CARMEN EMILIA OSPINA	FORMATO **CERTIFICADO DE CUMPLIMIENTO**			
PROCESO: GESTIÓN DE CONTRATACIÓN	**CODIGO:** GCR-S1-F19	**VIGENCIA:** 18/05/2023	V2	**PÁGINA** 1 de 4

No. Contrato	0009-2025	**No. Entrega**	1	**Fecha**	25/02/2025

La Suscrita COORDINADORA AREA TIC de la E.S.E. Carmen Emilia Ospina en calidad de SUPERVISORA

CERTICA QUE:

La empresa ALPASURFNET S.A.S., Identificada con Nit 828.000.170-8, Representada legalmente por GUSTAVO ADOLFO ANDRADE DUSSAN, Identificado con cedula de ciudadanía número 7.688.838 de Neiva , Responsable del contrato Número 0009 de 2025 cuyo objeto es CONTRATAR EL SERVICIO DE CONECTIVIDAD Y/O INTERCONEXION Y SERVICIO DE INTERNET CANAL DEDICADO Y A TRAVES DE FIBRA OPTICA PARA LAS SEDES DE CANAIMA, CAIMI, GRANJAS, EDUARDO SANTOS, SIETE DE AGOSTO, PALMAS, IPC, SANTA ISABEL, FORTALECILLAS Y CAGUAN DE LA ZONA URBANA CON EL SERVICIO DE INTERCONEXION POR RADIO ENLACES A LAS SEDES RURALES DE LAS ZONAS SUR, NORTE Y ORIENTE; COMPLEMENTANDO CON EL SERVICIO DE LA SEGURIDAD WEB PERIMETRAL, INCLUYENDO FIREWALL A 600 USUARIOS PARA LA ESE CARMEN EMILIA OSPINA, del 10 al 31 de Enero del 2025, Cumplió a satisfacción con los requerimientos de calidad, cantidad y oportunidad definidos en el mismo contrato, entregados a la E.S.E. CARMEN EMILIA OSPINA, el referido contrato presenta el siguiente especificaciones:

Contrato No. 0009 de 2025	Fecha de inicio	10/01/2025
	Fecha de terminación	09/04/2025
	Otrosí	

Valor inicial	$81.300.000
Valor Otrosí	$0
Valor total	$81.300.000
Valor ejecutado	$0
Vienen contrato	$81.300.000
Valor factura (s)	$18.529.926
Saldo contrato	$62.770.074

Ítem	Factura	Fecha	Comprobante entrada a almacén	Valor facturas
1	FC 19	24/02/2025		$18.529.926
Total				$18.529.926.

Total de facturas	1

De conformidad con las directrices legales, contractuales e institucionales, establecidas por la E.S.E. Carmen Emilia Ospina, el contratista cumplió a cabalidad con los respectivos pagos al SGSSS, soportada por la certificación expedida por ESPER MOTTA GONZLAEZ CC 12.118.113 TP 31164 -**T, Contador** de la entidad contratista.
Expedida en la ciudad Neiva, 25 de Febrero del año 2025.

LILIANA CAROLINA GONZÁLEZ GUTIERREZ
otorga el certificado Supervisora

ALPASURFNET S.A.S.
NIT 828.000.170-8
calle 6 Numero 14 A 39 Barrio Altico
Tel: 3153372911
Neiva - Colombia
alpavision@gmail.com
https://alpavision.com.co

Factura electrónica de venta
No. FC 19

Señores	EMPRESA SCIAL DEL ESTADO ESE CARMEN EMILIA OSPINA		
NIT	813.005.265-7	**Teléfono**	(000) 3112566991 - Ext. 000
Dirección	CARRERA 22 # 26 - 29	**Ciudad**	Neiva - Colombia

Fecha y hora Factura

Generación	24/02/2025, 11:04
Expedición	24/02/2025, 11:04
Vencimiento	28/02/2025

Ítem	Descripción	Cantidad	Vr. Total	Impto. Cargo	Nombre producto
1	CP 381 DEL 2024 DESDE 10/01/2025 AL 31/01/2025	1.00	18,529,926.00	19 %	servicio internet gravado 19

Total items: 1

Valor en Letras:
Dieciocho millones quinientos veintinueve mil novecientos veintiseis pesos m/cte

Forma de pago:
Crédito

Medio de pago:
Efectivo - Crédito - Cuota No. 001 vence el 2025-02-28 $ 18,529,926.00
por

Observaciones:

Total Bruto	15,571,366.39
IVA 19%	2,958,559.61
Total a Pagar	18,529,926.00

Fabricante Software y Proveedor tecnológico: Siigo SAS - Nit 830.048.145-8. Nombre Software: Siigo Nube. Firma electrónica: ver en el XML

A esta factura de venta aplican las normas relativas a la letra de cambio (artículo 5 Ley 1231 de 2008). Con esta el Comprador declara haber recibido real y materialmente las mercancías o prestación de servicios descritos en este título - Valor. **Número Autorización Electrónica 18764076043753 aprobado en 20240730 prefijo FC desde el número 1 al 100 Vigencia: 24 Meses**
Responsable de IVA - Actividad Económica 6110 Actividades de telecomunicaciones alámbricas Tarifa 10X1000- somos autorretenedores de ica
CUFE: a0229c07d48a714cfd740079443302d0a4a4485cf3c3fe855176804924 2cad7bd66b6962c556db03dd06fa6c89b986c9

Neiva, 21 de febrero de 2025

Señora
CAROLINA GUTIERREZ
Supervisora

REF: INFORME DE EJECUCIÓN DE ACTIVIDADES. Supervisor - Contrato Bienes y Servicios N.º 009 de 2025. **ALPASURFNET S.A.S. Nit. 828.000.170-8**, mediante el presente escrito me permito presentar el

OBJETO CONTRACTUAL: "CONTRATAR EL SERVICIO DE CONECTIVIDAD Y/O INTERCONEXION Y SERVICIO DE INTERNET CANAL DEDICADO A TRAVES DE FIBRA OPTICA PARA LAS SEDES DE CANAIMA, GRANJAS, EDUARDO SANTOS, SIETE DE AGOSTO, PALMAS, IPC, CAIMI, SANTA ISABEL, BODEGA, FORTALECILLAS Y CAGUAN DE LA ESE CARMEN EMILIA OSPINA Y CON EL SERVICIO INTERCONEXION POR RADIO ENLACES A LAS SEDES RURALES DE LAS ZONAS SUR, ORIENTE Y ORIENTE; COMPLEMENTADO CON EL SERVICIO DE SEGURIDAD WEB PERIMETRAL, INCLUYENDO FIREWALL A 600 USUARIOS PARA LA ESE CARMEN EMILIA OSPINA".

Periodo ejecutado: 10 enero al 31 de enero de 2025

ACTIVIDADES REALIZADAS:

N°	Actividades del contratista	Actividades realizadas	Evidencia aprobada
1	Ejecutar el objeto contractual dentro de los términos y condiciones establecidas en la normatividad vigente sobre la actividad vigente en Colombia y acatando las especificaciones y/o recomendaciones técnicas señalada de la ESE CARMEN EMILIA OSPINA, con oportunidad eficiencia y eficacia de manera autónoma e independiente.	Se ejecutó el contrato dentro de los términos establecidos en la normatividad vigente de acuerdo con el anexo técnico establecido en la ESE CARMEN EMELIA OSPINA	Se evidenciará en las diferentes actividades realizadas según CPS 00009 del 2025.
2	El contratista deberá contar con el debido Registro de TIC del ministerio de las TICS (RTIC), en el que se acredita al contratista como ISP.	ALPASURFNET cuenta con registro TIC Número 96002041 del 12 de Mayo del 2014.	Se anexa consulta Registro TIC en Fisico.

