, o ejecutar los siguientes servicios u Obras:
- c) Si nuestra oferta es aceptada, nos comprometemos a obtener una garantía de fiel cumplimiento del Contrato, de conformidad con los Pliegos de Condiciones de la Licitación, por el importe del **CUATRO POR CIENTO (4%)** del monto total de la adjudicación, para asegurar el fiel cumplimiento del Contrato.
- d) Para esta licitación no somos partícipes en calidad de Oferentes en más de una Oferta, excepto en el caso de ofertas alternativas, de conformidad con los Pliegos de Condiciones de la Licitación.
- e) Nuestra firma, sus afiliadas o subsidiarias, incluyendo cualquier subcontratista o proveedor de cualquier parte del Contrato, no han sido declarados inelegibles por el Comprador para presentar ofertas.
- f) Entendemos que esta Oferta, junto con su aceptación por escrito que se encuentra incluida en la notificación de adjudicación, constituirán una obligación contractual, hasta la preparación y ejecución del Contrato formal.
- g) Entendemos que el Comprador no está obligado a aceptar la Oferta evaluada como la más baja ni ninguna otra de las Ofertas que reciba.

Tamara Bartulis en calidad de REPRESENTANTE LEGAL, debidamente autorizado para actuar en nombre y representación de FL BETANCES Y ASOCIADOS.

25 de enero de 2023

OFERTA ECONÓMICA

Página 1 de 2

NOMBRE DEL OFERENTE: FL BETANCES & ASOCIADOS

Item No.	Descripción del Bien, Servicio u Obra	Unidad de medida ¹	Cantidad ²	Precio Unitario	ITBIS	Precio Unitario Final
1	FS-224D-FPOE FORTINET FORTISWITCH 224D-FPOE - SWITCH - MANAGED - 24 X 10/100/1000 (POE+) + 4 X GIGABIT SFP - RACK-MOUNTABLE -POE+ (370 W)	UD	4	67,578.50	12,164.13	79,742.63
2	FS-248E-FPOE FORTINET FORTISWITCH 248E-FPOE - SWITCH - L3 - MANAGED - 48 X 10/100/1000 (POE+) + 4 X GIGABIT SFP - RACK-MOUNTABLE - POE+ (740 W)	UD	4	129,893.50	23,380.83	153,274.33
3	NK688MIW PANDUIT NK JACK CAT6 BLANCO	UD	675	297.66	53.57	351.23
4	NUC6CR04BU-CEPANDUIT NETKEY CABLE UTP CAT6 CM AZUL	UD	14	8,670.86	1,560.75	10,231.61
5	NK1FIWY PANDUIT NETKEY FACE PLATE 1 PT BLANCO	UD	125	81.07	14.59	95.66
6	NK6PC1YLY PANDUIT NK PATCH CORD CAT6 1P AMARILLO	UD	185	217.80	39.20	257.00
7	NK6PC7Y PANDUIT NK PATCH CORD CAT6 7P WHITE	UD	185	329.12	59.24	388.36
8	NK6PPG24Y PANDUIT NK PATCH PANEL 24 PTS CAT6 RECTO 1RU	UD	9	9,296.43	1,673.35	10,969.78
9	WMPFSE PANDUIT ORGANIZADOR HORIZONTAL FRONT ONLY 1U	UD	9	2,043.09	367.75	2,410.84

10	LP-XCEPUSWH LANPRO CONECTOR MODULAR (JACK) CAT5E BLANCO	UD	50	93.78	16.88	110.66
11	LP-CE0N0BKC LANPRO CABLE UTP CAT5E OUTDOOR SINGLE JACKET AWG24	UD	2	7,381.00	1,328.58	8,709.58
12	NTDWC6U600 NITROTEL GABINETE 6U 600X650 WALL MOUNT DOBLE CUERPO (ABATIBLE)	UD	2	16,940.00	3,049.20	19,989.20
13	NK2FIWY PANDUIT NETKEY FACE PLATE 2PT BLANCOS	UD	40	82.89	14.92	97.81
14	NTMB24 NITROTEL CAJA SUPERFICIE 2X4 BLANCA	UD	12	75.63	13.61	89.24
15	NTSC42U61 NITROTEL SERVER CABINET 42U 600X1000 MM, 4 VENTILADORES DE ENFRIAMIENTO, SISTEMA DE TIERRA, PUERTA FRONTAL PERFORADA CON 4 JUEGO DE LLAVES, PANELES LATERALES REMOVIBLES, PATITAS Y RUEDAS	UD	1	84,337.00	15,180.66	99,517.66

VALOR TOTAL DE LA OFERTA: 1,731,604.37 RD\$

Valor total de la oferta en letras: **UN MILLÓN SETECIENTOS TREINTA Y UN MIL SEISCIENTOS CUATRO CON TREINTA Y SIETE CENTAVOS.**

Tamara Bartulis en calidad de REPRESENTANTE LEGAL, debidamente autorizado para actuar en nombre y representación de FL BETANCES Y ASOCIADOS.



Registro no.

7624-2022



MIPYMES

CERTIFICACIÓN

Otorgado a:

FL BETANCES & ASOCIADOS SRL

Clasificada como: MEDIANA

CERTIFICAMOS: Que la empresa FL BETANCES & ASOCIADOS SRL, PERSONA JURÍDICA, RNC No. 130067147, cumple con todos los requisitos sobre el régimen regulatorio para desarrollo y competitividad de las Micro, Pequeñas y Medianas Empresas (MIPYMES).

Esta certificación tiene vigencia de (12) meses, a partir de la fecha de emisión. Expedida en la ciudad de Santo Domingo, Distrito Nacional, capital de la República Dominicana a los **(8)** días del mes de **Septiembre** del año **(2022)**.



85419

**Torre MICM, Av. 27 de Febrero No.306, Bella Vista, Santo Domingo, Rep. Dom.
(809) 685-5171 · (809) 200-5171 sin cargos · www.micm.gob.do**



ESTE CERTIFICADO FUE GENERADO ELECTRÓNICAMENTE Y CUENTA CON UN CÓDIGO DE VERIFICACIÓN QUE LE PERMITE SER VALIDADO INGRESANDO A WWW.CAMARASANTODOMINGO.DO

EL REGISTRO MERCANTIL DE LA CÁMARA DE COMERCIO Y PRODUCCIÓN DE SANTO DOMINGO DE CONFORMIDAD CON LA LEY NO. 3-02 DEL 18 DE ENERO DEL 2002, EXPIDE EL SIGUIENTE:

CERTIFICADO DE REGISTRO MERCANTIL SOCIEDAD DE RESPONSABILIDAD LIMITADA - SRL

REGISTRO MERCANTIL NO. 27141SD

DENOMINACIÓN SOCIAL: FL BETANCES & ASOCIADOS S.R.L.

SOCIEDAD DE RESPONSABILIDAD LIMITADA - SRL

RNC: 1-30-06714-7

FECHA DE EMISIÓN: 22/4/2004

FECHA DE VENCIMIENTO: 22/4/2023

SIGLAS: NO REPORTADO

NACIONALIDAD: REPÚBLICA DOMINICANA

CAPITAL SOCIAL: RD\$3,000,000.00

MONEDA: DOP

FECHA ASAMBLEA CONSTITUTIVA/ACTO: 16/4/2004

FECHA ÚLTIMA ASAMBLEA: 28/5/2022

DURACIÓN DE LA SOCIEDAD: INDEFINIDA

DOMICILIO DE LA EMPRESA:

CALLE: ARMANDO OSCAR PACHECO NO.9

SECTOR: URB. FERNANDEZ

MUNICIPIO: DISTRITO NACIONAL

DATOS DE CONTACTO DE LA EMPRESA:

TELÉFONO (1): (809) 732-3792

TELÉFONO (2): 8294218222

CORREO ELECTRÓNICO: labetances@flbetances.com

FAX: **NO REPORTADO**

PÁGINA WEB: **www.flbetances.com**

ACTIVIDAD DE LA SOCIEDAD: **COMERCIO, COMERCIO, SERVICIO, SERVICIO**

OBJETO SOCIAL: **SERVICIOS DE PERSONAL TEMPORAL, SERVICIOS DE ASESORÍA DE GESTIÓN, DESARROLLO DE RECURSOS HUMANOS, SERVICIOS DE RECURSOS HUMANOS, SERVICIOS DE INFORMACIÓN, SERVICIOS INFORMÁTICOS, VENTA DE SOFTWARE, VENTA DE EQUIPOS INFORMÁTICOS Y ACCESORIOS, COMPONENTES PARA TECNOLOGÍA DE LA INFORMACIÓN, ELECTRÓNICA DE CONSUMO, ACCESORIOS Y SUMINISTROS, EQUIPOS DE AUDIO Y VIDEO PARA PRESENTACIÓN Y COMPOSICIÓN, MEDIOS FOTOGRÁFICOS Y DE GRABACIÓN, VENTA DE BATERÍAS, GENERADORES Y TRANSMISIÓN DE ENERGÍA CINÉTICA, DIFUSIÓN DE TECNOLOGÍAS DE INFORMACIÓN Y TELECOMUNICACIONES, SERVICIOS DE MEDIOS DE TELECOMUNICACIONES, FORMACIÓN PROFESIONAL, SERVICIOS EDUCATIVOS ESPECIALIZADOS, MATERIALES DIDÁCTICOS PROFESIONALES Y DE DESARROLLO, SUMINISTROS DE OFICINA, DIFUSIÓN O TELECOMUNICACIONES, PRODUCTOS DE PAPEL, VENTA DE EQUIPOS, SUMINISTROS Y COMPONENTES ELÉCTRICOS.**

PRINCIPALES PRODUCTOS Y SERVICIOS: **SUMINISTROS DE OFICINA, DIFUSIÓN O TELECOMUNICACIONES, PERSONAL TEMPORAL, ASESORÍA DE GESTIÓN, DESARROLLO DE RECURSOS HUMANOS, RECURSOS HUMANOS, SERVICIOS DE INFORMACIÓN, SERVICIOS INFORMÁTICOS, SOFTWARE, VENTA DE EQUIPOS INFORMÁTICOS Y ACCESORIOS, COMPONENTES PARA TECNOLOGÍA DE LA INFORMACIÓN, ELECTRÓNICA DE CONSUMO, ACCESORIOS Y SUMINISTROS, EQUIPOS DE AUDIO Y VIDEO PARA PRESENTACIÓN Y COMPOSICIÓN, MEDIOS FOTOGRÁFICOS Y DE GRABACIÓN, VENTA DE BATERÍAS, GENERADORES Y TRANSMISIÓN DE ENERGÍA CINÉTICA, DIFUSIÓN DE TECNOLOGÍAS DE INFORMACIÓN Y TELECOMUNICACIONES, MEDIOS DE TELECOMUNICACIONES, FORMACIÓN PROFESIONAL, EDUCATIVOS ESPECIALIZADOS, MATERIALES DIDÁCTICOS PROFESIONALES, PRODUCTOS DE PAPEL, VENTA DE EQUIPOS, SUMINISTROS Y COMPONENTES ELÉCTRICOS, SUMINISTROS DE OFICINA, DIFUSIÓN O TELECOMUNICACIONES, PERSONAL TEMPORAL, ASESORÍA DE GESTIÓN, DESARROLLO DE RECURSOS HUMANOS, RECURSOS HUMANOS, SERVICIOS DE INFORMACIÓN, SERVICIOS INFORMÁTICOS, SOFTWARE, VENTA DE EQUIPOS INFORMÁTICOS Y ACCESORIOS, COMPONENTES PARA TECNOLOGÍA DE LA INFORMACIÓN, ELECTRÓNICA DE CONSUMO, ACCESORIOS Y SUMINISTROS, EQUIPOS DE AUDIO Y VIDEO PARA PRESENTACIÓN Y COMPOSICIÓN**

SISTEMA ARMONIZADO (SA): **NO REPORTADO**

SOCIOS:



NOMBRE	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
CONNIE MARIA BETANCES FERNANDEZ	ARMANDO OSCAR PACHECO #9, URB. FERNANDEZ, DISTRITO NACIONAL, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-1199570-0	DOMINICANA	Casado/a
LUIS ALBERTO BETANCES FERNANDEZ	ARMANDO OSCAR PACHECO #9, URB. FERNANDEZ, DISTRITO NACIONAL, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-0949879-0	DOMINICANA	Casado/a
JENNIE MARIA BETANCE FERNANDEZ	ARMANDO OSCAR PACHECO #9, URB. FERNANDEZ, DISTRITO	001-1394137-1	DOMINICANA	Casado/a

	NACIONAL, DISTRITO NACIONAL, REPÚBLICA DOMINICANA			
FAUSTO RICARDO BETANCES FERNANDEZ	ARMANDO OSCAR PACHECO #9, URB. FERNANDEZ, DISTRITO NACIONAL, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-0171245-3	DOMINICANA	Casado/a

CANTIDAD SOCIOS: En el presente certificado figuran 4 de 4 socios.

CANTIDAD DE CUOTAS SOCIALES: 1,000

ÓRGANO DE GESTIÓN:

NOMBRE	CARGO	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
LUIS ALBERTO BETANCES FERNANDEZ	Gerente	ARMANDO OSCAR PACHECO #9, URB. FERNANDEZ, DISTRITO NACIONAL, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-0949879-0	DOMINICANA	Casado/a

DURACIÓN ÓRGANO DE GESTIÓN: 6 AÑO(S)

ADMINISTRADORES/PERSONAS AUTORIZADAS A FIRMAR:

NOMBRE	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
ALEJANDRA TAMARA BARTULIS	ARMANDO OSCAR PACHECO #9, URB. FERNANDEZ, DISTRITO NACIONAL, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	AAA3779991	ARGENTINO	Casado/a
LUIS ALBERTO BETANCES FERNANDEZ	ARMANDO OSCAR PACHECO #9, URB. FERNANDEZ, DISTRITO NACIONAL, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-0949879-0	DOMINICANA	Casado/a
OSCAR CANTILLO HIGUERA	ARMANDO OSCAR PACHECO #9, URB. FERNANDEZ, DISTRITO NACIONAL, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-1201739-7	COLOMBIANA	Casado/a

COMISARIO(S) DE CUENTA(S) (SI APLICA):
NO REPORTADO

NOMBRE	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
--------	-----------	-------------------------	--------------	-----------------

ÓRGANO LIQUIDADOR:
NO REPORTADO

NOMBRE	CARGO	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
--------	-------	-----------	-------------------------	--------------	-----------------

ENTE REGULADO: NO REPORTADO
NO. RESOLUCIÓN: NO REPORTADO

TOTAL EMPLEADOS: 86 **MASCULINOS:** 56 **FEMENINOS:** 30

SUCURSALES/AGENCIAS/FILIALES:
NO REPORTADO

NOMBRE(S) COMERCIAL(ES)

NOMBRE NO REPORTADO **NO. REGISTRO** NO REPORTADO

REFERENCIAS COMERCIALES
NO REPORTADO

REFERENCIAS BANCARIAS
NO REPORTADO

COMENTARIO(S)

NO POSEE

ACTO(S) DE ALGUACIL(ES)

NO POSEE

ES RESPONSABILIDAD DEL USUARIO CONFIRMAR LA VERACIDAD Y LEGITIMIDAD DEL PRESENTE DOCUMENTO A TRAVÉS
DE SU CÓDIGO DE VALIDACIÓN EN NUESTRA PÁGINA WEB: WWW.CAMARASANTODOMINGO.DO

ESTE CERTIFICADO FUE GENERADO ELECTRÓNICAMENTE CON FIRMA DIGITAL Y CUENTA CON PLENA VALIDEZ JURÍDICA
CONFORME A LA LEY NO. 126-02 SOBRE COMERCIO ELECTRÓNICO, DOCUMENTOS Y FIRMAS DIGITALES.