<table>
<tr><td>3</td><td>Poner a disposición y acceso a una solución de herramienta web, que permita monitorear los consumos de anchos banda de cada y en tiempo real cada uno de los equipos de red instalados por el contratista de la ESE CARMEN EMELIA OSPINA.</td><td>Se pone a disposición una herramienta http://177.74.204.242/index.htm que permite monitorear los consumos de anchos de banda de las 27 Sedes de la ESE CARMEN EMILIA. Con usuario: esecarmen y password: Es3carmen20</td><td>Herramienta de Monitoreo PRTG</td></tr>
<tr><td>4</td><td>El contratista pondrá a disposición de la ESE el personal de soporte y atención a incidentes y fallas con dominio y experiencia en manejo, configuración de las marcas de equipos y activos de red (routers, switches, firewall) del contratista.</td><td>Se puso a disposición el personal de soporte y atención a incidentes y fallas para el manejo de los equipos tecnológicos y activos de red</td><td>Se adjunta listado de personal que se dispuso para la atención de incidentes y fallas reportados por la ESE.</td></tr>
<tr><td>5</td><td>El contratista garantizara que no se podrá tener demoras en atención y solución de incidentes por falta de personal técnico para los requerimientos que se presenten y cumplir los niveles de servicios establecidos así: cumplir con el nivel de disponibilidad del servicio de conectividad de Datos e internet ofertado a las sedes urbanas y rurales que deberá ser como mínimo del 99.7%, canal sin reúso 1:1 incluyendo la solución de ultimo kilometro, backbone y nodos necesarios, para la presentación del servicio:
<table>
<tr><th>TIEMPO INDISPONIBILIDAD</th><th>COMPENSACION SOBRE TARIFA MENSUAL</th></tr>
<tr><td>Entre 100% y 99.7%</td><td>0%</td></tr>
<tr><td>Entre 99.6% y 98 %</td><td>4%</td></tr>
<tr><td>Entre 97.9% y 95%</td><td>10%</td></tr>
<tr><td>Entre 94.9% y 90%</td><td>20%</td></tr>
<tr><td>Entre 89.9% y el 80%</td><td>40%</td></tr>
<tr><td>Entre 79.9% y 70%</td><td>60%</td></tr>
<tr><td>Entre 69.9% y 60%</td><td>88%</td></tr>
<tr><td>Menor e Igual al</td><td>100%</td></tr>
</table></td><td>Teniendo en cuenta los niveles de servicio se hace relación de sedes que tuvieron tiempo de indisponibilidad a causa de fallas de los servicios asi:
<table>
<tr><th>Sedes</th><th>Total</th><th>% Disponibilidad</th><th>% de descuento</th><th>Valor del descuento</th><th>Valor a facturar por sede</th></tr>
<tr><td>Sede El Cedral</td><td>375.247</td><td>72.7</td><td>60%</td><td>$225.148</td><td>150.099</td></tr>
<tr><td>Sede Santa Helena</td><td>375.247</td><td>0</td><td>100 %</td><td>375.247</td><td>$0</td></tr>
<tr><td>Sede Colegio</td><td>375.247</td><td>72.7</td><td>60%</td><td>$225.148</td><td>150.099</td></tr>
<tr><td>Sede Palestina</td><td>375.247</td><td>72.7</td><td>60%</td><td>$225.148</td><td>150.099</td></tr>
<tr><td>Sede Piedra marcada</td><td>375.247</td><td>72.7</td><td>60%</td><td>$225.148</td><td>150.099</td></tr>
<tr><td>San Jorge</td><td>375.247</td><td>0</td><td>100 %</td><td>375.247</td><td>$0</td></tr>
</table></td><td>Se anexa en fisico Formato de descuento en base a los reportes de incidencias generados en los Ticket y en el WhatsApp.</td></tr>
</table>

	59.9%		
6	Para los servicios de Internet, el contratista debe contar con una red de fibra óptica propia, anillada, de capacidad mínima de 20 Gbps y equipos robustos de alta fiabilidad, disponibilidad tipo Carrier Grade en su Core	ALPASURFNET S.A.S cumple con una red propia de Fibra Óptica, anillada, y con capacidad de 20Gbps.	Se anexan diagramas de topología de red.
7	El contratista realizará entrega al área TIC del diagrama de la topología física de la red WAN utilizada para la sede principal y de cada una de las sedes.	Se entrega el Diagrama de topología física de la red WAN, que se usa en la sede Principal y en cada una de las sedes.	Se ajunta imagen en físico de la Topología de la RED.
8	Los planos deberán incluir diagramas de red, descripciones técnicas y lista de materiales necesarios para la implementación del diseño .	Se entregan los Diagramas de Red, las descripciones técnicas y lista de equipos	Se ajunta en fisico en este 1° Informe, los diagramas de red y listado de equipos instalados.
9	El contratista realizará recomendaciones a través de un informe técnico donde presentará alternativas de mejoras para la red y la topología LAN, aplicando criterios de seguridad internas, segmentación y buenas prácticas, para poder llegar a contener ataques internos y externos en la red, sin afectar en gran medida los servicios.	ALPASURFNET S.A.S realizara esta entrega del informe de recomendaciones en el mes de septiembre del 2024.	NA.
10	Contar con un servicio dinámico de gestión de Mesa de Ayuda, por medio de una línea celular que funcione las 6X8 de lunes a viernes de 7AM a 6:00pm y sábados de 7:00am a 1:00pm, como también de una plataforma Web o línea whatsaap o correo electrónico o línea telefónica, para el reporte de tickets que permitan hacer seguimiento a cada una de las PQRS generadas 7X24, que	ALPASURFNET S.A.S. cuenta con una mesa de ayuda que puede ser visitada desde internet desde la siguiente url: http://177.74.204.24/glpi/ De igual forma, contamos con un Call Center de atención al público la cual está disponible las 24 horas, 7 días a la semana, con el objetivo de atender reportes de fallas o consultas con el servicio. La línea de atención es (608)-866-4820 -- 316-521-3488	Herramienta de Ticket Web.

	garanticen el control y medición de la disponibilidad del servicio		
11	Contar con un servicio de respaldo (Backup) de conectividad de datos e internet disponible 7x4 en las Sedes Canaima, palmas, granjas, caimi e IPC, como contingencia ante eventualidades generales no previstas, que garantice la prestación del servicio de forma interrumpida, este respaldo deberá ser en tecnología diferente a Fibra Optica y no debe converger en el mismo punto core del contratista para evitar así indisponibilidades.	ALPASURFNET S.A.S. cuenta con una red anillada en Fibra Oscura en las sede Canaima, palmas, granjas, IPC, Eduardo santos, Santa Isabel y Bodega; Dicho anillo está disponible 7x24 y actúa como contingencia ante eventualidades que se presenten en Canaima o alguna de estas sede.	Se evidenciará en el las topologías y diagramas de red.
12	Suministrar, instalar y configurar en cada sede (rural o urbana) equipos de conectividad de tipo carrier grade, de alta disponibilidad, tipo Enterprise, y en caso de presentarse fallas, deberán ser remplazados por otro de igual o superior características que garanticen un óptimo servicio, sin costo alguno En caso de realizar suministros e instalaciones de servicios en sedes nuevas, éstas deben ser realizadas con plazo máximo 15 días desde la firma del acta de inicio del contrato	En cada una de las sedes se instalaron equipos de borde (routers) nuevos con características técnicas que garantizan una alta disponibilidad de los servicios. Un equipo Router ONT marca Huawei en cada sede urbana y routers de marca Mikrotik.	Se evidencia en el listado de equipos anexo.
13	Asumir los costos por la instalación y configuración de los equipos, transporte, mano de obra que se requieran para la puesta en marcha de la solución y verificación de los canales de conectividad, dentro del área de cobertura en zonas urbanas y rurales y en caso de que haya lugar realizar cambios de equipos y/o solucionar fallas oportunamente que se presenten en la prestación de los servicios suministrados sin que esto tenga costo adicional para la ESE	ALPASURFNET S.A.S. realizo la instalacion y configuracion de los equipos en cada sede, asumiendo todos los costos asociados por la esta actividad como son los equipos, material, transporte, mano de obra requerida para la puesta en marcha del Servicio de Conectividad a internet.	Se anexan actas de instalacion de cada sede.