Santiago Mejia Ortiz
Registrador Mercantil

no hay nada más debajo de esta línea

Digitally signed by Santiago Eugenio Mejia Ortiz
Date: 2022.10.10 11:34:38 -04:00



República Dominicana
MINISTERIO DE HACIENDA
DIRECCIÓN GENERAL DE IMPUESTOS INTERNOS
RNC: 4-01-50625-4
CERTIFICACIÓN

No. de Certificación: **C0223950007563**

La Dirección General de Impuestos Internos **CERTIFICA** que el o la contribuyente **FL BETANCES & ASOCIADOS SRL**, RNC No. **130067147**, con su domicilio y asiento fiscal en **SANTO DOMINGO DE GUZMAN**, Administración Local **ADM LOCAL MAXIMO GOMEZ**, está al día en la declaración y/o pago de los impuestos correspondientes a las obligaciones fiscales siguientes:

Nombre del Impuesto	
• IMP. SELECTIVO A LAS TELECOMUN	• ANTICIPO IMPUESTO A LAS RENTAS
• ACTIVOS IMPONIBLES	• OTRAS RETENCIONES Y RETRIB COM
• IMPUESTO A LA RENTA SOCIEDADES	• RETENCIONES Y RETRIB. EN RENTA
• CONT RESIDUOS SOLIDOS IR2-ISFL	• ITBIS

Dada en la **OFICINA VIRTUAL**, a los **tres (3) días del mes de enero del año dos mil veintitres (2023)**.

NOTAS:

- **El contribuyente tiene creditos tributarios en controversia administrativa o litigiosa pendiente de decision o emision de sentencia.**
- La presente certificación tiene una vigencia de treinta (30) días a partir de la fecha y se emite a solicitud del o de la contribuyente o su representante.
- Esta certificación no constituye un juicio de valor sobre la veracidad de las declaraciones presentadas por el o la contribuyente, ni excluye cualquier proceso de verificación posterior.
- Este documento no requiere firma ni sello.

	Código de firma: W1YB-SNP7-YPX1-6727-6288-4939 sha1: lc8va7g77Exl/MXosxQPI/hYWYU= DGII - OFICINA VIRTUAL DIRECCION GENERAL DE IMPUESTOS INTERNOS DIRECCION GENERAL DE IMPUESTOS INTERNOS
	 W1YB-SNP7-YPX1-6727-6288-4939

Verifique la legitimidad de la presente certificación en <http://www.dgii.gov.do/verifica> o llamando a los teléfonos 809-689-3444 y 1-809-200-6060 (desde el interior sin cargos).



4-01-51707-8

CERTIFICACION No. 2904694

A QUIEN PUEDA INTERESAR

Por medio de la presente hacemos constar que en los registros de la Tesorería de la Seguridad Social, la empresa **FL BETANCES & ASOCIADOS SRL** con RNC/Cédula **1-30-06714-7**, a la fecha no presenta balance con atrasos en los pagos de los aportes a la Seguridad Social.

La presente certificación no significa necesariamente que **FL BETANCES & ASOCIADOS SRL** haya realizado sus pagos en los plazos que establece la Ley 87-01, ni constituye un juicio de valor sobre la veracidad de las declaraciones hechas por este empleador a la Tesorería de la Seguridad Social, ni le exime de cualquier verificación posterior.

Esta certificación no requiere firma ni sello, tiene una vigencia de 30 días a partir de la fecha y se expide **totalmente gratis sin costo alguno** a solicitud de la parte interesada.

Dado en la ciudad de Santo Domingo, Republica Dominicana, a los 3 días del mes de Enero del año 2023.

Para verificar la autenticidad de esta certificación dirijase a la siguiente dirección:

<https://suir.gob.do/sys/VerificarCertificacion.aspx>

Datos de verificación:

- Código de firma digital: **2904694-V3222593-52023**
- Pin: **7810**

NO HAY NADA ESCRITO DEBAJO DE ESTA LINEA

Registro de Proveedores del Estado (RPE)

Constancia de inscripción

RPE: 5659

Fecha de registro: 5/6/2007

Fecha actualización: 4/8/2021

Razón social: FL Betances & Asociados, SRL

No. Documento: 130067147 - RNC

Género: Masculino

Provee: Consultoria, Servicios

Certificación MIPYME: Sí

Registro de beneficiario: Sí

Clasificación empresa: Mediana Empresa

Estado: Activo

Ocupación:

Motivo:

Domicilio: Calle Armando Oscar Pacheco, 9, Urbanización
Fernández

10129 - REPÚBLICA DOMINICANA

Persona de contacto: Alejandra Tamara Bartulis

Observaciones:

Actividad comercial

CÓDIGO	DESCRIPCIÓN
14110000	Productos de papel
26110000	Baterías y generadores y transmisión de energía cinética
39120000	Equipos, suministros y componentes eléctricos
43200000	Componentes para tecnología de la información, difusión o telecomunicaciones
43210000	Equipo informático y accesorios
43230000	Software
44120000	Suministros de oficina
45110000	Equipos de audio y video para presentación y composición
45130000	Medios fotográficos y de grabación
52160000	Electrónica de consumo
60100000	Materiales didácticos profesionales y de desarrollo y accesorios y suministros
80100000	Servicios de asesoría de gestión
80110000	Servicios de recursos humanos
81110000	Servicios informáticos

**HACIENDA**Dirección General
Contrataciones Públicas

83110000	Servicios de medios de telecomunicaciones
86100000	Formación profesional
86130000	Servicios educativos especializados

Portal Transaccional - 4/8/2021 3:40:19 p.m.

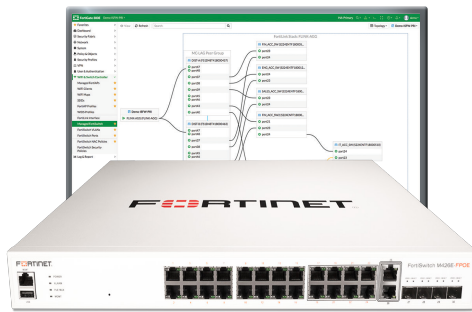
DATA SHEET

FortiSwitch™ Secure Access

Available in:



Appliance



Security, Performance, and Manageability

The FortiSwitch™ Secure Access Family delivers outstanding security, performance, and manageability. Secure, simple, and scalable, FortiSwitch is the right choice for threat-conscious businesses of all sizes.

Tightly integrated into the Fortinet Security Fabric via FortiLink, FortiSwitch can be managed directly from the familiar FortiGate interface. This single-pane-of-glass management provides complete visibility and control of users and devices on the network regardless of how they connect. This makes the FortiSwitch ideal for SD-Branch and campus deployments with applications that range from desktop to data center aggregation, enabling businesses to converge their security and network access.

Security Fabric Integration through FortiLink

FortiLink is an innovative proprietary management protocol that allows our FortiGate Next-Generation Firewall to seamlessly manage any FortiSwitch. FortiLink enables the FortiSwitch to become a logical extension of the FortiGate, integrating it directly into the Fortinet Security Fabric. This management option reduces complexity and decreases management costs as network security and access layer functions are enabled and managed through a single console. FortiLink integration enables centralized policy management, including role-based access and control, making it easy to implement and manage.



Highlights

- Designed for installations from desktops to wiring closets
- Ideal for SD-Branch deployments
- Centralized security and access management from FortiGate interfaces with FortiLink
- Optimal for converged network environments; enabling voice, data, and wireless traffic to be delivered across a single network
- Supports non-FortiLink deployments through onboard GUI, API, or command line configuration
- Up to 48 ports in a compact 1 RU form factor
- Stackable up to 300 switches per FortiGate, depending on model
- Supports wire-speed switching and store and forward forwarding mode

HIGHLIGHTS

Entry

100 Series

- Entry level switch
- 8-48 GE ports, PoE+ capable
- Desktop to wiring closet
- 2-4 GE SFP uplink ports
- 4× 10GE SFP+ uplink ports

Mid-Range

200 Series

- Mid-level switch
- 24-48 GE ports, PoE+ capable
- Typical wiring closet switch
- 4 GE SFP uplink ports

Premium

400 Series

- Enterprise switch
- 24-48 GE and Multi-Gig port options, PoE+ and UPOE options
- Larger wiring closet or high throughput requirements
- 4× 10 GE SFP+ uplink ports

Aggregation

500 Series

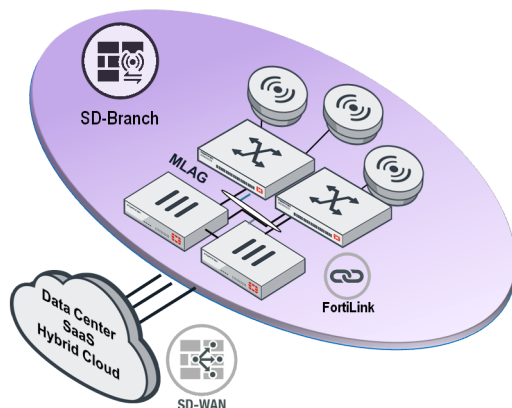
- Aggregation switch
- 24-48 GE ports, PoE+ capable
- Larger wiring closet or high throughput requirements
- 4× 10 GE SFP+ and 2× 40 GE QSFP uplink ports

DEPLOYMENT OVERVIEW

FortiSwitch is commonly managed and deployed through our FortiGate with FortiLink but can also be deployed and managed in non-FortiGate environments

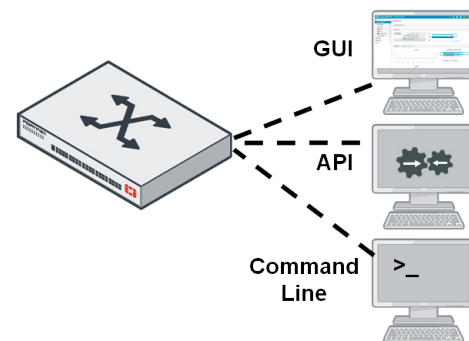
FortiGate

- Deployment and management via FortiLink
- Security extended from NGFW
- Most common Fortinet deployment model



Non-FortiGate

- Standalone GUI or CLI
- Manage at scale with FortiSwitch Manager
- Industry standard, no Fortinet Security Fabric integration



Cloud Management for both deployment options available through FortiCloud



PRODUCT OFFERINGS

Model Numbers

FS-108E-POE, FS-108E-FPOE, FS-108F, FS-108F-POE, FS-108F-FPOE, FS-124E, FS-124E-POE, FS-124E-FPOE, FS-148E, FS-148E-POE, FS-124F, FS-124F-POE, FS-124F-FPOE, FS-148F, FS-148F-POE, FS-148F-FPOE, FS-224D-FPOE, FS-224E, FS-224E-POE, FS-248D, FS-248E-POE, FS-248E-FPOE, FS-424E-FIBER, FS-M426E-FPOE, FS-424E, FS-424E-POE, FS-424E-FPOE, FS-448E, FS-448E-POE, FS-448E-FPOE, FS-524-D, FS-524D-FPOE, FS-548D, FS-548D-FPOE

FEATURES

Refer to the FortiSwitch Feature Matrix for details about the features supported by each FortiSwitch model.

FORTISWITCH FORTILINK MODE (WITH FORTIGATE)
Management and Configuration
Auto Discovery of Multiple Switches
8 to 300 Managed Switches depending on FortiGate model
FortiLink Stacking (Auto Inter-Switch Links)
Software Upgrade of Switches
Centralized VLAN Configuration
Switch POE Control
Link Aggregation Configuration
Spanning Tree
LLDP/MED
IGMP Snooping
L3 Routing and Services (FortiGate)
Policy-Based Routing (FortiGate)
Virtual Domain (FortiGate)
Automated detection and recommendations
Dynamic Port Profiles for FortiSwitch ports
Provision firmware upon authorization
Health Monitoring
High Availability
Support FortiLink FortiGate in HA Cluster
LAG support for FortiLink Connection
Active-Active Split LAG from FortiGate to FortiSwitches for Advanced Redundancy

FORTISWITCH FORTILINK MODE (WITH FORTIGATE)
Security and Visibility
802.1X Authentication (Port-based, MAC-based, MAB)
Syslog Collection
DHCP Snooping
Device Detection
MAC Black/White Listing (FortiGate)
Policy Control of Users and Devices (FortiGate)
Block Intra-VLAN Traffic
Network Device Detection
Host Quarantine on Switch Port
Integrated FortiGate Network Access Control (NAC) function
FortiGuard IoT identification
FortiSwitch recommendations in Security Rating
Switch Controller traffic collector
Port Statistics
Clients Monitoring
UTM Features
Firewall (FortiGate)
IPC, AV, Application Control, Botnet (FortiGate)



FEATURES

Refer to the FortiSwitch Feature Matrix for details about the features supported by each FortiSwitch model.