	CARMEN EMILIA OSPIN		
14	Disponer de un rango mínimo de 10 direcciones IP públicas libres, sin NAT, no reportadas en listas negras, para garantizar los servicios web implementados por La ESE CARMEN EMILIA OSPINA	ALPASURFNET S.A.S. asigno a la ESE CARMEN EMILIA en su sede de CANAIMA las siguientes direcciones IPv4 públicas, de la red 177.74.205.240/29 teniendo disponibles las direccion 177.74.204.241,177.74.205.242, 177.74.205.243, 177.74.205.244, 177.74.205.245, 177.74.204.246. asignándose a los siguientes servicios por IPv4 asi: **IPv4 EQUIPO/OFICINA SERVICIO** 177.74.204.241 SOPHOS FIREWALL INTERNET 177.74.205.242 TESORERIA INTERNET Técnicamente se recomienda no exponer la totalidad de las IP sin darles un uso concreto, como buena práctica de TI, razón por la cual sólo se hace uso de 2 IPS públicas.	Se evidenciará en los diagramas de red anexos.
15	Garantizar la interoperabilidad de los demás equipos Networking y de telecomunicaciones que disponga la ESE. CARMEN EMILIA OSPINA con los equipos, servicios y canales de conectividad contratados e instalados por el contratista	ALPASURFNET S.A.S. y su personal tecnico, garantiza la interoperabilidad se los equipos Networking y de telecomunicaciones que disponga la ESE. CARMEN EMILIA OSPINA con los equipos, servicios y canales de conectividad contratados	No Aplica
16	Suministrar en calidad de comodato, un Firewall de alto throughput, para prestar la seguridad perimetral de la entidad y realizar la Gestión Unificada de Amenazas (UTM) el cual cuente con múltiples funciones añadidas, trabajando a nivel de aplicación para prestar servicios de seguridad perimetral, herramientas de tráfico de datos, procesar el tráfico a modo de proxy, analizando y gestionando el tráfico en función de la política implementada en el dispositivo, establecer balanceo de carga, protección contra múltiples amenazas, gestión de VPN, prevención de intrusos, antivirus,	ALPASURFNET S.A.S. en modo de comodato, instala en la ESE Carmen Emilia Ospina sede Canaima un equipo SOPHOS FIREWALL XGS330 que cumple con los requerimientos de esta obligación, se pone a disposición un personal especializado para la configuracion de las políticas de seguridad perimetral que aplicaran al tráfico de INTERNET y red LAN, protegiendo la integridad de los datos digitales que transitan por la red de WAN que soporta los servicios de conectividad de este contrato CPS 000009 del 2025	Se anexa Ficha tecnica del equipos SOPHOS FIREWALL.

	filtrado web, anti spam y administración de ancho de banda, con una licencia de uso a término por la duración del contrato con capacidad de mínima de 600 usuarios, suministrado por el contratista en calidad de comodato, ubicado en la sede principal Canaima para centralizar todas las conexiones hacia los demás centros de salud y sedes administrativas de forma bidireccional según la topología de red disponible y asociada a la arquitectura tecnológica de la ESE Carmen Emilia Ospina en el Municipio de Neiva. Incluye por parte del contratista, la realización de la instalación, configuración, parametrización y puesta en marcha de las políticas web, restricciones de aplicaciones y de portales web y demás que el Supervisor considere necesarias; como también realizará la asignación de un usuario con perfiles de Administrador que permita la coadministración del firewall por parte de la entidad, asi mismo se socializarán las herramientas de análisis como Google Analytics, entender y clasificar el tráfico		
17	Presentar un informe en tiempo real de amenazas e incidencia sobre los ataques, hallazgos y acciones realizadas donde se mitigue el riesgo las cuales fueron encontradas a través del monitoreo realizado con personal calificado que ofrece la plataforma de seguridad perimetral en el horario de lunes a viernes de 6:00am a 11:00pm y sábado, domingo y	Se presenta informe de amenazas e incidencias sobre la seguridad perimetral WEB proporcionadas por el SOPHOS FIREWALL del periodo 10 de enero a 31 de enero del 2025.	Se anexa en fisico Informe Especializado de la Seguridad Perimetral.

	festivos de 7:00am a 6:00pm. El informe debe ser socializado ante el supervisor donde se evidencie estadísticas mensuales y se brinde acompañamiento, asesoramiento en las recomendaciones de las amenazas, con políticas que minimicen el riesgo de ataques cibernético buscando contar siempre con una postura de ciberseguridad acorde con las necesidades de la ESE Carmen Emilia Ospina.		
18	La E.S.E CARMEN EMILIA OSPINA se reserva el derecho de solicitar suspensión de canales de servicio y su correspondiente facturación por razones de traslados, remodelación, unificación de Centros de Salud, sedes, casos fortuitos o retiro de estas. Estas suspensiones deberán realizarse a más tardar tres (3) días calendario después de enviada la solicitud vía email, ticket o escrita del supervisor del contrato. La suspensión de los canales puede ser definitiva o temporal y será tenida en cuenta para su respectivo descuento.	En este periodo el supervisor no solicito suspensión de los canales de servicio a internet de ninguna de las sedes contratadas	No Aplica
19	Realizar al menos uno (1) mantenimiento preventivo de los equipos y sistemas que hagan parte de los canales de conectividad de datos e internet entregados y utilizados, cuando la ejecución en tiempo del contrato esté entre el 50% y 60%. En caso de requerirse mantenimiento correctivo al firewall o a los equipos de orden o de ultimo kilometro instalado, por cualquier causa o anomalía técnica, estos costos son asumidos directamente y en su totalidad por el contratista.	en este periodo no se realizó mantenimiento preventivo de los equipos de conectividad debido a que el contrato no se encuentra aún dentro del 50% y 60% de ejecución	No Aplica

20	El supervisor del contrato podrá citar de forma extraordinaria la realización de mesas técnicas las veces que sean necesarias, previa comunicación de mínimo dos días al contratista, este proceso debe permitir el supervisor la verificación y evaluación de los servicios prestados, aportándole toda la información o evidencia de cualquier tipo relacionada con la ejecución, administración y operación del contrato.	El supervisor realiza reunión de mesa técnica para socialización el informe mensual de ejecución del contrato 009 de 2025	Acta de Reunión
21	Contar con todos los equipos, maquinaria, herramientas, materiales, demás elementos y recurso humano técnico necesarios para la ejecución del objeto contractual.	ALPASURFNET S.A.S. cuenta con todos los equipos y maquinarias necesarios para la ejecución contractual	No Aplica
22	Cumplir con los demás niveles de servicio relacionados en la propuesta técnica y comercial presentada.	ALPASURFNET S.A.S. cumplió con los niveles de Servicio relacionados en la propuesta técnica y comercial presentada	No Aplica
23	Guardar la debida y completa reserva sobre la información y los documentos que tenga conocimiento o a los que tenga acceso en virtud de la ejecución del contrato y utilizarla exclusivamente en relación con los fines del mismo.	ALPASURFNET S.A.S. guarda debida reserva de la información y documentos de los que se tienen acceso.	No Aplica
24	Mantener indemne a la entidad frente a reclamaciones judiciales y extrajudiciales por los daños y perjuicios que se deriven de los actos, omisiones o hechos ocasionados.	ALPASURFNET S.A.S. mantiene indemne a la entidad frente a reclamaciones judiciales y extrajudiciales.	No Aplica
25	Cumplir con las acciones y operaciones de almacenamiento, tratamiento, aprovechamiento (recuperación/reciclado) y/o disposición final de residuos de aparatos eléctricos y electrónicos (RAEE), usados durante y posteriormente de la ejecución del	ALPASURFNET S.A.S. cumple con las acciones y operación de aprovechamiento de Residuos de aparatos Eléctricos y Electrónicos.	No Aplica