FORTISWITCH
Layer 2
Jumbo Frames
Auto-negotiation for Port Speed and Duplex
MDI/MDIX Auto-crossover
IEEE 802.1D MAC Bridging/STP
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
STP Root Guard
STP BPDU Guard
Edge Port / Port Fast
IEEE 802.1Q VLAN Tagging
Private VLAN
IEEE 802.3ad Link Aggregation with LACP
Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac)
IEEE 802.1AX Link Aggregation
Spanning Tree Instances (MSTP/CST)
IEEE 802.3x Flow Control and Back-pressure
IEEE 802.3 10Base-T
IEEE 802.3u 100Base-TX
IEEE 802.3z 1000Base-SX/LX
IEEE 802.3ab 1000Base-T
IEEE 802.3ae 10 Gigabit Ethernet
IEEE 802.3az Energy Efficient Ethernet
IEEE 802.3bz Multi Gigabit Ethernet
IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications
Storm Control
MAC, IP, Ethertype-based VLANs
Virtual-Wire
Split Port (QSFP+ breakout to 4×10G SFP+ or 4×1G SFP)
Time-Domain Reflectometry (TDR) Support
LAG min/max bundle
Rapid PVST interoperation
Ingress Pause Metering
Loop Guard
Per-port storm control
Priority-based Flow Control (802.1Qbb)
IEEE 802.1ad QinQ
VLAN Mapping
IEEE 802.3ba, 802.3bj, and 802.3bm 40 and 100 Gigabit Ethernet
Auto topology
Dynamically shared packet buffers
Services
IGMP proxy / querier
MLD Snooping
MLD proxy / querier
IGMP Snooping

FORTISWITCH
Layer 3
Static Routing (Hardware-based)
Dynamic Routing Protocols: OSPFv2, RIPv2, VRRP, BGP, ISIS *
Multicast Protocols: PIM-SSM *
ECMP
Bidirectional Forwarding Detection (BFD)
DHCP Relay
IP conflict detection and notification
DHCP server
Unicast Reverse Path Forwarding - uRPF
IPv6 route filtering
Filtering routemaps based on routing protocol
Security and Visibility
Port Mirroring
Admin Authentication Via RFC 2865 RADIUS
IEEE 802.1X Authentication Port-based
IEEE 802.1X Authentication MAC-based
IEEE 802.1X Guest and Fallback VLAN
IEEE 802.1X MAC Access Bypass (MAB)
IEEE 802.1X Dynamic VLAN Assignment
Radius CoA (Change of Authority)
Radius Accounting
MAC-IP Binding
sFlow
ACL
IEEE 802.1ab Link Layer Discovery Protocol (LLDP)
IEEE 802.1ab LLDP-MED
IEEE 802.1ae MAC Security (MAC Sec)
DHCP-Snooping
Dynamic ARP Inspection
Sticky MAC and MAC Limit
IEEE 802.1X open auth
IEEE 802.1X EAP pass-through
Flow Export (NetFlow and IPFIX)
ACL Multistage
ACL Multiple Ingress
ACL Schedule
IP source guard
IPv6 RA Guard
LLDP-MED ELIN support
Per-port and per-VLAN MAC learning limit
Assign VLANs via Radius attributes (RFC 4675)
Wake on LAN

*Requires 'Advanced Features' License.



FEATURES

Refer to the FortiSwitch Feature Matrix for details about the features supported by each FortiSwitch model.

FORTISWITCH
High Availability
Multi-Chassis Link Aggregation (MCLAG)
Quality of Service
IEEE 802.1p Based Priority Queuing
IP TOS/DSCP Based Priority Queuing
IEEE 1588 PTP (Transparent Clock)
Explicit Congestion Notification
Egress priority tagging
Percentage Rate Control
Management
IPv4 and IPv6 Management
Telnet / SSH
HTTP / HTTPS
SNMP v1/v2c/v3
SNTP
Standard CLI and Web GUI Interface
Software download/upload: TFTP/FTP/GUI
Managed from FortiGate
Support for HTTP REST APIs for Configuration and Monitoring
Dual Firmware Support
RMON Group 1
Packet Capture
SPAN, RSPAN, and ERSPAN
Link Monitor
POE Control Modes
System Temperature and Alert
Syslog UDP/TCP
Provide warning if L2 table is getting full
Display Average Bandwidth and Allow Sorting on Physical Port / Interface Traffic
System alias command
SNMP v3 traps
Automation Stitches



FEATURES

ALL FORTISWITCH MODELS

RFC and MIB Support*

BFD

- RFC 5880: Bidirectional Forwarding Detection (BFD)
- RFC 5881: Bidirectional Forwarding Detection (BFD) for IPv4 and IPv6 (Single Hop)
- RFC 5882: Generic Application of Bidirectional Forwarding Detection (BFD)

BGP

- RFC 1771: A Border Gateway Protocol 4 (BGP-4)
- RFC 1965: Autonomous System Confederations for BGP
- RFC 1997: BGP Communities Attribute
- RFC 2545: Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing
- RFC 2796: BGP Route Reflection - An Alternative to Full Mesh IBGP
- RFC 2842: Capabilities Advertisement with BGP-4
- RFC 2858: Multiprotocol Extensions for BGP-4
- RFC 4271: BGP-4
- RFC 6286: Autonomous-System-Wide Unique BGP Identifier for BGP-4
- RFC 6608: Subcodes for BGP Finite State Machine Error
- RFC 6793: BGP Support for Four-Octet Autonomous System (AS) Number Space
- RFC 7606: Revised Error Handling for BGP UPDATE Messages
- RFC 7607: Codification of AS 0 Processing
- RFC 7705: Autonomous System Migration Mechanisms and Their Effects on the BGP AS_PATH Attribute
- RFC 8212: Default External BGP (EBGP) Route Propagation Behavior without Policies
- RFC 8654: Extended Message Support for BGP

DHCP

- RFC 2131: Dynamic Host Configuration Protocol
- RFC 3046: DHCP Relay Agent Information Option
- RFC 7513: Source Address Validation Improvement (SAVI) Solution for DHCP

IP/IPv4

- RFC 2697: A Single Rate Three Color Marker
- RFC 3168: The Addition of Explicit Congestion Notification (ECN) to IP
- RFC 5227: IPv4 Address Conflict Detection
- RFC 5517: Cisco Systems' Private VLANs: Scalable Security in a Multi-Client Environment
- RFC 7039: Source Address Validation Improvement (SAVI) Framework

IP Multicast

- RFC 2362: Protocol Independent Multicast-Sparse Mode (PIM-SM): Protocol Specification
- RFC 2710: Multicast Listener Discovery (MLD) for IPv6 (MLDv1)
- RFC 4541: Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches
- RFC 4605: Internet Group Management Protocol (IGMP)/Multicast Listener Discovery (MLD)-Based Multicast Forwarding ("IGMP/MLD Proxying")
- RFC 4607: Source-Specific Multicast for IP

IPv6

- RFC 2464: Transmission of IPv6 Packets over Ethernet Networks: Transmission of IPv6 Packets over Ethernet Networks
- RFC 2474: Definition of the Differentiated Services Field (DS Field) in the and IPv6 Headers (DSCP)
- RFC 2893: Transition Mechanisms for IPv6 Hosts and Routers
- RFC 4213: Basic Transition Mechanisms for IPv6 Hosts and Router
- RFC 4291: IP Version 6 Addressing Architecture
- RFC 4443: Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification
- RFC 4861: Neighbor Discovery for IP version 6 (IPv6)
- RFC 4862: IPv6 Stateless Address Auto configuration
- RFC 5095: Deprecation of Type 0 Routing Headers in IPv6
- RFC 6724: Default Address Selection for Internet Protocol version 6 (IPv6)
- RFC 7113: IPv6 RA Guard
- RFC 8200: Internet Protocol, Version 6 (IPv6) Specification
- RFC 8201: Path MTU Discovery for IP version 6

IS-IS

- RFC 1195: Use of OSI IS-IS for Routing in TCP/IP and Dual Environments
- RFC 5308: Routing IPv6 with IS-IS

MIB

- RFC 1213: MIB II parts that apply to FortiSwitch 100 units
- RFC 1354: IP Forwarding Table MIB
- RFC 1493: Bridge MIB
- RFC 1573: SNMP MIB II
- RFC 1643: Ethernet-like Interface MIB

* RFC and MIB supported by FortiSwitch Operating System. Check FortiSwitch Feature Matrix for model specific support.



FEATURES

ALL FORTISWITCH MODELS
RFC AND MIB Support*
MIB
RFC 1724: RIPv2-MIB
RFC 1850: OSPF Version 2 Management Information Base
RFC 2233: The Interfaces Group MIB using SMIv2
RFC 2618: Radius-Auth-Client-MIB
RFC 2620: Radius-Acc-Client-MIB
RFC 2665: Definitions of Managed Objects for the Ethernet-like Interface Types
RFC 2674: Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering and Virtual LAN extensions
RFC 2787: Definitions of Managed Objects for the Virtual Router Redundancy Protocol
RFC 2819: Remote Network Monitoring Management Information Base
RFC 2863: The Interfaces Group MIB
RFC 2932: IPv4 Multicast Routing MIB
RFC 2934: Protocol Independent Multicast MIB for IPv4
RFC 3289: Management Information Base for the Differentiated Services Architecture
RFC 3433: Entity Sensor Management Information Base
RFC 3621: Power Ethernet MIB
RFC 6933: Entity MIB (Version 4)
OSPF
RFC 1583: OSPF version 2
RFC 1765: OSPF Database Overflow
RFC 2328: OSPF version 2
RFC 2370: The OSPF Opaque LSA Option
RFC 2740: OSPF for IPv6
RFC 3101: The OSPF Not-So-Stubby Area (NSSA) Option
RFC 3137: OSPF Stub Router Advertisement
RFC 3623: OSPF Graceful Restart
RFC 5340: OSPF for IPv6 (OSPFv3)
RFC 5709: OSPFv2 HMAC-SHA Cryptographic Authentication
RFC 6549: OSPFv2 Multi-Instance Extensions
RFC 6845: OSPF Hybrid Broadcast and Point-to-Multipoint Interface Type
RFC 6860: Hiding Transit-Only Networks in OSPF
RFC 7474: Security Extension for OSPFv2 When Using Manual Key Management
RFC 7503: OSPF for IPv6
RFC 8042: CCITT Draft Recommendation T.4
RFC 8362: OSPFv3 Link State Advertisement (LSA) Extensibility
OTHER
RFC 2030: SNTP
RFC 3176: InMon Corporation's sFlow: A Method for Monitoring Traffic in Switched and Routed Networks
RFC 3768: VRRP
RFC 3954: Cisco Systems NetFlow Services Export Version 9
RFC 5101: Specification of the IP Flow Information Export (IPFIX) Protocol for the Exchange of Flow Information
RFC 5798: VRRPv3 (IPv4 and IPv6)
RADIUS
RFC 2865: Admin Authentication Using RADIUS
RFC 2866: RADIUS Accounting
RFC 4675: RADIUS Attributes for Virtual LAN and Priority Support
RFC 5176: Dynamic Authorization Extensions to Remote Authentication Dial In User Service (RADIUS)
RIP
RFC 1058: Routing Information Protocol
RFC 2080: RIPv2 for IPv6
RFC 2082: RIP-2 MD5 Authentication
RFC 2453: RIPv2
RFC 4822: RIPv2 Cryptographic Authentication
SNMP
RFC 1157: SNMPv1/v2c
RFC 2571: Architecture for Describing SNMP
RFC 2572: SNMP Message Processing and Dispatching
RFC 2573: SNMP Applications
RFC 2576: Coexistence between SNMP versions

* RFC and MIB supported by FortiSwitch Operating System. Check FortiSwitch Feature Matrix for model specific support.



SPECIFICATIONS



	FORTISWITCH 108E-POE	FORTISWITCH 108E-FPOE
Hardware Specifications		
Total Network Interfaces	8x GE RJ45 and 2x GE SFP	8x GE RJ45 and 2x GE SFP
Dedicated Management 10/100 Port	0	0
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	4 (802.3af/at)	8 (802.3af/at)
PoE Power Budget	65 W	130 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity (Duplex)	20 Gbps	20 Gbps
Packets Per Second (Duplex)	30 Mpps	30 Mpps
MAC Address Storage	8 K	8 K
Network Latency	4μs	4μs
VLANs Supported	4 K	4 K
Link Aggregation Group Size	8	8
Total Link Aggregation Groups	8	8
Packet Buffers	512 KB	512 KB
DRAM	256 MB DDR3	256 MB DDR3
FLASH	32 MB	32 MB
ACL	640	640
Spanning Tree Instances	16	16
Dimensions		
Height x Depth x Width (inches)	1.7 × 8.2 × 13	1.7 × 8.2 × 13
Height x Depth x Width (mm)	44 × 209 × 330	44 × 209 × 330
Weight	4.3 lbs (1.95 kg)	4.5 lbs (2.04 kg)
Environment		
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	AC Built in	AC Built in
Redundant Power	—	—
Power Consumption* (Average / Maximum)	70.19 W / 71.10 W	135.19 W / 136.10 W
Heat Dissipation	17.7 BTU/h	17.7 BTU/h
Operating Temperature	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)
Storage Temperature	–40°–158°F (–40°–70°C)	–40°–158°F (–40°–70°C)
Humidity	10%–90% non-condensing	10%–90% non-condensing
Air-Flow Direction	side-to-back	side-to-back
Noise Level	Fanless	Fanless
Certification and Compliance		
	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	
Warranty		
Fortinet Warranty	Limited lifetime** warranty on all models	

* PoE models power consumption is similar to non-PoE model if PoE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 108E-POE



FortiSwitch 108E-FPOE



SPECIFICATIONS



	FORTISWITCH 108F	FORTISWITCH 108F-POE	FORTISWITCH 108F-FPOE
Hardware Specifications			
Total Network Interfaces	7x GE RJ45, 1x GE/PoE-PD RJ45, and 2x GE SFP	8x GE RJ45 and 2x GE SFP	8x GE RJ45 and 2x GE SFP
Dedicated Management 10/100 Port	0	0	0
RJ-45 Serial Console Port	1	1	1
Form Factor	Desktop	Desktop / 19" rack bracket	Desktop / 19" rack bracket
Power over Ethernet (PoE) Ports	0	8 (802.3af/at)	8 (802.3af/at)
PoE Power Budget	0	65 W	130 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	20 Gbps	20 Gbps	20 Gbps
Packets Per Second (Duplex)	30 Mpps	30 Mpps	30 Mpps
MAC Address Storage	8 K	8 K	8 K
Network Latency	4 μs	4 μs	4 μs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	8	8	8
Packet Buffers	512 KB	512 KB	512 KB
DRAM	256 MB DDR3	256 MB DDR3	256 MB DDR3
FLASH	32 MB	32 MB	32 MB
ACL	768	768	768
Spanning Tree Instances	16	16	16
Dimensions			
Height x Depth x Width (inches)	1.18 × 4.72 × 7.09	1.73 × 8.23 × 9.85	1.73 × 8.23 × 9.85
Height x Depth x Width (mm)	30 × 120 × 180	44 × 209 × 250	44 × 209 × 250
Weight	1.36 lbs (0.62 kg)	3.75 lbs (1.70 kg)	4.05 lbs (1.84 kg)
Environment			
Power Required	100–240V AC, 50/60 Hz / PoE-PSE(af)	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	12V/1A DC power adapter included, PoE-PD Built in	AC built in	AC built in
Redundant Power	No	No	No
Power Consumption	6.2 W	74.4 W	139.2 W
Heat Dissipation	21.142 BTU/h	34.12 BTU/h	34.56 BTU/h
Operating Temperature	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)
Storage Temperature	-49°–158°F (-40°–70°C)	-40°–158°F (-40°–70°C)	-40°–158°F (-40°–70°C)
Humidity	5%–95% non-condensing	5%–95% non-condensing	5%–95% non-condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	Fanless	Fanless	Fanless
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty	Limited lifetime* warranty on all models		

* Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 108F



FortiSwitch 108F-FPOE



FortiSwitch 108F-POE



SPECIFICATIONS

			
	FORTISWITCH 124E	FORTISWITCH 124E-POE	FORTISWITCH 124E-FPOE
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 and 4x GE SFP	24x GE RJ45 and 4x GE SFP	24x GE RJ45 and 4x GE SFP
Dedicated Management 10/100 Port	0	0	0
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	0	12 (802.3af/at)	24 (802.3af/at)
PoE Power Budget	0	185 W	370 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	56 Gbps	56 Gbps	56 Gbps
Packets Per Second (Duplex)	83 Mpps	83 Mpps	83 Mpps
MAC Address Storage	8 K	8 K	8 K
Network Latency	4μs	4μs	4μs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	8	8	8
Packet Buffers	512 KB	512 KB	512 KB
DRAM	256 MB DDR3	256 MB DDR3	256 MB DDR3
FLASH	32 MB	32 MB	32 MB
ACL	640	640	640
Spanning Tree Instances	16	16	16
Dimensions			
Height x Depth x Width (inches)	1.7 × 8.2 × 13	1.7 × 12.2 × 17.3	1.7 × 12.2 × 17.3
Height x Depth x Width (mm)	44 × 209 × 330	44 × 309 × 440	44 × 309 × 440
Weight	4.7 lbs (2.13 kg)	11.1 lbs (5.03 kg)	11.2 lbs (5.03 kg)
Environment			
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	AC Built in	AC Built in	AC Built in
Redundant Power	—	—	—
Power Consumption* (Average / Maximum)	15.83 W / 17.79 W	202.78 W / 205.45 W	387.78 W / 390.45 W
Heat Dissipation	54 BTU/h	60.67 BTU/h	60.67 BTU/h
Operating Temperature	32°-113°F (0°-45°C)	32°-113°F (0°-45°C)	32°-113°F (0°-45°C)
Storage Temperature	-40°-158°F (-40°-70°C)	-40°-158°F (-40°-70°C)	-40°-158°F (-40°-70°C)
Humidity	10%–90% non-condensing	10%–90% non-condensing	10%–90% non-condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	Fanless	39.3 dBA	42.5 dBA
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty	Limited lifetime** warranty on all models		

* POE models power consumption is similar to non-POE model if POE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 124E



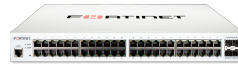
FortiSwitch 124E-FPOE



FortiSwitch 124E-POE



SPECIFICATIONS



	FORTISWITCH 148E	FORTISWITCH 148E-POE
Hardware Specifications		
Total Network Interfaces	48x GE RJ45 and 4x GE SFP	48x GE RJ45 and 4x GE SFP
Dedicated Management 10/100 Port	0	0
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	0	24 (802.3af/at)
PoE Power Budget	0	370 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity (Duplex)	104 Gbps	104 Gbps
Packets Per Second (Duplex)	155 Mpps	155 Mpps
MAC Address Storage	16 K	16 K
Network Latency	3860 ns	3860 ns
VLANs Supported	4 K	4 K
Link Aggregation Group Size	8	8
Total Link Aggregation Groups	16	16
Packet Buffers	1.5 MB	1.5 MB
DRAM	256 MB DDR3	256 MB DDR3
FLASH	64 MB	64 MB
ACL	640	640
Spanning Tree Instances	16	16
Dimensions		
Height x Depth x Width (inches)	1.73 × 12.2 × 17.3	1.73 × 13.7 × 17.3
Height x Depth x Width (mm)	44 × 309 × 440	44 × 348 × 440
Weight	8.6 lbs (3.9 kg)	11.5 lbs (5.2 kg)
Environment		
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	AC Built in	AC Built in
Redundant Power	No	No
Power Consumption* (Average / Maximum)	19.804 W / 22.137 W	389.742 W / 393.109 W
Heat Dissipation	67.574 BTU/h	78.82 BTU/h
Operating Temperature	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)
Storage Temperature	–4°–158°F (–20°–70°C)	–4°–158°F (–20°–70°C)
Humidity	10%–90% non-condensing	10%–90% non-condensing
Air-Flow Direction	side-to-back	side-to-back
Noise Level	36.9 dBA	38.7 dBA
Certification and Compliance		
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2		
Warranty		
Fortinet Warranty	Limited lifetime** warranty on all models	

* POE models power consumption is similar to non-POE model if POE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 148E



FortiSwitch 148E-POE



SPECIFICATIONS

			
	FORTISWITCH 124F	FORTISWITCH 124F-POE	FORTISWITCH 124F-FPOE
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 and 4x 10GE SFP+	24x GE RJ45 and 4x 10GE SFP+	24x GE RJ45 and 4x 10GE SFP+
Dedicated Management 10/100 Port	0	0	0
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	0	12 (802.3af/at)	24 (802.3af/at)
PoE Power Budget	0	185 W	370 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	128 Gbps	128 Gbps	128 Gbps
Packets Per Second (Duplex)	190 Mpps	190 Mpps	190 Mpps
MAC Address Storage	32 K	32 K	32 K
Network Latency	< 1μs	< 1μs	< 1μs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	16	16	16
Packet Buffers	2 MB	2 MB	2 MB
DRAM	512 MB DDR3	512 MB DDR3	512 MB DDR3
FLASH	64 MB	64 MB	64 MB
ACL	768	768	768
Spanning Tree Instances	16	16	16
Dimensions			
Height x Depth x Width (inches)	1.73 × 9.06 × 12.99	1.73 × 10.24 × 17.32	1.73 × 10.24 × 17.32
Height x Depth x Width (mm)	44 × 230 × 330	44 × 260 × 440	44 × 260 × 440
Weight	4.48 lbs (2.03 kg)	7.85 lbs (3.56 kg)	8.42 lbs (3.82 kg)
Environment			
Power Required	100–240V AC, 50-60 Hz	100–240V AC, 50-60 Hz	100–240V AC, 50-60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	No	No	No
Power Consumption* (Average / Maximum)	24.8 W / 26.3 W	235.9 W / 237.4 W	449.8 W / 451.3 W
Heat Dissipation	89.683 BTU/h	102.982 BTU/h	118.327 BTU/h
Operating Temperature	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)
Storage Temperature	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)
Humidity	10%–90% non-condensing	10%–90% non-condensing	10%–90% non-condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	Fanless	46.3 dBA	45.8 dBA
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty	Limited lifetime** warranty on all models		

* POE models power consumption is similar to non-POE model if POE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>

FortiSwitch 124F



FortiSwitch 124F-POE



FortiSwitch 124F-FPOE



SPECIFICATIONS

			
	FORTISWITCH 148F	FORTISWITCH 148F-POE	FORTISWITCH 148F-FPOE
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 and 4× 10GE SFP+	48x GE RJ45 and 4× 10GE SFP+	48x GE RJ45 and 4× 10GE SFP+
Dedicated Management 10/100 Port	0	0	0
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	0	24 (802.3af/at)	48 (802.3af/at)
PoE Power Budget	0	370 W	740 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	176 Gbps	176 Gbps	176 Gbps
Packets Per Second (Duplex)	260 Mpps	260 Mpps	260 Mpps
MAC Address Storage	32 K	32 K	32 K
Network Latency	< 1μs	< 1μs	< 1μs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	16	16	16
Packet Buffers	2 MB	2 MB	2 MB
DRAM	512 MB DDR3	512 MB DDR3	512 MB DDR3
FLASH	64 MB	64 MB	64 MB
ACL	768	768	768
Spanning Tree Instances	16	16	16
Dimensions			
Height x Depth x Width (inches)	1.73 × 10.24 × 17.32	1.73 × 12.20 × 17.32	1.73 × 12.20 × 17.32
Height x Depth x Width (mm)	44 × 260 × 440	44 × 310 × 440	44 × 310 × 440
Weight	7.63 lbs (3.46 kg)	10.32 lbs (4.68 kg)	10.32 lbs (4.68 kg)
Environment			
Power Required	100–240V AC, 50-60 Hz	100–240V AC, 50-60 Hz	100–240V AC, 50-60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	No	No	No
Power Consumption* (Average / Maximum)	55.8 W / 57 W	474.8 W / 476.3 W	893.5 W / 895.7 W
Heat Dissipation	194.37 BTU/h	195.73 BTU/h	198.46 BTU/h
Operating Temperature	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)
Storage Temperature	–4°–158°F (–20°–70°C)	–4°–158°F (–20°–70°C)	–4°–158°F (–20°–70°C)
Humidity	10%–90% non-condensing	10%–90% non-condensing	10%–90% non-condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	42.8 dBA	46.9 dBA	46.5 dBA
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty	Limited lifetime** warranty on all models		

* POE models power consumption is similar to non-POE model if POE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 148F



FortiSwitch 148F-POE



FortiSwitch 148F-FPOE



SPECIFICATIONS

			
	FORTISWITCH 224D-FPOE	FORTISWITCH 224E	FORTISWITCH 224E-POE
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 ports and 4x GE SFP ports	24x GE RJ45 ports and 4x GE SFP ports	24x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	24 (802.3af/802.3at)	NA	12 (802.3af/802.3at)
PoE Power Budget	370 W	NA	180 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	56 Gbps	56 Gbps	56 Gbps
Packets Per Second (Duplex)	83 Mpps	83 Mpps	83 Mpps
MAC Address Storage	16 K	16 K	16 K
Network Latency	< 1μs	< 1μs	< 1μs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	Up to number of ports	Up to number of ports	Up to number of ports
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	512 MB DDR3	512 MB DDR3	512 MB DDR3
FLASH	128 MB	128 MB	128 MB
ACL	512	512	512
Spanning Tree Instances	16	16	16
Route Entries (IPv4/IPv6)	64/32	64/32	64/32
Host Entries	1k	1k	1k
Dimensions			
Height x Depth x Width (inches)	1.73 × 12.2 × 17.5	1.73 × 9 × 12.99	1.73 × 9 × 12.99
Height x Depth x Width (mm)	44 × 310 × 440	44 × 230 × 330	44 × 230 × 330
Weight	10.64 lbs (4.83 kg)	4.78 lbs (2.17 kg)	5.37 lbs (2.44 kg)
Environment			
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	Optional FRPS-740	Redundant AC	Optional FRPS-740
Power Consumption* (Average / Maximum)	380 W / 397 W	17.2 W / 17.3 W	220.18 W / 223.57 W
Heat Dissipation	85 BTU/h	59.095 BTU/h	74.29554 BTU/h
Operating Temperature	32°–122°F (0°–50°C)	32°–122°F (0°–50°C)	32°–122°F (0°–50°C)
Storage Temperature	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)
Humidity	10%–90% non-condensing	10%–90% non-condensing	10%–90% non-condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	42.7 dBA	Fanless	30.6 dBA
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty	Limited lifetime** warranty on all models		

* POE models power consumption is similar to non-POE model if POE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



SPECIFICATIONS

	FORTISWITCH 248D	FORTISWITCH 248E-POE	FORTISWITCH 248E-FPOE
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 ports and 4x GE SFP ports	48x GE RJ45 ports and 4x GE SFP ports	48x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	—	24 (802.3af/802.3at)	48 (802.3af/802.3at)
PoE Power Budget	N/A	370 W	740 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	104 Gbps	104 Gbps	104 Gbps
Packets Per Second (Duplex)	155 Mpps	155 Mpps	155 Mpps
MAC Address Storage	16 K	16 K	16 K
Network Latency	< 1μs	< 1μs	< 1μs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	Up to number of ports	Up to number of ports	Up to number of ports
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	512 MB DDR3	512 MB DDR3	512 MB DDR3
FLASH	128 MB	128 MB	128 MB
ACL	512	512	512
Spanning Tree Instances	16	16	16
Route Entries (IPv4/IPv6)	64/32	64/32	64/32
Host Entries	1k	1k	1k
Dimensions			
Height x Depth x Width (inches)	1.73 × 9.68 × 17.3	1.73 × 16.1 × 17.3	1.73 × 16.1 × 17.3
Height x Depth x Width (mm)	44 × 246 × 440	44 × 410 × 440	44 × 410 × 440
Weight	7.81 lbs (3.54 kg)	12.12 lbs (5.5 kg)	13.44 lbs (6.1 kg)
Environment			
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	—	Optional FRPS-740	Optional FRPS-740
Power Consumption* (Average / Maximum)	38.66 W / 39.19 W	457.46 W / 466.47 W	842 W / 855.02 W
Heat Dissipation	134 BTU/h	17714268 BTU/h	162.87865 BTU/h
Operating Temperature	32°–122°F (0°–50°C)	32°–122°F (0°–50°C)	32°–122°F (0°–50°C)
Storage Temperature	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)
Humidity	10%–90% non-condensing	10%–90% non-condensing	10%–90% non-condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	32.3 dBA	34.2 dBA	44.7 dBA
Certification and Compliance			

FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2

Warranty			
Fortinet Warranty	Limited lifetime** warranty on all models		

* POE models power consumption is similar to non-POE model if POE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>

SPECIFICATIONS



	FORTISWITCH-424E-FIBER	FORTISWITCH-M426E-FPOE
Hardware Specifications		
Total Network Interfaces	24x GE SFP and 4x 10GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	16x GE RJ45, 8x 2.5 GE RJ45 ports, 2x 5 GE RJ45, and 4x 10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP
Dedicated Management 10/100 Port	1	1
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	N/A	24 (16x 802.3af/at, 8x 802.3af/at/bt Type 3 Class 6)
PoE Power Budget	N/A	420 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity (Duplex)	128 Gbps	172 Gbps
Packets Per Second (Duplex)	204 Mpps	255 Mpps
MAC Address Storage	32 K	16 K
Network Latency	< 1μs	< 1μs
VLANs Supported	4 K	4 K
Link Aggregation Group Size	8	8
Total Link Aggregation Groups	Up to number of ports	Up to number of ports
Packet Buffers	4 MB	2 MB
DRAM	1 GB DDR4	1 GB DDR4
FLASH	256 MB	256 MB
ACL	1.5k	1k
Spanning Tree Instances	16	16
Route Entries (IPv4/IPv6)	16k/8k	1000/500
Host Entries	16k	2k
Dimensions		
Height x Depth x Width (inches)	1.75 × 7.87 × 17.3	1.73 × 16.14 × 17.3
Height x Depth x Width (mm)	44 × 200 × 440	44 × 410 × 440
Weight	5.62 lbs (2.55 kg)	13.00 lbs (5.9 kg)
Environment		
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	AC built in	AC built in
Redundant Power	Redundant AC	Redundant AC
Power Consumption* (Average / Maximum)	36 W / 38 W	441 W / 442 W
Heat Dissipation	132.5 BTU/h	132.734 BTU/h
Operating Temperature	32°–113°F (0°–45°C)	32°–122°F (0°–50°C)
Storage Temperature	–4°–158°F (–20°–70°C)	–4°–158°F (–20°–70°C)
Humidity	5%–95% non-condensing	5%–95% non-condensing
Air-Flow Direction	side-to-back	side-to-back
Noise Level	32.8 dBA	35 dBA
Certification and Compliance		
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2		
Warranty		
Fortinet Warranty	Limited lifetime** warranty on all models	

* POE models power consumption is similar to non-POE model if POE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 424E-Fiber



FortiSwitch M426E-FPOE



SPECIFICATIONS

			
FORTISWITCH 424E		FORTISWITCH 424E-POE	
FORTISWITCH 424E-FPOE			
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP		24x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP
Dedicated Management 10/100 Port	1		1
RJ-45 Serial Console Port	1		1
Form Factor	1 RU Rack Mount		1 RU Rack Mount
Power over Ethernet (PoE) Ports	—		24 (802.3af/at)
PoE Power Budget	N/A		250 W
Mean Time Between Failures	> 10 years		> 10 years
System Specifications			
Switching Capacity (Duplex)	128 Gbps		128 Gbps
Packets Per Second (Duplex)	204 Mpps		204 Mpps
MAC Address Storage	16 K		16 K
Network Latency	< 1μs		< 1μs
VLANs Supported	4 K		4 K
Link Aggregation Group Size	8		8
Total Link Aggregation Groups	Up to number of ports		Up to number of ports
Packet Buffers	2 MB		2 MB
DRAM	1 GB DDR4		1 GB DDR4
FLASH	256 MB		256 MB
ACL	1k		1k
Spanning Tree Instances	16		16
Route Entries (IPv4/IPv6)	1000/500		1000/500
Host Entries	2k		2k
Dimensions			
Height x Depth x Width (inches)	1.75 × 10.23 × 17.3		1.75 × 16.14 × 17.3
Height x Depth x Width (mm)	44 × 260 × 440		44 × 410 × 440
Weight	6.83 lbs (3.1 kg)		11.57 lbs (5.25 kg)
12.72 lbs (5.77 kg)			
Environment			
Power Required	100–240V AC, 50/60 Hz		100–240V AC, 50/60 Hz
Power Supply	AC built in		AC built in
Redundant Power	Redundant AC		Redundant AC
Power Consumption* (Average / Maximum)	22.3 W / 23.6 W		281.3 W / 283.5 W
431.2 W / 433.7 W			
Heat Dissipation	76.04 BTU/h		102.64 BTU/h
117.2 BTU/h			
Operating Temperature	32°–113°F (0°–45°C)		32°–113°F (0°–45°C)
Storage Temperature	–40°–158°F (–40°–70°C)		–4°–158°F (–40°–70°C)
–40°–158°F (–40°–70°C)			
Humidity	5%–95% non-condensing		5%–95% non-condensing
Air-Flow Direction	side-to-back		side-to-back
Noise Level	32.3 dBA		31.8 dBA
30.9 dBA			
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty		Limited lifetime** warranty on all models	

* POE models power consumption is similar to non-POE model if POE is not in use

** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



SPECIFICATIONS



	FORTISWITCH 448E	FORTISWITCH 448E-POE	FORTISWITCH 448E-FPOE
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 and 4x 10GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	48x GE RJ45 and 4x 10GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	48x GE RJ45 and 4x 10GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	—	48 (802.3af/at)	48 (802.3af/at)
PoE Power Budget	—	421 W	772 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity (Duplex)	176 Gbps	176 Gbps	176 Gbps
Packets Per Second (Duplex)	262 Mpps	262 Mpps	262 Mpps
MAC Address Storage	32 K	32 K	32 K
Network Latency	<1μs	<1μs	<1μs
VLANs Supported	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	Up to number of ports	Up to number of ports	Up to number of ports
Packet Buffers	4 MB	4 MB	4 MB
DRAM	1GB DDR4	1GB DDR4	1GB DDR4
FLASH	256 MB	256 MB	256 MB
ACL	1.5k	1.5k	1.5k
Spanning Tree Instances	16	16	16
Route Entries (IPv4/IPv6)	16k/8k	16k/8k	16k/8k
Host Entries	16k	16k	16k
Dimensions			
Height x Depth x Width (inches)	1.75 × 12.2 × 17.3	1.73 × 16.1 × 17.3	1.73 × 16.1 × 17.3
Height x Depth x Width (mm)	44 × 310 × 440	44 × 410 × 440	44 × 410 × 440
Weight	9.17 lbs (4.16 kg)	13.8 lbs (6.26 kg)	14.04 lbs (6.37 kg)
Environment			
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	Redundant AC	Redundant AC	Redundant AC
Power Consumption* (Average / Maximum)	46.5 W / 47.81 W	440.12 W / 442.234 W	921.4 W / 923.6 W
Heat Dissipation	163.032 BTU/h	163.066 BTU/h	163.1 BTU/h
Operating Temperature	32°–122°F (0°–50°C)	32°–122°F (0°–50°C)	32°–122°F (0°–50°C)
Storage Temperature	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)
Humidity	10%–90% non condensing	10%–90% non condensing	10%–90% non condensing
Air-Flow Direction	side-to-back	side-to-back	side-to-back
Noise Level	35.5 dBA	38.3 dBA	50.7 dBA
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty		Limited lifetime** warranty on all models	

* POE models power consumption is similar to non-POE model if POE is not in use

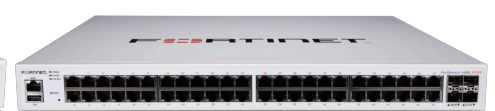
** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 448E



FortiSwitch 448E-POE



FortiSwitch 448E-FPOE



SPECIFICATIONS

	FORTISWITCH 524D	FORTISWITCH 524D-FPOE
Hardware Specifications		
Total Network Interfaces	24 GE/RJ45 ports, 4× 10 GE SFP+ ports and 2× 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	24 GE/RJ45 ports, 4× 10 GE SFP+ ports and 2× 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP
Dedicated Management 10/100/1000 Ports	1	1
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	N/A	24 (802.3af/at)
PoE Power Budget (single/dual PSU)	N/A	400 W / 720 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity (Duplex)	288 Gbps	288 Gbps
Packets Per Second (Duplex)	428 Mpps	428 Mpps
MAC Address Storage	96 K	96 K
Network Latency	< 2μs	< 2μs
VLANs Supported	4 K	4 K
Link Aggregation Group Size	24	24
Total Link Aggregation Groups	Up to number of ports	Up to number of ports
Packet Buffers	4 MB	4 MB
DRAM	2 GB DDR3	2 GB DDR3
FLASH	128 MB	128 MB
ACL	1k	1k
Spanning Tree Instances	32	32
Route Entries (IPv4/IPv6)	16k/8k	16k/8k
Multicast Route Entries	8k	8k
Host Entries	24k	24k
Dimensions		
Height x Depth x Width (inches)	1.75 × 13.8 × 17.3	1.75 × 13.8 × 17.3
Height x Depth x Width (mm)	44 × 350 × 439	44 × 350 × 439
Weight	13.6 lbs (6.2 kg)	15.74 lbs (7.14 kg)
Environment		
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	150 W AC PSU*	600 W AC PSU*
Redundant Power	Optional FS-PSU-150*	Optional FS-PSU-600*
Power Consumption** (Average / Maximum)	73 W / 75 W	570 W / 579 W (full PoE load for single power supply)
Heat Dissipation	247 BTU/h	296 BTU/h (full PoE load for single power supply)
Operating Temperature	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)
Storage Temperature	–40°–158°F (–40°–70°C)	–40°–158°F (–40°–70°C)
Humidity	5%–95% non-condensing	5%–95% non-condensing
Air-Flow Direction	front-to-back	front-to-back
Noise Level	57.3 dBA	57.3 dBA
Certification and Compliance		
	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2
Warranty		
Fortinet Warranty	Limited lifetime*** warranty on all models	Limited lifetime*** warranty on all models

*FS-524D, FS-524D-FPOE, FS-548D, FS-548D-FPOE Power Supply Units are Hot-Swappable. ** POE models power consumption is similar to non-POE model if POE is not in use

*** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 524D



FortiSwitch 524D-FPOE



SPECIFICATIONS



	FORTISWITCH 548D	FORTISWITCH 548D-FPOE
Hardware Specifications		
Total Network Interfaces	48x GE/RJ45 ports, 4× 10 GE SFP+ ports and 2× 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	48x GE/RJ45 ports, 4× 10 GE SFP+ ports and 2× 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP
Dedicated Management 10/100/1000 Ports	1	1
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	N/A	48 (802.3af/at)
PoE Power Budget (single/dual PSU)	N/A	750 W / 1440 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity (Duplex)	336 Gbps	336 Gbps
Packets Per Second (Duplex)	512 Mpps	512 Mpps
MAC Address Storage	96 K	96 K
Network Latency	< 2μs	< 2μs
VLANs Supported	4 K	4 K
Link Aggregation Group Size	48	48
Total Link Aggregation Groups	Up to number of ports	Up to number of ports
Packet Buffers	4 MB	4 MB
DRAM	2 GB DDR3	2 GB DDR3
FLASH	128 MB	128 MB
ACL	1k	1k
Spanning Tree Instances	32	32
Route Entries (IPv4/IPv6)	16k/8k	16k/8k
Multicast Route Entries	8k	8k
Host Entries	24k	24k
Dimensions		
Height x Depth x Width (inches)	1.75 × 13.8 × 17.3	1.75 × 13.8 × 17.3
Height x Depth x Width (mm)	44 × 350 × 439	44 × 350 × 439
Weight	14.1 lbs (6.4 kg)	15.74 lbs (7.14 kg)
Environment		
Power Required	100–240V AC, 50/60 Hz	100–240V AC, 50/60 Hz
Power Supply	150 W AC PSU*	920 W AC PSU*
Redundant Power	Optional FS-PSU-150*	Optional FS-PSU-920*
Power Consumption** (Average / Maximum)	74 W / 77 W	925 W / 961 W (full PoE load for single power supply)
Heat Dissipation	252 BTU/h	318 BTU/h (full PoE load for single power supply)
Operating Temperature	32°–113°F (0°–45°C)	32°–113°F (0°–45°C)
Storage Temperature	–40°–158°F (–40°–70°C)	–40°–158°F (–40°–70°C)
Humidity	5%–95% non-condensing	5%–95% non-condensing
Air-Flow Direction	front-to-back	front-to-back
Noise Level	57.3 dBA	57.3 dBA
Certification and Compliance		
	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2	FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2
Warranty		
Fortinet Warranty	Limited lifetime*** warranty on all models	Limited lifetime*** warranty on all models

*FS-524D, FS-524D-FPOE, FS-548D, FS-548D-FPOE Power Supply Units are Hot-Swappable. ** POE models power consumption is similar to non-POE model if POE is not in use

*** Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 548D



FortiSwitch 548D-FPOE



ORDER INFORMATION

PRODUCT	SKU	DESCRIPTION
FortiSwitch Models		
FortiSwitch 108E-POE	FS-108E-POE	Layer 2 FortiGate switch controller compatible PoE+ switch with 8 GE RJ45 + 2 SFP ports, 4 port PoE with maximum 65 W PoE limit. Fanless.
FortiSwitch 108E-FPOE	FS-108E-FPOE	Layer 2 FortiGate switch controller compatible PoE+ switch with 8 GE RJ45 + 2 SFP ports, 8 port PoE with maximum 130 W PoE limit. Fanless.
FortiSwitch 108F	FS-108F	Layer 2 FortiGate switch controller compatible switch with 8 x GE RJ45 ports, 2 x GE SFP, Fanless, 12V/3A power adapter of input voltage 100 – 240VAC, and PSE dual powered.
FortiSwitch 108F-POE	FS-108F-POE	Layer 2 FortiGate switch controller compatible PoE+ switch with 8 x GE RJ45 ports, 2 x GE SFP, Fanless with automatic Max 65W POE output limit.
FortiSwitch 108F-FPOE	FS-108F-FPOE	Layer 2 FortiGate switch controller compatible PoE+ switch with 8 x GE RJ45 ports, 2 x GE SFP, Fanless with automatic Max 130W POE output limit.
FortiSwitch 124E	FS-124E	Layer 2 FortiGate switch controller compatible switch with 24 GE RJ45 + 4 SFP ports. Fanless.
FortiSwitch 124E-POE	FS-124E-POE	Layer 2 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 12 port PoE with maximum 185 W limit.
FortiSwitch 124E-F-POE	FS-124E-FPOE	Layer 2 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 148E	FS-148E	Layer 2 FortiGate switch controller compatible switch with 48 GE RJ45 + 4 SFP ports.
FortiSwitch 148E-POE	FS-148E-POE	Layer 2 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 124F	FS-124F	Layer 2 FortiGate switch controller compatible switch with 24 GE RJ45 + 4 10G SFP+ ports. Fanless.
FortiSwitch 124F-POE	FS-124F-POE	Layer 2 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 10G SFP+ ports, 12 port PoE with maximum 185 W limit.
FortiSwitch 124F-FPOE	FS-124F-FPOE	Layer 2 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 10G SFP+ ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 148F	FS-148F	Layer 2 FortiGate switch controller compatible switch with 48 GE RJ45 + 4 10G SFP+ ports.
FortiSwitch 148F-POE	FS-148F-POE	Layer 2 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4 10G SFP+ ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 148F-FPOE	FS-148F-FPOE	Layer 2 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4 10G SFP+ ports, 48 port PoE with maximum 740 W limit.
FortiSwitch 224D-FPOE	FS-224D-FPOE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 224E	FS-224E	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45 + 4 SFP ports. Fanless.
FortiSwitch 224E-POE	FS-224E-POE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45 + 4 SFP ports, 12 port PoE with maximum 180 W limit.
FortiSwitch 248D	FS-248D	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45 + 4 SFP ports.
FortiSwitch 248E-POE	FS-248E-POE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4 SFP ports, 24 port PoE with maximum 370 W limit.
FortiSwitch 248E-FPOE	FS-248E-FPOE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45 + 4 SFP ports, 48 port PoE with maximum 740 W limit.
FortiSwitch 424E-Fiber	FS-424E-Fiber	Layer 2/3 FortiGate switch controller compatible switch with 24x GE SFP and 4x 10 GE SFP+ Uplinks
FortiSwitch M426E-FPOE	FS-M426E-FPOE	Layer 2/3 FortiGate switch controller compatible PoE+/802.3bt Type 3 switch with 16x GE RJ45, 8x 2.5 RJ45, 2x 5 GE RJ45 and 4x 10 GE SFP+, 24 port PoE+ with maximum 420 W limit.
FortiSwitch 424E	FS-424E	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45, 4x 10 GE SFP + ports.
FortiSwitch 424E-POE	FS-424E-POE	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45, 4x 10 GE SFP + ports, 24 port PoE+ with maximum 283.5 W limit.
FortiSwitch 424E-FPOE	FS-424E-FPOE	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45, 4x 10 GE SFP + ports, 24 port PoE+ with maximum 433.7 W limit.
FortiSwitch 448E	FS-448E	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4x 10 GE SFP + ports.
FortiSwitch 448E-POE	FS-448E-POE	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4x 10 GE SFP + ports, 48 port PoE+ with maximum 421 W limit.
FortiSwitch 448E-FPOE	FS-448E-FPOE	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4x 10 GE SFP + ports, 48 port PoE+ with maximum 772 W limit.
FortiSwitch 524D	FS-524D	Layer 2/3 FortiGate switch controller compatible switch with 24 GE RJ45, 4x 10 GE SFP+ and 2x 40 GE QSFP+ ports.
FortiSwitch 524D-FPOE	FS-524D-FPOE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 24 GE RJ45, 4x 10 GE SFP+, 2x 40 GE QSFP+ ports, 24 port PoE with maximum 400 W limit.
FortiSwitch 548D	FS-548D	Layer 2/3 FortiGate switch controller compatible switch with 48 GE RJ45, 4x 10 GE SFP+ and 2x 40 GE QSFP+ ports.
FortiSwitch 548D-FPOE	FS-548D-FPOE	Layer 2/3 FortiGate switch controller compatible PoE+ switch with 48 GE RJ45, 4x 10 GE SFP+ and 2x 40 GE QSFP+ ports, 48 port PoE with maximum 750 W limit.