<table>
<tr><td></td><td>presente proceso contractual.</td><td></td><td></td></tr>
<tr><td>26</td><td>Generar las facturas y cobrar mes vencido, relacionando el costo por cada centro de salud o sedes con su respectivos detalle o concepto.</td><td>ALPASURFNET S.A.S. mensualmente se presenta la factura mes vencido de 30 días, este reporte se toma en cuenta los días desde el 10 de enero del 2025 hasta el 31 de enero del 2025, lo que nos da 22 días de servicios, los cueles son relacionados el costo de cada sede junto con el informe de actividades y los respectivos soportes.
<table>
<tr><th>Sedes</th><th>Total</th><th>Valor del descuento</th><th>Valor a facturar por sede</th></tr>
<tr><td>Servicio de Internet Dedicado Sede Canaima</td><td>2.256.494</td><td>$0</td><td>2.256.494</td></tr>
<tr><td>Sede Palmas</td><td>1.153.792</td><td>$0</td><td>1.153.792</td></tr>
<tr><td>Sede Caimi</td><td>858.268</td><td>$0</td><td>858.268</td></tr>
<tr><td>Sede 7 de Agosto</td><td>858.268</td><td>$0</td><td>858.268</td></tr>
<tr><td>Sede Eduardo Santos</td><td>833.658</td><td>$0</td><td>833.658</td></tr>
<tr><td>Sede Granjas</td><td>833.658</td><td>$0</td><td>833.658</td></tr>
<tr><td>Sede IPC</td><td>833.658</td><td>$0</td><td>833.658</td></tr>
<tr><td>Sede Santa Isabel</td><td>833.658</td><td>$0</td><td>833.658</td></tr>
<tr><td>Sede Bodega</td><td>$0</td><td>$0</td><td>$0</td></tr>
<tr><td>Sede Caguan</td><td>388.337</td><td>$0</td><td>388.337</td></tr>
<tr><td>Sede Fortalecillas</td><td>388.337</td><td>$0</td><td>388.337</td></tr>
<tr><td>Sede San Francisco</td><td>375.247</td><td>$0</td><td>375.247</td></tr>
<tr><td>Sede Triunfo</td><td>375.247</td><td>$0</td><td>375.247</td></tr>
<tr><td>Sede San Antonio</td><td>375.247</td><td>$0</td><td>375.247</td></tr>
<tr><td>Sede San Luis</td><td>584.687</td><td>$0</td><td>584.687</td></tr>
<tr><td>Sede Vegalarga</td><td>388.337</td><td>$0</td><td>388.337</td></tr>
<tr><td>Sede Chapinero</td><td>375.247</td><td>$0</td><td>375.247</td></tr>
</table></td><td>Se anexa factura</td></tr>
</table>

<table>
<tr>
<td></td>
<td></td>
<td>
<table>
<tr><td>Sede El Cedral</td><td>375.247</td><td>225.148</td><td>150.099</td></tr>
<tr><td>Sede Aipecito</td><td>375.247</td><td>$0</td><td>375.247</td></tr>
<tr><td>Sede Palestina</td><td>375.247</td><td>225.148</td><td>150.099</td></tr>
<tr><td>Sede Palacio</td><td>375.247</td><td>$0</td><td>375.247</td></tr>
<tr><td>Sede Santa Helena</td><td>375.247</td><td>375.247</td><td>0</td></tr>
<tr><td>Sede Guacirco</td><td>388.337</td><td>$0</td><td>388.337</td></tr>
<tr><td>Sede Peñas Blancas</td><td>375.247</td><td>$0</td><td>375.247</td></tr>
<tr><td>Sede San Jorge</td><td>$375.247</td><td>$375.247</td><td>$0</td></tr>
<tr><td>Sede Colegio</td><td>375.247</td><td>$225.148</td><td>150.099</td></tr>
<tr><td>Sede Piedra Marcada</td><td>375.247</td><td>$225.148</td><td>150.099</td></tr>
<tr><td>Seguridad Web Perimetral 600 usuarios</td><td>$4.703.316</td><td>$0</td><td>$4.703.312</td></tr>
<tr><td>TOTAL</td><td>$20.181.011</td><td>$1.651.085</td><td>$18.529.926</td></tr>
</table>
Incluye los descuentos por ANS del periodo correspondiente.
</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Las demás inherentes a la ejecución y naturaleza del objeto contractual.</td>
<td>En este periodo no se designaron obligaciones inherentes a la ejecución contractual.</td>
<td>No Aplica</td>
</tr>
</table>

Observación: el valor de la factura corresponde a los servicios prestados en las sedes activas del durante el periodo comprendido entre 10 de enero al 31 de enero de 2025

VALOR DE PERIODO EJECUTADO: DIECIOCHO MILLONES QUINIENTOS VEINTI NUEVE MIL NOVECIENTOS VEINTI SEIS PESOS **($18.529.926) MCT.**

GUSTAVO ADOLFO ANDRADE D.
C.C.7.688.838
R.L- ALPASURFNET SAS

LILIANA CAROLINA GONZALEZ GUTIERREZ
Supervisor (a)

JOSE YAMIL LAGUNA
Apoyo a la supervisión

Neiva, 21 de febrero del 2025

Señores
Coordinación TIC
ESE CARMEN EMILIA OSPINA
Ciudad.

Referencia: CERTIFICACION DISPONIBILIDAD DE LOS SERVICIOS DE CONECTIVIDAD E INTERNET

ALPASURFNET SaS en calidad de Prestador del Servicio de INTERNET (ISP), certifica que los servicios de conectividad e INTERNET prestados bajo el CONTRATO DE PRESTACION DE SERVICIOS número 00009 del 2025, que incluyen 9 sedes URBANAS y 18 sedes RURALES en el Municipio de Neiva, asi como el canal de respaldo del servicio de INTERNET y la Seguridad Perimetral WEB de la sede Canaima, tienen una disponibilidad de 24 horas los 7 dias de la semana; estos servicios cumplen con las regulaciones de la Comisión de Regulación de las Comunicaciones (CRC) en las resoluciones número 1740 del 2007, 3503 del 2011 y 3496 del 2011 incluyendo sus modificaciones.

Dada a los 21 dias del mes de febrero del 2025 a solicitud de la ESE CARMEN EMILIA OSPINA.

Atentamente,

GUSTAVO ADOLFO ANDRADE D.
C.C.7.688.838
R.L- ALPASURFNET SAS

INFORME MENSUAL

DATOS DEL INFORME	
TIPO DE INFORME	Reporte de Personal Técnico
NÚMERO DEL INFORME	1
FECHA DE PRESENTACIÓN	21 de Febrero de 2025

RELACIÓN PERSONAL TÉCNICO – PROFESIONAL

NOMBRES	CARGO	PROFESIÓN	IDENTIFICACIÓN	EPS	ARL
JHON ERICK ANDRADE DUSSAN	TECNICO	TECNICO DE REDES	12.125.872	SANITAS	AXA COLPATRIA
WILSON DE JESUS MORALES PATIÑO	TECNICO	TECNICO DE REDES	17.654.995	NUEVA EPS	AXA COLPATRIA
CARLOS RODOLFO CORTES DUQUE	TECNICO	TECNICO DE REDES	12.118.082	SANITAS	AXA COLPATRIA
LUDOVIC SAGRE GARCIA	TECNICO	TECNICO DE REDES	7.725.782	SANITAS	AXA COLPATRIA