ORDER INFORMATION

PRODUCT	SKU	DESCRIPTION
Licenses		
FortiLAN Cloud Management License*	FC-10-FSW00-628-02-DD	FortiSwitch 100 Series (none-Rugged) FortiLAN Cloud Management SKU Including Forticare 24×7. (Note, FortiCare only applicable when used with FortiLAN Cloud)
	FC-10-FSW10-628-02-DD	FortiSwitch 200-400 Series (incl all FSW Rugged Models) FortiLAN Cloud Management SKU Including Forticare 24×7. (Note, FortiCare only applicable when used with FortiLAN Cloud)
	FC-10-FSW20-628-02-DD	FortiSwitch 500-900 Series FortiLAN Cloud Management SKU Including Forticare 24×7. (Note, FortiCare only applicable when used with FortiLAN Cloud)
FortiSwitch Manager Subscription License	FC1-10-SWMVM-258-01-DD	Subscription license for 10 FortiSwitch Units managed by FortiSwitchManager VM. 24×7 FortiCare support (for FSWM VM) included.
	FC2-10-SWMVM-258-01-DD	Subscription license for 100 FortiSwitch Units managed by FortiSwitchManager VM. 24×7 FortiCare support (for FSWM VM) included.
	FC3-10-SWMVM-258-01-DD	Subscription license for 1000 FortiSwitch Units managed by FortiSwitchManager VM. 24×7 FortiCare support (for FSWM VM) included.
FortiSwitch Advanced Features License	FS-SW-LIC-200	SW License for FS-200 Series Switches to activate Advanced Features.
	FS-SW-LIC-400	SW License for FS-400 Series Switches to activate Advanced Features.
	FS-SW-LIC-500	SW License for FS-500 Series Switches to activate Advanced Features.
Accessories		
External Redundant AC Power Supply	FRPS-740	Redundant AC power supply for up to 2 units: FS-224D-FPOE, FS-224E-POE, FS-248E-POE, FS-248E-FPOE.
Redundant AC Power Supply	FS-PSU-150	AC power supply for FS-548D and FS-524D.
	FS-PSU-600	AC power supply for FS-524D-FPOE.**
	FS-PSU-920	AC power supply for FS-548D-FPOE.**

* When managing a FortiSwitch with a FortiGate via FortiGate Cloud, no additional license is necessary.
** Provides additional PoE capacity.

For details of Transceiver modules, see the [Fortinet Transceivers datasheet](#). Note that all PoE FortiSwitches are Alternative-A.

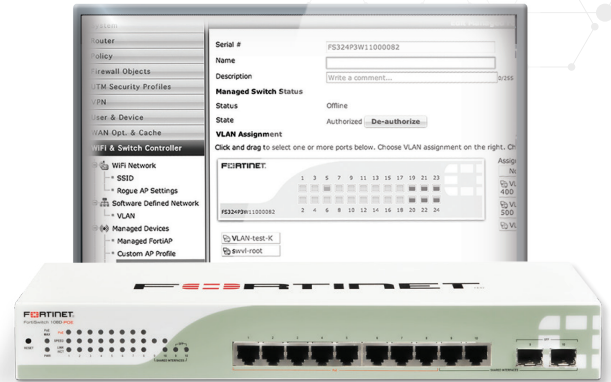


Copyright © 2022 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiCare® and FortiGuard®, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet's General Counsel, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's internal lab tests. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.

Fortinet is committed to driving progress and sustainability for all through cybersecurity, with respect for human rights and ethical business practices, making possible a digital world you can always trust. You represent and warrant to Fortinet that you will not use Fortinet's products and services to engage in, or support in any way, violations or abuses of human rights, including those involving illegal censorship, surveillance, detention, or excessive use of force. Users of Fortinet products are required to comply with the Fortinet EULA (<https://www.fortinet.com/content/dam/fortinet/assets/legal/EULA.pdf>) and report any suspected violations of the EULA via the procedures outlined in the Fortinet Whistleblower Policy (https://secure.ethicspoint.com/domain/media/en/gui/19775/Whistleblower_Policy.pdf).

FortiSwitch™ Secure Access Series

FortiSwitch Secure Access switches deliver a Secure, Simple, Scalable Ethernet solution with outstanding security, performance and manageability for threat conscious small to mid-sized businesses, distributed enterprises and branch offices. Tightly integrated into the FortiGate® Network Security Platform, the FortiSwitch Secure Access switches can be managed directly from the familiar FortiGate interface. This single pane of glass management provides complete visibility and control of all users and devices on the network, regardless of how they connect.

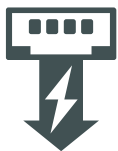


Security Fabric Integration

Reduces complexity and decreases management cost with network security functions managed through a single console via FortiGate.

This integration allows all users to be authenticated against the same user database, regardless of whether they connect to the wired or wireless network, including temporary guest users.

In addition, same security policy can apply to a user or device regardless of how or where they connect to the network.



Simplify Network Deployment

The Power over Ethernet (PoE) capability in some models, enables simple installation of wireless Access Points and IP phones in the network.

Product Offerings

FS-108D-POE, 124D, 124D-POE, 224D-POE, 224D-FPOE, 248D, 248D-POE, 248D-FPOE, 224E, 224E-POE, 248E-POE, 248E-FPOE, 424D, 424D-POE, 424D-FPOE, 448D, 448D-POE, 448D-FPOE, 524D, 524D-FPOE, 548D and 548D-FPOE



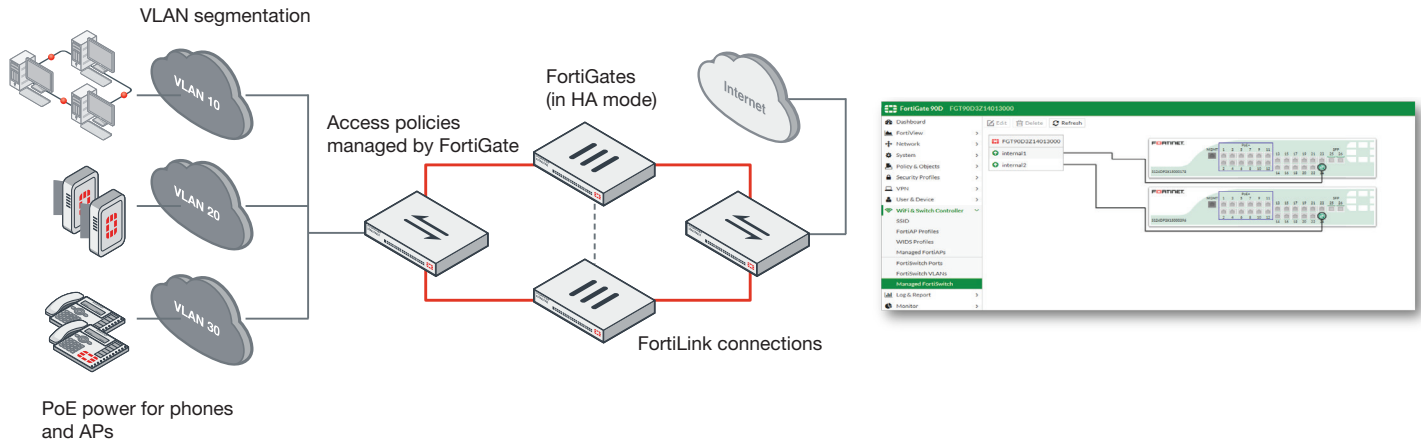
Highlights

- Secure Access switches suitable for wire closet and desktop installations
- Devices are identified and users authenticated prior to being granted access to the network
- Centralized security management and reporting from FortiGate interface
- Up to 48 ports in a compact 1 RU form factor
- Stackable up to 256 switches per FortiGate depending on model
- Power over Ethernet capable, including PoE+
- Ideal for converged network environments; enabling voice, data and wireless traffic to be delivered across a single network

DEPLOYMENT

FortiLink Mode

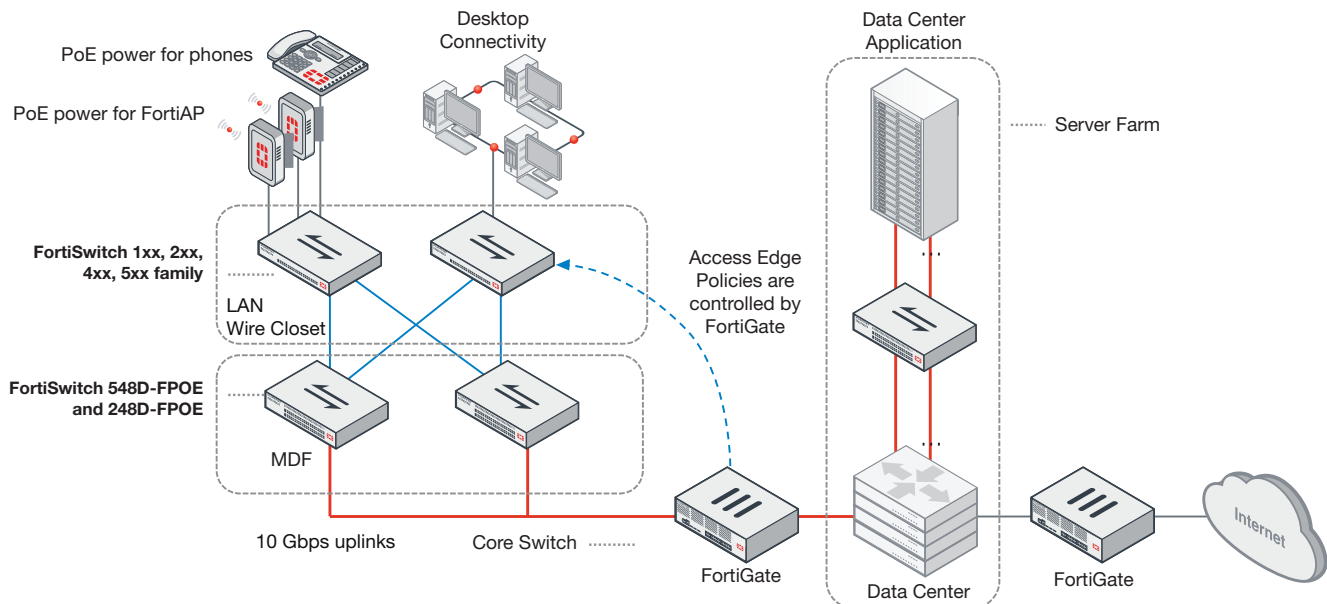
The FortiSwitch Secure Access Switch series integrates directly into the FortiGate* Connected UTM, with switch administration and access port security managed from the familiar FortiGate interface. Regardless of how users and devices connect to the network, you have complete visibility and control over your network security and access through this single pane of glass, perfectly suited to threatconscious organizations of any size.



* Selected models only

Standalone Mode

Virtualization and cloud computing have created dense high-bandwidth Ethernet networking requirements in the data center, pushing the limits of existing data center switching. FortiSwitch Data Center switches meet these challenges by providing a high performance 10 or 40 GE capable switching platform, with a low Total Cost of Ownership. Ideal for Top of Rack server or firewall aggregation applications, as well as enterprise network core or distribution deployments, these switches are purpose-built to meet the needs of today's bandwidth intensive environments.



FEATURES

FORTISWITCH FORTILINK MODE (WITH FORTIGATE)	
Management and Configuration	
Auto Discovery of Multiple Switches	Yes
Number of Managed Switches per FortiGate	8 to 256 Depending on FortiGate Model (Please refer to admin-guide)
FortiLink Stacking (Auto Inter-Switch Links)	Yes
Software Upgrade of Switches	Yes
Centralized VLAN Configuration	Yes
Switch POE Control	Yes
Link Aggregation Configuration	Yes
Spanning Tree	Yes
LLDP/MED	Yes
IGMP Snooping	Yes
L3 Routing and Services	Yes (FortiGate)
Policy-Based Routing	Yes (FortiGate)
Virtual Domain	Yes (FortiGate)
Security and Visibility	
802.1x Authentication (Port-based, MAC-based, MAB)	Yes
Syslog Collection	Yes
DHCP Snooping	Yes
Device Detection	Yes
MAC Black/White Listing	Yes (FortiGate)
Policy Control of Users and Devices	Yes (FortiGate)
UTM Features	
Firewall	Yes (FortiGate)
IPC, AV, Application Control, Botnet	Yes (FortiGate)
High Availability	
Support FortiLink FortiGate in HA Cluster	Yes
LAG support for FortiLink Connection	Yes
Active-Active Split LAG from FortiGate to FortiSwitches for Advanced Redundancy	Yes (with FS-2xx, 4xx, 5xx)
FORTISWITCH STANDALONE MODE	
Layer 2	
Jumbo Frames	Yes
Auto-negotiation for port speed and duplex	Yes
IEEE 802.1D MAC Bridging/STP	Yes
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)	Yes
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)	Yes
STP Root Guard	Yes
Edge Port / Port Fast	Yes
IEEE 802.1Q VLAN Tagging	Yes
Private VLAN	Yes (except FS-108D-POE, FS-224D-POE)
IEEE 802.3ad Link Aggregation with LACP	Yes
Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac)	Yes
IEEE 802.1AX Link Aggregation	Yes
Spanning Tree Instances (MSTP/CST)	15/1
IEEE 802.3x Flow Control and back-pressure	Yes
IEEE 802.3 10Base-T	Yes
IEEE 802.3u 100Base-TX	Yes
IEEE 802.3z 1000Base-SX/LX	Yes
IEEE 802.3ab 1000Base-T	Yes
IEEE 802.3ae 10 Gigabit Ethernet	4xx and 5xx Family
IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications	Yes
Storm Control	Yes (except FS-108D-POE, FS-224D-POE)
MAC, IP, EtherType-based VLANs	Yes
Virtual-Wire	Yes
Split Port (QSFP+ breakout to 4xSFP+)	FS-5xx Family
Time-Domain Reflectometry (TDR) Support	Yes (except FS-108D-POE, FS-224D-POE)