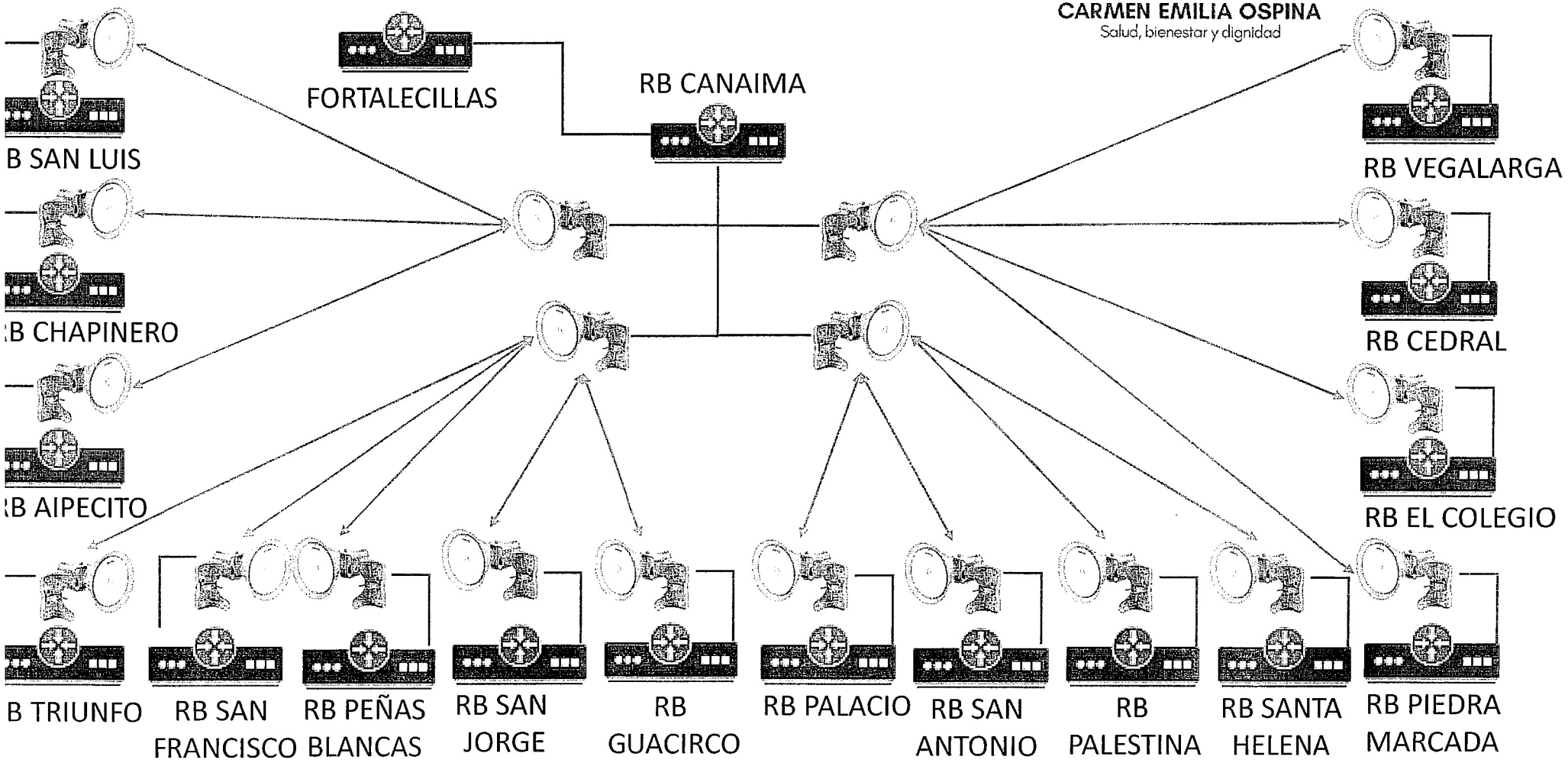
ALPASURFNET SAS

NIT. 828.000.170-8

Calle 6 14ª 39 altico
E-mail: alpavision@gmail.com
Linea : 608 8664820
Neiva – Huila - Colombia

TOPOLOGIA DE RED WAN ZONA RURAL

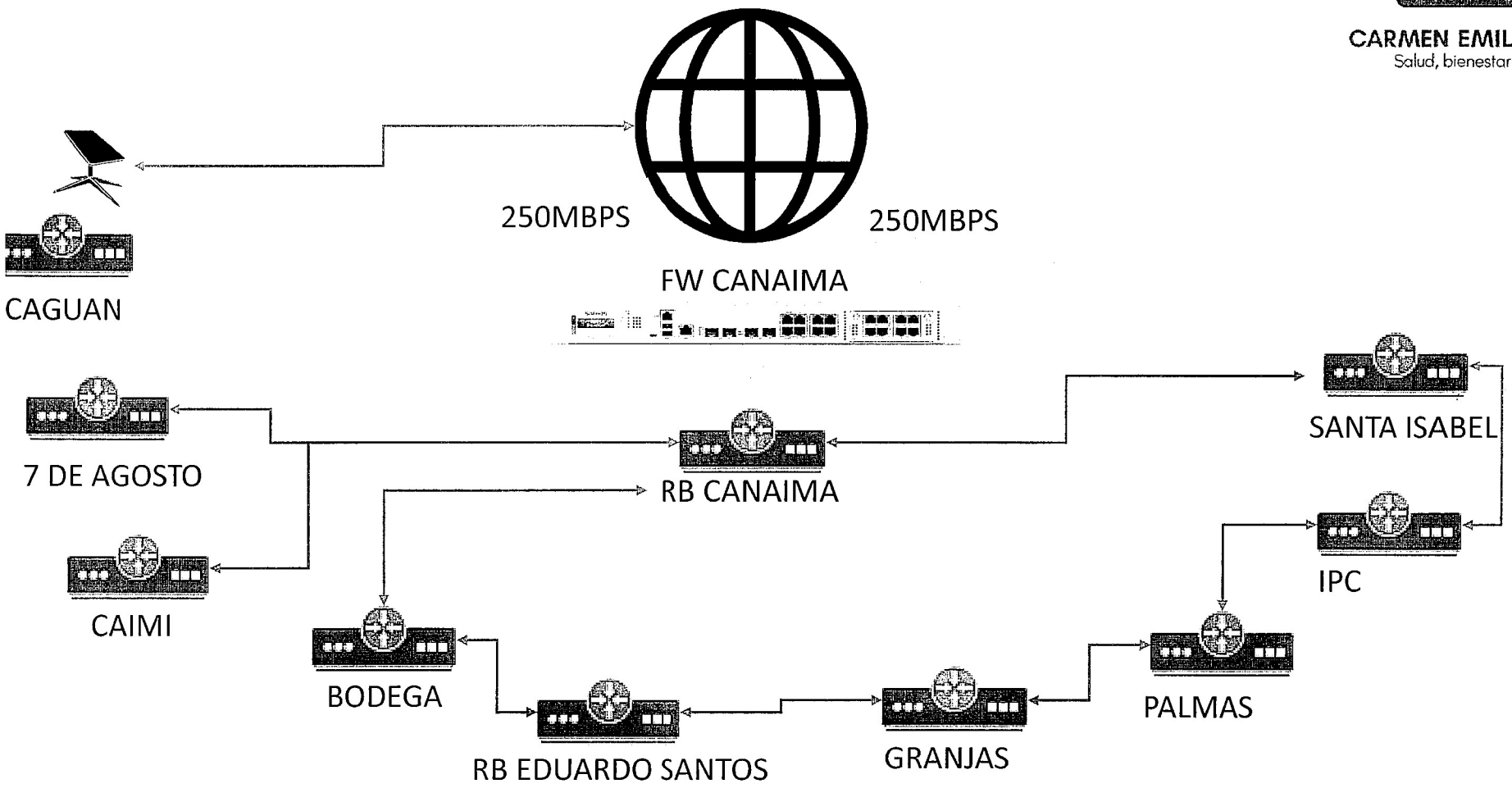
CARMEN EMILIA OSPINA
Salud, bienestar y dignidad



AlpeSuriNet

TOPOLOGIA DE RED WAN ZONA URBANA

CARMEN EMILIA OSPINA
Salud, bienestar y dignidad



Sedes	Anchos de Banda	Total sin Iva	Total sin Iva	Total Con Iva	Valor Por Hora	Numero de Horas	Horas Prestadas	% Disponibilidad	% de descuento	Valor del descuento	Valor a facturar por sede	Días de servio	Valor en horas
Servicio de Internet Dedicado Sede Canaima	250	2.585.746	1.896.214	2.256.494	$ 4.274	0	528	100	0%	$0	2.256.494	22	528
Sede Palmas	FIBRA OSCURA	955.300	969.573	1.153.792	$ 2.185	0	528	100	0%	$0	1.153.792		
Sede Caimi	100	983.500	721.233	858.268	$ 1.626	0	528	100	0%	$0	858.268		
Sede 7 de Agosto	100	983.500	721.233	858.268	$ 1.626	0	528	100	0%	$0	858.268		
Sede Eduardo Santos	FIBRA OSCURA	955.300	700.553	833.658	$ 1.579	0	528	100	0%	$0	833.658		
Sede Granjas	FIBRA OSCURA	955.300	700.553	833.658	$ 1.579	0	528	100	0%	$0	833.658		
Sede IPC	FIBRA OSCURA	955.300	700.553	833.658	$ 1.579	0	528	100	0%	$0	833.658		
Sede Santa Isabel	FIBRA OSCURA	955.300	700.553	833.658	$ 1.579	0	528	100	0%	$0	833.658		
Sede Bodega	FIBRA OSCURA	0	0	0	$ -	0	528	100	0%	$0	-		
Sede Caguan	30	445.000	326.333	388.337	$ 735	0	528	100	0%	$0	388.337		
Sede Fortalecillas	30	445.000	326.333	388.337	$ 735	0	528	100	0%	$0	388.337		
Sede San Francisco	10	430.000	315.333	375.247	$ 711	0	528	100	0%	$0	375.247		
Sede Triunfo	10	430.000	315.333	375.247	$ 711	0	528	100	0%	$0	375.247		
Sede San Antonio	10	430.000	315.333	375.247	$ 711	0	528	100	0%	$0	375.247		
Sede San Luis	20	670.000	491.333	584.687	$ 1.107	0	528	100	0%	$0	584.687		
Sede Vegalarga	30	445.000	326.333	388.337	$ 735	0	528	100	0%	$0	388.337		
Sede Chapinero	10	430.000	315.333	375.247	$ 711	0	528	100	0%	$0	375.247		
Sede El Cedral	10	430.000	315.333	375.247	$ 711	144	384	72,72727	60%	$225.148	150.099		
Sede Aipecito	10	430.000	315.333	375.247	$ 711	0	528	100	0%	$0	375.247		
Sede Palestina	10	430.000	315.333	375.247	$ 711	144	384	72,72727	60%	$225.148	150.099		
Sede Palacio	10	430.000	315.333	375.247	$ 711	0	528	100	0%	$0	375.247		
Sede Santa Helena	10	430.000	315.333	375.247	$ 711	528	0	0	100%	$375.247	-		
Sede Guacirco	30	445.000	326.333	388.337	$ 735	0	528	100	0%	$0	388.337		
Sede Peñas Blancas	10	430.000	315.333	375.247	$ 711	0	528	100	0%	$0	375.247		
Sede San Jorge	10	430.000	315.333	375.247	$ 711	528	0	0	100%	$375.247	-		
Sede Colegio	10	430.000	315.333	375.247	$ 711	144	384	72,72727	60%	$225.148	150.099		
Sede Piedra Marcada	10	430.000	315.333	375.247	$ 711	144	384	72,72727	60%	$225.148	150.099		
				0	$ -	0	528	100	0%	$0	-		
		17.369.246		15.477.695	$ 29.314					$1.651.085	**13.826.610**		
SOPHOS		5.389.590	3.952.366	4.703.316	$ 8.908			SOPHOS	3.952.366	**750.950**	**4.703.316**		
				20.181.011							**18.529.926**		

18.529.926

AlpaSurfnet

alpavisión

DATOS DEL INFORME	
PROYECTO	CPS 00009 del 2024
DESTINATARIO	ESE CARMEN EMILIA OSPINA
TIPO DE INFORME	Graficas Disponibilidad
NÚMERO DEL INFORME	1
PERIODO DEL INFORME	10 de enero al 31 de enero de 2025.
FECHA DE PRESENTACIÓN	21 de febrero de 2025

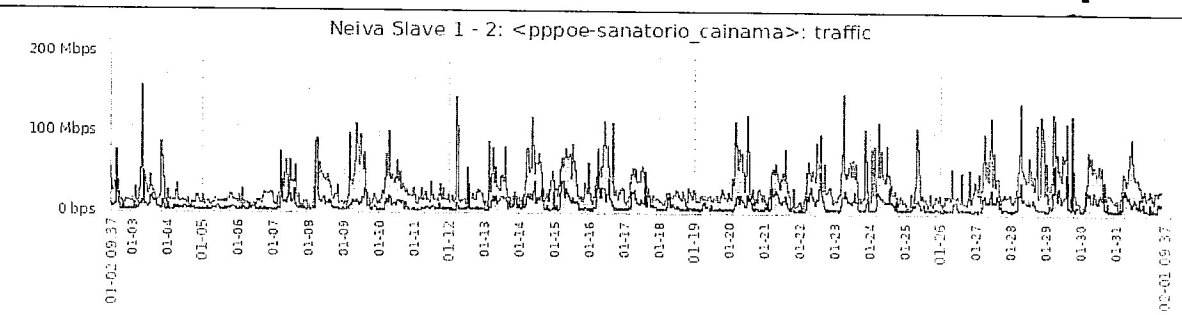
ITEM	SEDES
1	Servicio de Internet Dedicado Sede Canaima
2	Sede Palmas
3	Sede Caimi
4	Sede 7 de agosto
5	Sede Eduardo Santos
6	Sede Granjas
7	Sede IPC
8	Sede Santa Isabel
9	Sede Bodega
10	Sede Caguan
11	Sede Fortalecillas
12	Sede San Francisco
13	Sede Triunfo
14	Sede San Antonio
15	Sede San Luis
16	Sede Vegalarga
17	Sede Chapinero
18	Sede El Cedral
19	Sede Aipecito
20	Sede Palestina
21	Sede Palacio
22	Sede Santa Helena
23	Sede Guacirco
24	Sede Peñas Blancas
25	Sede San Jorge
26	Sede Colegio
27	Sede Piedra Marcada

Las siguientes gráficas muestran el consumo de cada una de las sedes urbanas y rurales de la ESE. Estos consumos hacen referencia a la cantidad de datos que fueron transferidos por los canales de datos instalados usando tecnologías de última milla como fibra óptica y radio enlace. El tráfico generado y transferido desde las sedes hacia los diferentes aplicativos y servicios (índigo, intranet, SIMAD, telefonía VoIP, entre otros) ubicados en Canaima se cuantificó en Megabytes (MB), Kilobytes (KB) y las tasas de transferencias en Megabits por segundo (Mbps) y Kilobits por segundo (Kbps). Éstos fueron reportados por los sistemas de gestión propios de ALPASURFNET.

AlpaSurfnet

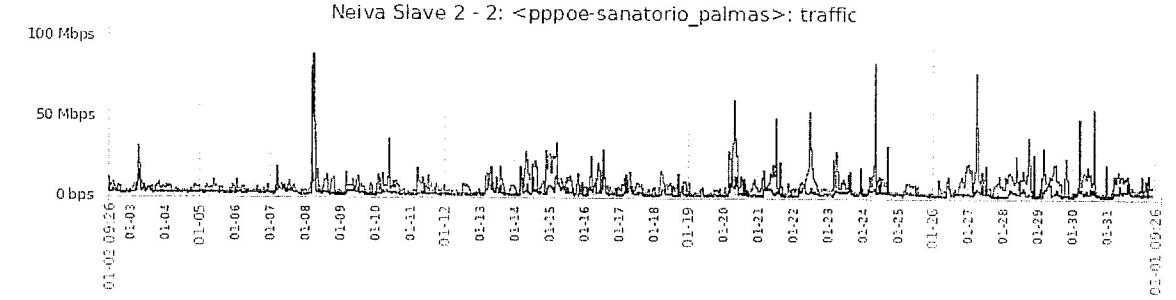
VISIÓN

1. Servicio de Internet Dedicado Sede Canaima



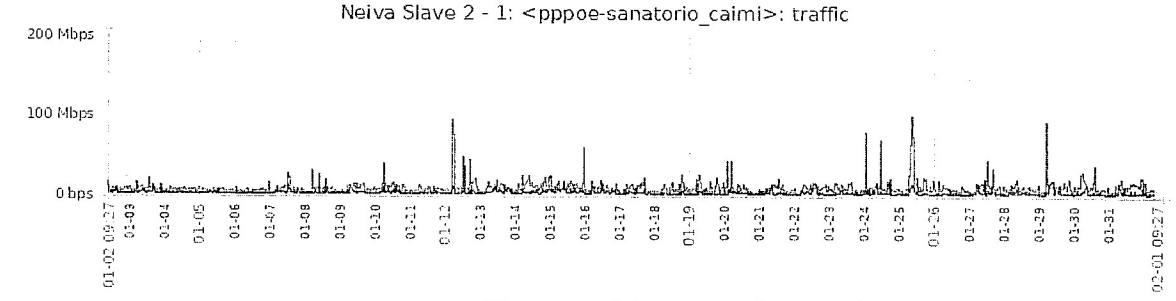
		último	mínimo	media	máximo
<pppoe-sanatorio_cainama>: bytes-out	[máximo]	27.12 Mbps	550.89 Kbps	18.35 Mbps	154.7 Mbps
<pppoe-sanatorio_cainama>: bytes-in	[máximo]	10.48 Mbps	489.34 Kbps	4.61 Mbps	121.5 Mbps