FEATURES

FORTISWITCH STANDALONE MODE	
Layer 3*	
Static Routing (Hardware-based)	Yes
Routing Entries	64 on FS-2xx, 4xx Family; 16K on FS-5xx Family
Host Entries	4K on FS-2xx, 4xx Family; 24K on FS-5xx Family
Dynamic Routing Protocols**	OSPFv2, RIPv2, VRRP
ECMP	FS-5xx Family
Bidirectional Forwarding Detection (BFD)	Yes
DHCP Relay	Yes
Services	
IGMP Snooping	Yes (except FS-108D-POE, FS-224D-POE)
Security and Visibility	
Port Mirroring	Yes
Admin Authentication Via RFC 2865 RADIUS	Yes
IEEE 802.1x authentication Port-based	Yes
IEEE 802.1x Authentication MAC-based	Yes
IEEE 802.1x Guest and Fallback VLAN	Yes
IEEE 802.1x MAC Access Bypass (MAB)	Yes
IEEE 802.1x Dynamic VLAN Assignment	Yes
MAC-IP Binding	Yes
sFlow	Yes
ACL	1K entries on FS-5xx Family; 512 on FS-1xx, 2xx, 4xx Families; Not supported on FS-108D-POE, FS-224D-POE
IEEE 802.1ab Link Layer Discovery Protocol (LLDP)	Yes
IEEE 802.1ab LLDP-MED	Yes
DHCP-Snooping	Yes
Dynamic ARP Inspection	Yes
Sticky MAC and MAC Limit	Yes
High Availability	
Multi-Chassis Link Aggregation (MCLAG)	Yes (2xx, 4xx and 5xx)
Quality of Service	
IEEE 802.1p Based Priority Queuing	Yes (2xx, 4xx and 5xx)
IP TOS/DSCP Based Priority Queuing	Yes (2xx, 4xx and 5xx)
Management	
Telnet / SSH	Yes
HTTP / HTTPS	Yes
SNMP v1/v2c/v3	Yes
SNTP	Yes
Standard CLI and Web GUI Interface	Yes
Software download/upload: TFTP/FTP/GUI	Yes
Managed from FortiGate	Yes
Support for HTTP REST APIs for Configuration and Monitoring	Yes
Additional RFC and MIB Support	
RFC 2571 Architecture for Describing SNMP Framework	Yes
DHCP Client	Yes
RFC 854 Telnet Server	Yes
RFC 2865 RADIUS	Yes
RFC 1643 Ethernet-like Interface MIB	Yes
RFC 1213 MIB-II	Yes
RFC 1354 IP Forwarding Table MIB	Yes
RFC 2572 SNMP Message Processing and Dispatching	Yes
RFC 1573 SNMP MIB II	Yes
RFC 1157 SNMPv1/v2c	Yes
RFC 2030 SNTP	Yes

* Supported on 2xx, 4xx and 5xx. ** Requires 'Advanced Features' License.

SPECIFICATIONS

	FORTISWITCH 108D-POE	FORTISWITCH 124D	FORTISWITCH 124D-POE
Hardware Specifications			
Total Network Interfaces	8x GE RJ45 ports and 2x GE RJ45/SFP combo ports	24x GE/RJ45 ports and 2x GE SFP ports	24x GE/RJ45 ports and 2x GE SFP ports
Dedicated Management 10/100 Port	0	0	1
RJ-45 Serial Console Port	0	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount Appliance	1 RU Rack Mount Appliance
Power over Ethernet (PoE) Ports	8 (802.3af)	0	12 (802.3af/802.3at)
PoE Power Budget	75 W	0	100 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	20 Gbps	52 Gbps	52 Gbps
Packets Per Second	40 Mpps	77 Mpps	77 Mpps
MAC Address Storage	16K	8K	16K
Network Latency	< 2μs	< 1μs	< 1μs
VLANs Supported	4K	4K	4K
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	4	13	13
Packet Buffers	1 MB	1.5 MB	1.5 MB
DRAM	256 MB	512 MB	512 MB
FLASH	32 MB	64 MB	64 MB
Dimensions			
Height x Depth x Width (inches)	1.7 x 7.9 x 13	1.73 x 5.51 x 17.32	1.73 x 9 x 12.99
Height x Depth x Width (mm)	44 x 200 x 330	44 x 140 x 440	44 x 230 x 330
Weight	4.19 lbs (1.9 kg)	3.74 lbs (1.7 kg)	5.4 lbs (2.4 kg)
Environment			
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	—	—	Optional FRPS-740
Power Consumption (Average / Maximum)	52.8 W / 95.1 W	14 W / 19 W	116 W / 116 W
Heat Dissipation	47.5 BTU/h	64.81 BTU/h	77 BTU/h
Operating Temperature	32–113°F (0–45°C)	32–122°F (0–50°C)	32–122°F (0–50°C)
Storage Temperature	-13–158°F (-25–70°C)	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)
Humidity	5–90% non-condensing	10–90% non-condensing	10–90% non-condensing
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty		Limited lifetime* warranty on all models	

* Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 108D-POE



FortiSwitch 124D

SPECIFICATIONS

	FORTISWITCH 224D-POE	FORTISWITCH 224D-FPOE
Hardware Specifications		
Total Network Interfaces	20x GE RJ45 ports and 4x GE RJ45/SFP combo ports	24x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	0	1
RJ-45 Serial Console Port	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	12 (802.3af)	24 (802.3af/802.3at)
PoE Power Budget	180 W (802.11af)	370 W
Mean Time Between Failures	> 10 years	> 10 years
System Specifications		
Switching Capacity	48 Gbps	56 Gbps
Packets Per Second	71 Mpps	83 Mpps
MAC Address Storage	16K	16K
Network Latency	< 2µs	< 1µs
VLANs Supported	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	NA	Yes
Link Aggregation Group Size	8	8
Total Link Aggregation Groups	12	14
Packet Buffers	1 MB	1.5 MB
DRAM	512 MB	512 MB
FLASH	128 MB	128 MB
Dimensions		
Height x Depth x Width (inches)	1.73 x 10.12 x 17.32	1.73 x 12.2 x 17.5
Height x Depth x Width (mm)	44 x 310 x 440	44 x 310 x 440
Weight	8.49 lbs (3.85 kg)	10.64 lbs (4.83 kg)
Environment		
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Power Supply	AC built in	AC built in
Redundant Power	—	Optional FRPS-740
Power Consumption (Average / Maximum)	190 W / 225 W	380 W / 397 W
Heat Dissipation	83.5 BTU/h	85 BTU/h
Operating Temperature	32–104°F (0–40°C)	32–122°F (0–50°C)
Storage Temperature	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)
Humidity	10–90% non-condensing	10–90% non-condensing
Certification and Compliance		
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2		
Warranty		
Fortinet Warranty	Limited lifetime* warranty on all models	

* Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 224D-POE



FortiSwitch 224D-FPOE

SPECIFICATIONS

	FORTISWITCH 248D	FORTISWITCH 248D-POE	FORTISWITCH 248D-FPOE
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 ports and 4x GE SFP ports	48x GE RJ45 ports and 2x GE SFP ports	48x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	—	24 (802.3af)	48 (802.3af/802.3at)
PoE Power Budget	N/A	370 W	370 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	104 Gbps	104 Gbps	104 Gbps
Packets Per Second	155 Mpps	155 Mpps	155 Mpps
MAC Address Storage	16K	16K	16K
Network Latency	< 1µs	< 1µs	< 1µs
VLANs Supported	4K	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	Yes	Yes	Yes
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	26	26	26
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	512 MB	512 MB	512 MB
FLASH	128 MB	128 MB	128 MB
Dimensions			
Height x Depth x Width (inches)	1.73 x 9.68 x 17.3	1.73 x 16.93 x 17.32	1.73 x 16.1 x 17.3
Height x Depth x Width (mm)	44 x 246 x 440	44 x 430 x 440	44 x 410 x 440
Weight	7.81 lbs (3.54 kg)	13.67 lbs (6.20 kg)	15.4 lbs (7.01 kg)
Environment			
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	—	—	Optional FRPS-740
Power Consumption (Average / Maximum)	38.66 W / 39.19 W	476 W / 476 W	410 W / 411 W
Heat Dissipation	134 BTU/h	180 BTU/h	188 BTU/h
Operating Temperature	32–122°F (0–50°C)	32–122°F (0–50°C)	32–122°F (0–50°C)
Storage Temperature	–4–158°F (–20–70°C)	–4–158°F (–20–70°C)	–4–158°F (–20–70°C)
Humidity	10–90% non-condensing	10–90% non-condensing	10–90% non-condensing
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty		Limited lifetime* warranty on all models	

* Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 248D



FortiSwitch 248D-POE



FortiSwitch 248D-FPOE

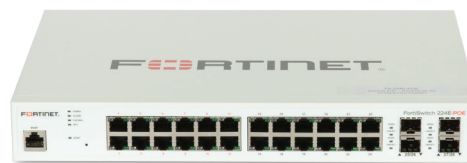
SPECIFICATIONS

	FORTISWITCH 224E	FORTISWITCH 224E-POE	FORTISWITCH 248E-POE	FORTISWITCH 248E-FPOE
Hardware Specifications				
Total Network Interfaces	24x GE RJ45 ports and 4x GE SFP ports	24x GE RJ45 ports and 4x GE SFP ports	48x GE RJ45 ports and 4x GE SFP ports	48x GE RJ45 ports and 4x GE SFP ports
Dedicated Management 10/100 Port	1	1	1	1
RJ-45 Serial Console Port	1	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	NA	12 (802.3af/802.3at)	24 (802.3af/802.3at)	48 (802.3af/802.3at)
PoE Power Budget	NA	180 W	370 W	740 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years	> 10 years
System Specifications				
Switch Type	Web and CLI Managed	Web and CLI Managed	Web and CLI Managed	Web and CLI Managed
Switching Capacity	56 Gbps	56 Gbps	104 Gbps	104 Gbps
Packets Per Second	83 Mpps	83 Mpps	155 Mpps	155 Mpps
MAC Address Storage	16 K	16 K	16 K	16 K
Network Latency	< 1us	< 1us	< 1us	< 1us
VLANs Supported	4 K	4 K	4 K	4 K
Link Aggregation Group Size	8	8	8	8
Total Link Aggregation Groups	14	14	26	26
Packet Buffers	1.5 MB	1.5 MB	1.5 MB	1.5 MB
DRAM	512 MB	512 MB	512 MB	512 MB
FLASH	128 MB	128 MB	128 MB	128 MB
Dimensions				
Height x Depth x Width (inches)	1.73 x 9 x 12.99	1.73 x 9 x 12.99	1.73 x 16.1 x 17.3	1.73 x 16.1 x 17.3
Height x Depth x Width (mm)	44 x 230 x 330	44 x 230 x 330	44 x 410 x 440	44 x 410 x 440
Weight	4.78 lbs (2.17 kg)	5.37 lbs (2.44 kg)	12.12 lbs (5.5 kg)	13.44 lbs (6.1 kg)
Environment				
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Power Supply	AC built in	AC built in	AC built in	AC built in
Redundant Power	Redundant AC	Optional FRPS-740	Optional FRPS-740	Optional FRPS-740
Power Consumption (Average / Maximum)	17.2 W / 17.3 W	23.5 W / 23.6 W	51.6 W / 51.9 W	47.5 W / 47.7 W
Heat Dissipation	59.095 BTU/h	74.29554 BTU/h	177.14268 BTU/h	162.87865 BTU/h
Operating Temperature	32–122°F (0–50°C)	32–122°F (0–50°C)	32–122°F (0–50°C)	32–122°F (0–50°C)
Storage Temperature	–4–158°F (-20–70°C)	–4–158°F (-20–70°C)	–4–158°F (-20–70°C)	–4–158°F (-20–70°C)
Humidity	10–90%	10–90%	10–90%	10–90%
Certification and Compliance				
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2				
Warranty				
Fortinet Warranty		Limited lifetime* warranty on all models		

* Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 224E



FortiSwitch 224E-POE



FortiSwitch 248E-POE



FortiSwitch 248E-FPOE

SPECIFICATIONS

	FORTISWITCH 424D	FORTISWITCH 424D-POE	FORTISWITCH 424D-FPOE
Hardware Specifications			
Total Network Interfaces	24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	24x GE RJ45 and 2x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	—	24 (802.3af/at)	24 (802.3af/at)
PoE Power Budget	N/A	185 W	370 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	88 Gbps	88 Gbps	88 Gbps
Packets Per Second	131 Mpps	131 Mpps	131 Mpps
MAC Address Storage	16K	16K	16K
Network Latency	< 1µs	< 1µs	< 1µs
VLANs Supported	4K	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	Yes	Yes	Yes
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	13	13	13
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	1 GB	1 GB	1 GB
FLASH	128 MB	128 MB	128 MB
Dimensions			
Height x Depth x Width (inches)	1.75 x 10.12 x 17.3	1.75 x 10.12 x 17.3	1.73 x 12.2 x 17.5
Height x Depth x Width (mm)	44 x 250 x 440	44 x 250 x 440	44 x 310 x 440
Weight	7.14 lbs (3.24 kg)	8.42 lbs (3.82 kg)	10.64 lbs (4.83 kg)
Environment			
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	Dual power supplies	Optional FRPS-740	Optional FRPS-740
Power Consumption (Average / Maximum)	17.3 W / 17.2 W	208 W / 210 W	397 W / 403 W
Heat Dissipation	69 BTU/h	89 BTU/h	100 BTU/h
Operating Temperature	32–122°F (0–50°C)	32–122°F (0–50°C)	32–122°F (0–50°C)
Storage Temperature	–4–158°F (–20–70°C)	–4–158°F (–20–70°C)	–4–158°F (–20–70°C)
Humidity	10–90% non-condensing	10–90% non-condensing	10–90% non-condensing
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty		Limited lifetime* warranty on all models	

* Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 424D



FortiSwitch 424D-POE



FortiSwitch 424D-FPOE

SPECIFICATIONS

	FORTISWITCH 448D	FORTISWITCH 448D-POE	FORTISWITCH 448D-FPOE
Hardware Specifications			
Total Network Interfaces	48x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	48x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP	48x GE RJ45 and 4x10 GE SFP+ ports Note: SFP+ ports are compatible with 1 GE SFP
Dedicated Management 10/100 Port	1	1	1
RJ-45 Serial Console Port	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	—	48 (802.3af/at)	48 (802.3af/at)
PoE Power Budget	N/A	370 W	740 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years
System Specifications			
Switching Capacity	176 Gbps	176 Gbps	176 Gbps
Packets Per Second	262 Mpps	262 Mpps	262 Mpps
MAC Address Storage	16K	16K	16K
Network Latency	< 1µs	< 1µs	< 1µs
VLANs Supported	4K	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	Yes	Yes	Yes
Link Aggregation Group Size	8	8	8
Total Link Aggregation Groups	26	26	26
Packet Buffers	1.5 MB	1.5 MB	1.5 MB
DRAM	1 GB	1 GB	1 GB
FLASH	128 MB	128 MB	128 MB
Dimensions			
Height x Depth x Width (inches)	1.75 x 12.2 x 17.3	1.73 x 16.1 x 17.3	1.73 x 16.1 x 17.3
Height x Depth x Width (mm)	44 x 310 x 440	44 x 410 x 440	44 x 410 x 440
Weight	9.15 lbs (4.15 kg)	13.44 lbs (6.1 kg)	15.45 lbs (7.01 kg)
Environment			
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Power Supply	AC built in	AC built in	AC built in
Redundant Power	Dual power supplies	Optional FRPS-740	Dual power supplies
Power Consumption (Average / Maximum)	38 W / 38 W	417 W / 419 W	790 W / 792 W
Heat Dissipation	147 BTU/h	177 BTU/h	193 BTU/h
Operating Temperature	32–122°F (0–50°C)	32–122°F (0–50°C)	32–122°F (0–50°C)
Storage Temperature	–4–158°F (-20–70°C)	–4–158°F (-20–70°C)	–4–158°F (-20–70°C)
Humidity	10–90% non-condensing	10–90% non-condensing	10–90% non-condensing
Certification and Compliance			
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2			
Warranty			
Fortinet Warranty		Limited lifetime* warranty on all models	

* Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 448D



FortiSwitch 448D-POE



FortiSwitch 448D-FPOE

SPECIFICATIONS

	FORTISWITCH 524D	FORTISWITCH 524D-FPOE	FORTISWITCH 548D	FORTISWITCH 548D-FPOE
Hardware Specifications				
Total Network Interfaces	24 GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	24 GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	48x GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP	48x GE/RJ45 ports, 4x 10 GE SFP+ ports and 2x 40 GE QSFP Note: SFP+ ports are compatible with 1G SFP
Dedicated Management 10/100/1000 Ports	1	1	1	1
RJ-45 Serial Console Port	1	1	1	1
Form Factor	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount	1 RU Rack Mount
Power over Ethernet (PoE) Ports	N/A	24 (802.3at/at)	N/A	48 (802.3at/at)
PoE Power Budget	N/A	400 W	N/A	750 W
Mean Time Between Failures	> 10 years	> 10 years	> 10 years	> 10 years
System Specifications				
Switching Capacity	288 Gbps	288 Gbps	336 Gbps	336 Gbps
Packets Per Second	428 Mpps	428 Mpps	512 Mpps	512 Mpps
MAC Address Storage	96K	96K	96K	96K
Network Latency	< 2µs	< 2µs	< 2µs	< 2µs
VLANs Supported	4K	4K	4K	4K
IPv4/IPv6 Dual Stack Routing Ready Hardware	Yes	Yes	Yes	Yes
Link Aggregation Group Size	24	24	48	48
Total Link Aggregation Groups	15	15	26	26
Packet Buffers	4 MB	4 MB	4 MB	4 MB
DRAM	2 GB	2 GB	2 GB	2 GB
FLASH	128 MB	128 MB	128 MB	128 MB
Dimensions				
Height x Depth x Width (inches)	1.75 x 13.8 x 17.3	1.75 x 13.8 x 17.3	1.75 x 13.8 x 17.3	1.75 x 13.8 x 17.3
Height x Depth x Width (mm)	44 x 350 x 439	44 x 350 x 439	44 x 350 x 439	44 x 350 x 439
Weight	13.6 lbs (6.2 kg)	15.74 lbs (7.14 kg)	14.1 lbs (6.4 kg)	15.74 lbs (7.14 kg)
Environment				
Power Required	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz	100–240V AC, 50–60 Hz
Power Supply	150 W AC PSU	600 W AC PSU	150 W AC PSU	920 W AC PSU
Redundant Power	Optional FS-PSU-150 (for 150 W backup only)	Optional FS-PSU-600 (for 600 W for additional PoE)	Optional FS-PSU-150 (for 150 W backup only)	Optional FS-PSU-900 (for 900 W for additional PoE)
Power Consumption (Average / Maximum)	73 W / 75 W	570 W / 579 W (full PoE load)	74 W / 77 W	925 W / 961 W (full PoE load)
Heat Dissipation	247 BTU/h	296 BTU/h (full PoE loading)	252 BTU/h	318 BTU/h (full PoE loading)
Operating Temperature	32–113°F (0–45°C)	32–113°F (0–45°C)	32–113°F (0–45°C)	32–113°F (0–45°C)
Storage Temperature	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)	-40–158°F (-40–70°C)
Humidity	5–95% non-condensing	5–95% non-condensing	5–95% non-condensing	5–95% non-condensing
Certification and Compliance				
FCC, CE, RCM, VCCI, BSMI, UL, CB, RoHS2				
Warranty				
Fortinet Warranty		Limited lifetime* warranty on all models		

* Fortinet Warranty Policy: <http://www.fortinet.com/doc/legal/EULA.pdf>



FortiSwitch 524D



FortiSwitch 524D-FPOE



FortiSwitch 548D



FortiSwitch 548D-FPOE

ORDER INFORMATION

Product	SKU	Description
FortiSwitch 108D-POE	FS-108D-POE	L2 PoE Switch — 8x GE RJ45 ports (including 8x PoE ports with 75 W power budget), 2x shared media pairs (including 2x GE RJ45, 2x GE SFP slots). Fanless switch. FortiGate switch controller compatible.
FortiSwitch 124D	FS-124D	L2 Switch — 24x GE RJ45 ports, 2x GE SFP slots. Fanless switch. FortiGate switch controller compatible.
FortiSwitch 124D-POE	FS-124D-POE	L2 PoE Switch — 24x GE RJ45 ports (including 12x PoE+ ports with 100 W power budget), 2x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 224D-POE	FS-224D-POE	L2 PoE Switch — 20x GE RJ45 ports (including 12x PoE ports with 185 W power budget), 4x shared media pairs (including 4x GE RJ45, 4x GE SFP slots). FortiGate switch controller compatible.
FortiSwitch 224D-FPOE	FS-224D-FPOE	L2 PoE+ Switch — 24x GE RJ45 ports, 2x 1 GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248D	FS-248D	L2 Switch — 48x GE RJ45 ports, 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248D-POE	FS-248D-POE	L2 PoE Switch — 48x GE RJ45 ports (24 PoE), 2x 1 GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248D-FPOE	FS-248D-FPOE	L2 PoE+ Switch — 48x GE RJ45 ports, 4x 1 GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 224E	FS-224E	L2/L3 Switch — 24x GE RJ45 ports, 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 224E-POE	FS-224E-POE	L2/L3 PoE+ Switch — 24x GE RJ45 ports including 12x PoE+ ports, 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248E-POE	FS-248E-POE	L2/L3 PoE+ Switch — 48x GE RJ45 ports (24 PoE+ capable), 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 248E-FPOE	FS-248E-FPOE	L2/L3 PoE+ Switch — 48x GE RJ45 ports full PoE+, 4x GE SFP slots. FortiGate switch controller compatible.
FortiSwitch 424D	FS-424D	L2 Switch — 24x GE RJ45 ports, 2x 10 GE SFP+ ports. FortiGate switch controller compatible.
FortiSwitch 424D-POE	FS-424D-POE	L2 PoE+ Switch — 24x GE RJ45 ports, 2x 10 GE SFP+ slots. 185 W power budget. FortiGate switch controller compatible.
FortiSwitch 424D-FPOE	FS-424D-FPOE	L2 PoE+ Switch — 24x GE RJ45 ports, 2x 10 GE SFP+ slots. FortiGate switch controller compatible.
FortiSwitch 448D	FS-448D	L2 Switch — 48x GE RJ45 ports, 4x 10 GE SFP+ slots. FortiGate switch controller compatible.
FortiSwitch 448D-POE	FS-448D-POE	L2 PoE+ Switch (185 W) — 48x GE RJ45 ports, 4x 10 GE SFP+ slots. FortiGate switch controller compatible.
FortiSwitch 448D-FPOE	FS-448D-FPOE	L2 PoE+ Switch (370 W) — 48x GE RJ45 ports, 4x 10 GE SFP+ slots. FortiGate switch controller compatible.
FortiSwitch 524D	FS-524D	L2 Switch — 24x GE RJ45 ports, 4x 10 GE SFP+ slots, 2x 40 GE QSFP+ slots. FortiGate switch controller compatible.
FortiSwitch 524D-FPOE	FS-524D-FPOE	L2 PoE+ Switch — 24x GE RJ45 ports, 4x 10 GE SFP+ slots, 2x 40 GE QSFP+ slots. FortiGate switch controller compatible.
FortiSwitch 548D	FS-548D	L2 Switch — 48x GE RJ45 ports, 4x 10 GE SFP+ slots, 2x 40 GE QSFP+ slots. FortiGate switch controller compatible.
FortiSwitch 548D-FPOE	FS-548D-FPOE	L2 PoE+ Switch — 48x GE RJ45 ports, 4x 10 GE SFP+ slots, 2x 40 GE QSFP+ slots. FortiGate switch controller compatible.
Accessories		
FortiSwitch Advanced Features License	FS-SW-LIC-200	SW License for FS-200 Series Switches to activate Advanced Features.
	FS-SW-LIC-400	SW License for FS-400 Series Switches to activate Advanced Features.
	FS-SW-LIC-500	SW License for FS-500 Series Switches to activate Advanced Features.
External Redundant AC Power Supply	FRPS-740	Redundant AC power supply for up to 2 units: FS-124D-POE, FS-224D-FPOE, FS-248D-FPOE, FS-424D-FPOE, FS-448D-POE and FS-424D-POE.
Redundant AC Power Supply	FS-PSU-150	AC power supply for FS-548D and FS-524D.
	FS-PSU-600	AC power supply for FS-524D-FPOE.*
	FS-PSU-900	AC power supply for FS-548D-FPOE.*

* Provides additional PoE capacity.

For a list of available Transceiver modules, see the [Fortinet Transceivers datasheet](#).



GLOBAL HEADQUARTERS
Fortinet Inc.
899 KIFER ROAD
Sunnyvale, CA 94086
United States
Tel: +1.408.235.7700
www.fortinet.com/sales

EMEA SALES OFFICE
905 rue Albert Einstein
06560 Valbonne
France
Tel: +33.4.8987.0500

APAC SALES OFFICE
300 Beach Road 20-01
The Concourse
Singapore 199555
Tel: +65.6395.2788

LATIN AMERICA SALES OFFICE
Sawgrass Lakes Center
13450 W. Sunrise Blvd., Suite 430
Sunrise, FL 33323
United States
Tel: +1.954.368.9990



FL Betances & Asociados

PROCURADURIA.

OFERTA TECNICA
Proceso De Compra Menor.
PROCURADURIA-DAF-CM-2023-0004.

EQUIPOS.

Fecha: Enero, 2023
Versión 1.0

FL BETANCES & ASOCIADOS

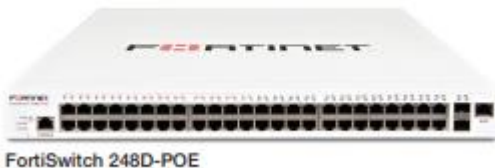
Calle Armando Oscar Pacheco No. 9, Urbanización Fernández,
Santo Domingo, República Dominicana
2728 Valencia Grove Dr., Valórico FL, 33596, Estados Unidos
<http://www.flbetances.com>

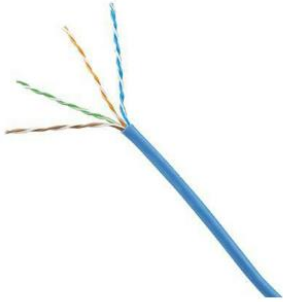
Santo Domingo, RD

Of: 809 732-3792
Fax: 809 473-3792

Tampa, FL, EU

Of: 813 643-2601
Flota: 829-641-8231

CANTIDAD	DESCRIPCION	TIEMPO DE ENTREGA
4	FS-224D-FPOE FORTINET FORTISWITCH 224D-FPOE - SWITCH - MANAGED - 24 X 10/100/1000 (POE+) + 4 X GIGABIT SFP - RACK-MOUNTABLE -POE+ (370 W)  1 AÑO DE VIGENCIA.	3 A 5 SEMANAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
4	FS-248E-FPOE FORTINET FORTISWITCH 248E-FPOE - SWITCH - L3 - MANAGED - 48 X 10/100/1000 (POE+) + 4 X GIGABIT SFP - RACK-MOUNTABLE - POE+ (740 W).  FortiSwitch 248D-POE	3 A 5 SEMANAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
675	NK688MIW PANDUIT NK JACK CAT6 BLANCO. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
14	NUC6CR04BU-CEPANDUIT NETKEY CABLE UTP CAT6 CM AZUL.	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS

		
125	NK1FIWY PANDUIT NETKEY FACE PLATE 1 PT BLANCO. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
185	NK6PC1YLY PANDUIT NK PATCH CORD CAT6 1P AMARILLO. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
185	NK6PC7Y PANDUIT NK PATCH CORD CAT6 7P WHITE. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS

		
9	NK6PPG24Y PANDUIT NK PATCH PANEL 24 PTS CAT6 RECTO 1RU. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
9	WMPFSE PANDUIT ORGANIZADOR HORIZONTAL FRONT ONLY 1U. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS

50	LP-XCEPUSWH LANPRO CONECTOR MODULAR (JACK) CAT5E BLANCO. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
2	LP-CE0N0BKC LANPRO CABLE UTP CAT5E OUTDOOR SINGLE JACKET AWG24. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
2	NTDWC6U600 NITROTEL GABINETE 6U 600X650 WALL MOUNT DOBLE CUERPO (ABATIBLE). 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS

40	NK2FIWY PANDUIT NETKEY FACE PLATE 2PT BLANCOS. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
12	NTMB24 NITROTEL CAJA SUPERFICIE 2X4 BLANCA.. 	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS
1	NTSC42U61 NITROTEL SERVER CABINET 42U 600X1000 MM, 4 VENTILADORES DE ENFRIAMIENTO, SISTEMA DE TIERRA, PUERTA FRONTAL PERFORADA CON 4 JUEGO DE LLAVES, PANELES LATERALES REMOVIBLES, PATITAS Y RUEDAS.	1 A 10 DIAS UNA VEZ CONFIRMADA LA ORDEN DE COMPRAS



VALIDEZ DE LA COTIZACION: 30 DIAS CALENDARIOS
TIEMPO DE ENTREGA: 1 A 10 DIAS (3 a 5 SEMANAS PARA LOS FORTINET FORTISWITCH)
FORMA DE PAGO: 30 DIAS.
TIEMPO DE GARANTIA:12 MESES



CUENTA DE AHORRO BANRESERVAS :

Razón social: FL BETANCES

✓

RNC: 130067147

✓

Número de Cuenta: 9600542538

✓

Tipo de Cuenta: AHORRO

✓

Moneda: Pesos Dominicanos

✓

Banco Popular: BANCO DE RESERVAS

✓

Correo para envío de Notificación: ymontero@flbetances.com

✓

Teléfono: 809-732-3792 ext. 221

✓

Celular: 829-762-8227

✓

Dirección: Calle Armando Oscar Pacheco # 9