2. Sede Palmas



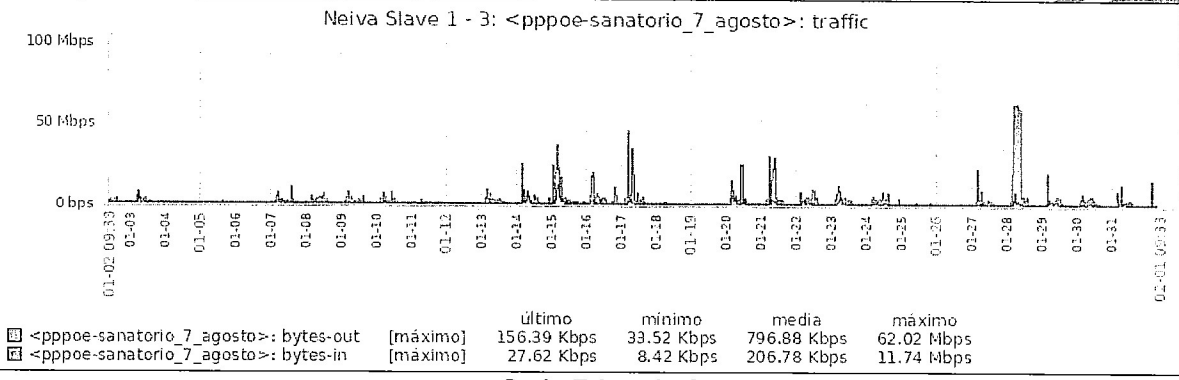
		último	mínimo	media	máximo
<pppoe-sanatorio_palmas>: bytes-out	[máximo]	6.64 Mbps	95.75 Kbps	3.53 Mbps	83.1 Mbps
<pppoe-sanatorio_palmas>: bytes-in	[máximo]	2.07 Mbps	102.3 Kbps	1.46 Mbps	87.68 Mbps

3. Sede Caimi

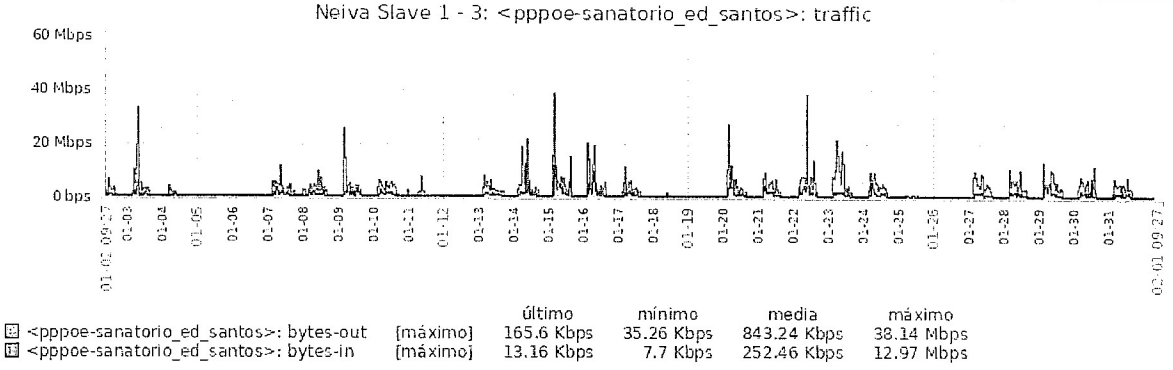


		último	mínimo	media	máximo
<pppoe-sanatorio_caimi>: bytes-out	[máximo]	8.01 Mbps	113.48 Kbps	4.1 Mbps	97.56 Mbps
<pppoe-sanatorio_caimi>: bytes-in	[máximo]	2.41 Mbps	80.58 Kbps	1.21 Mbps	33.56 Mbps

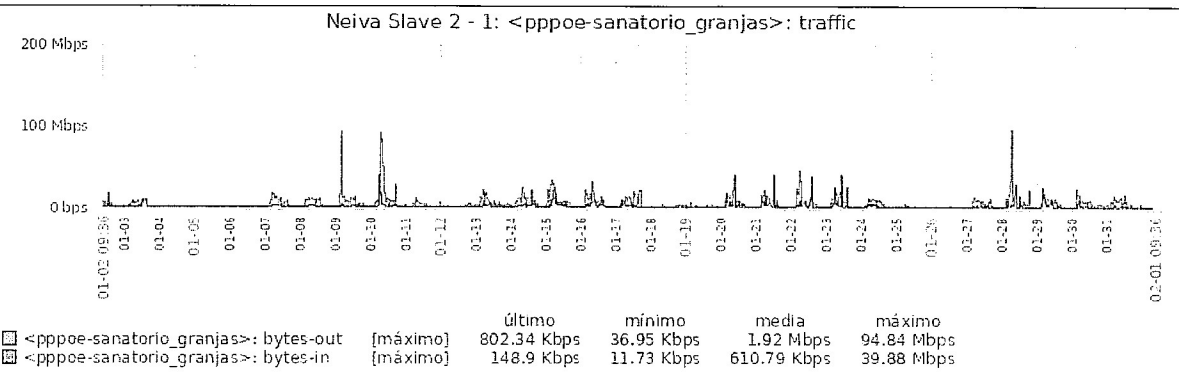
4. Sede 7 de agosto



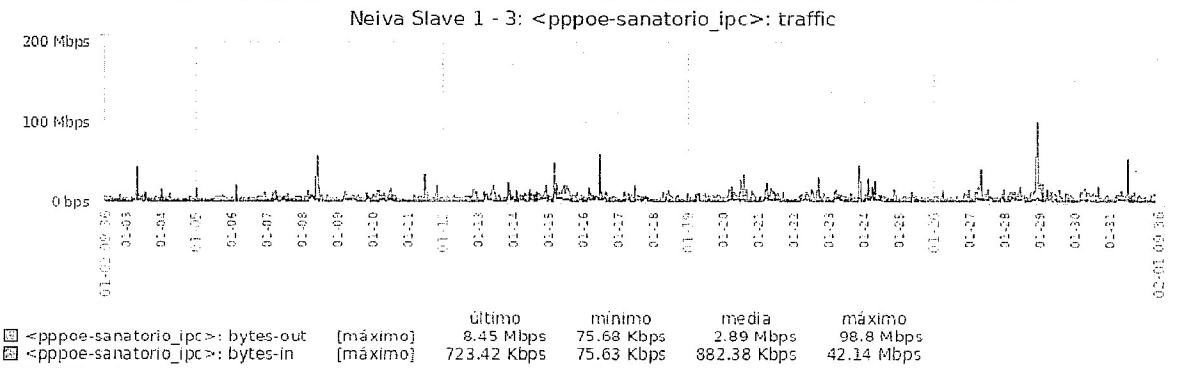
5. Sede Eduardo Santos



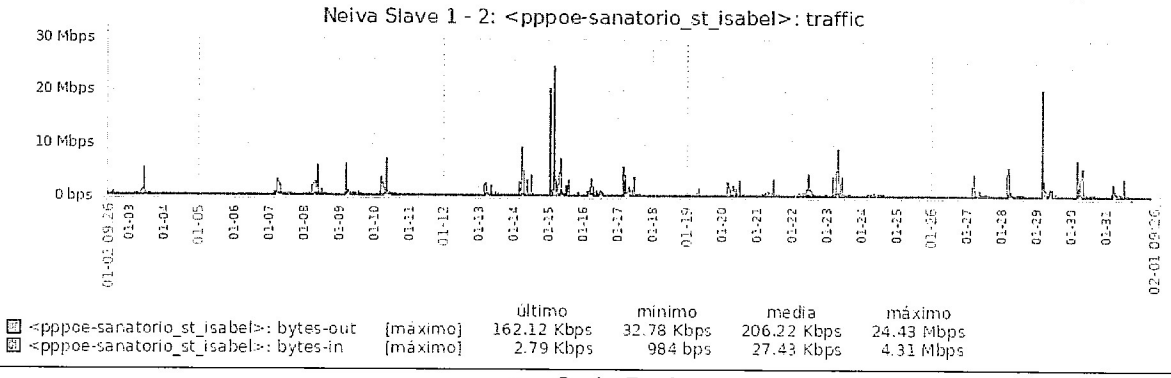
6. Sede Granjas



7. Sede IPC

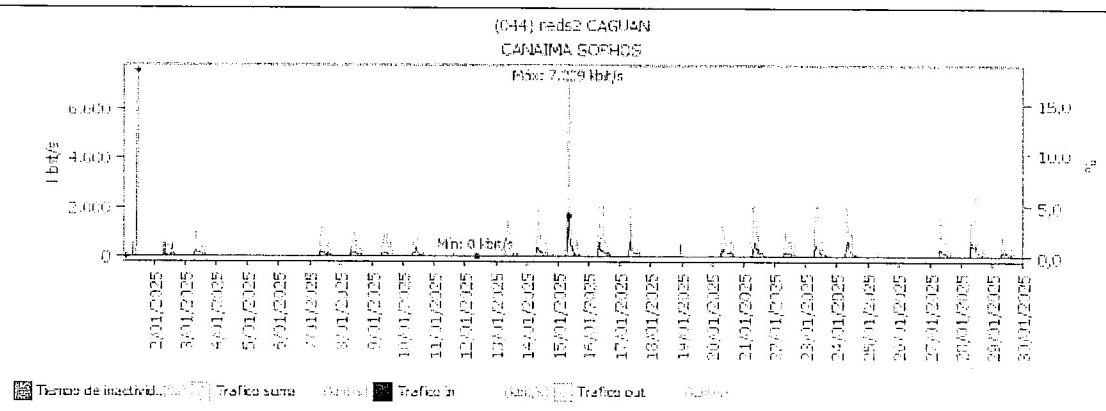


8. Sede Santa Isabel

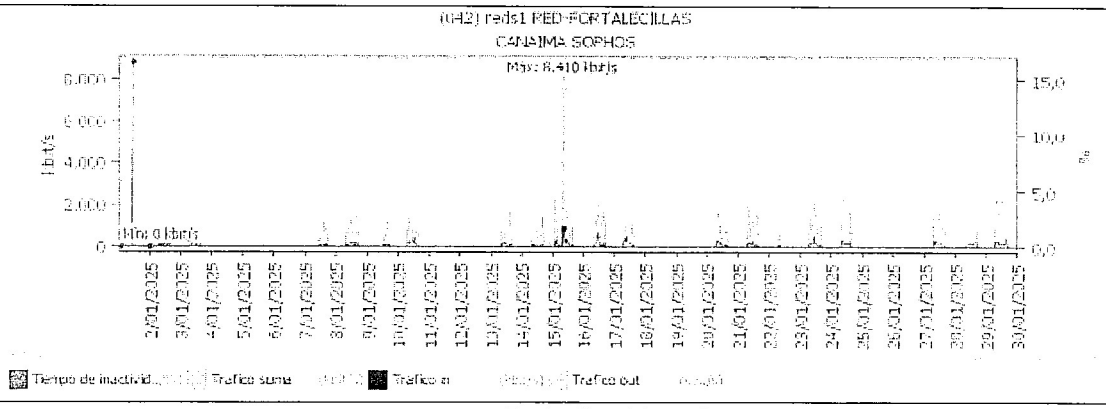


9. Sede Bodega

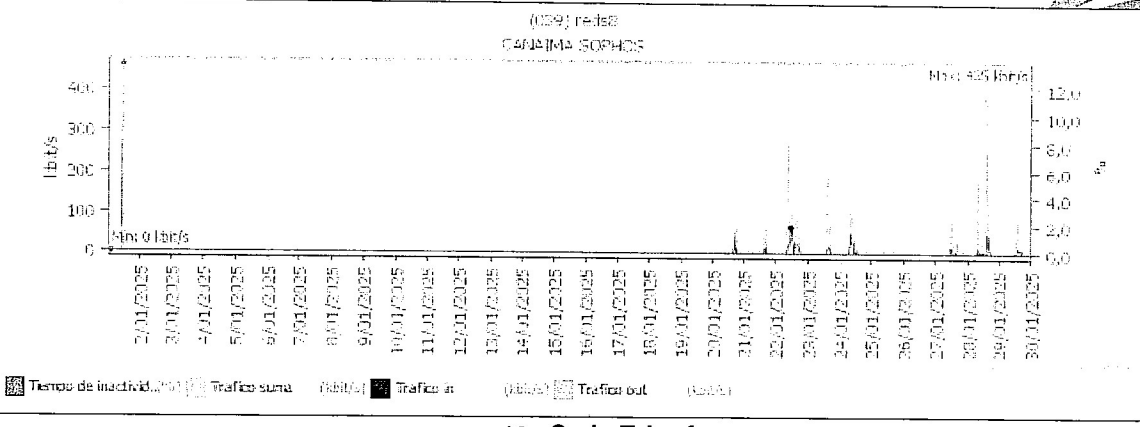
10. Sede Caguán



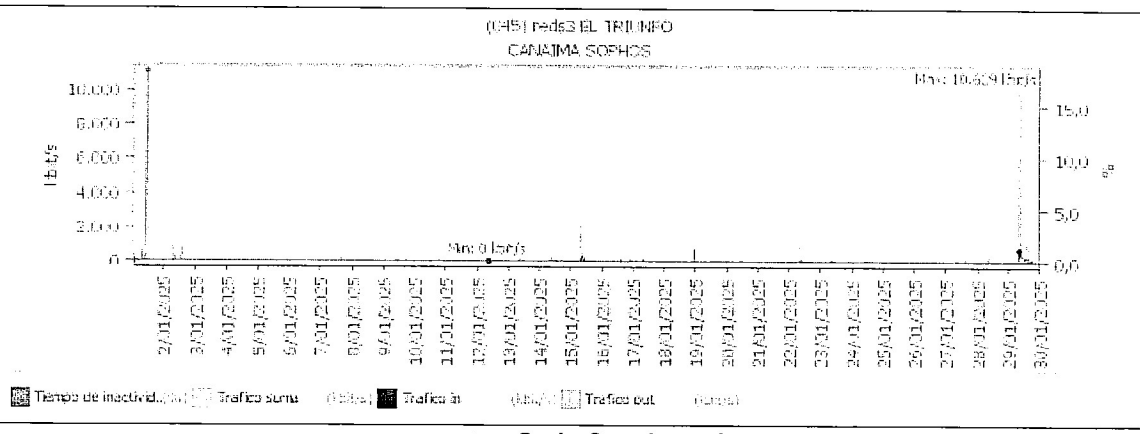
11. Sede Fortalecillas



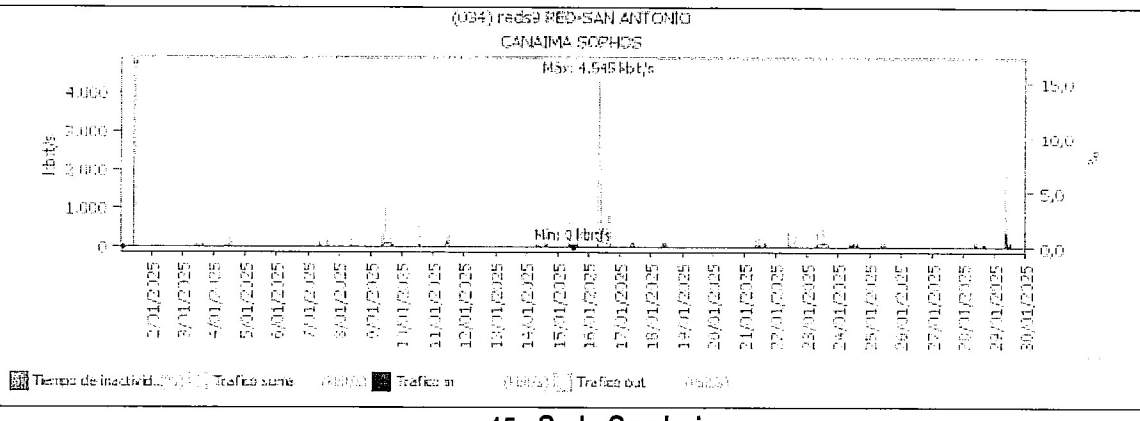
12. Sede San Francisco



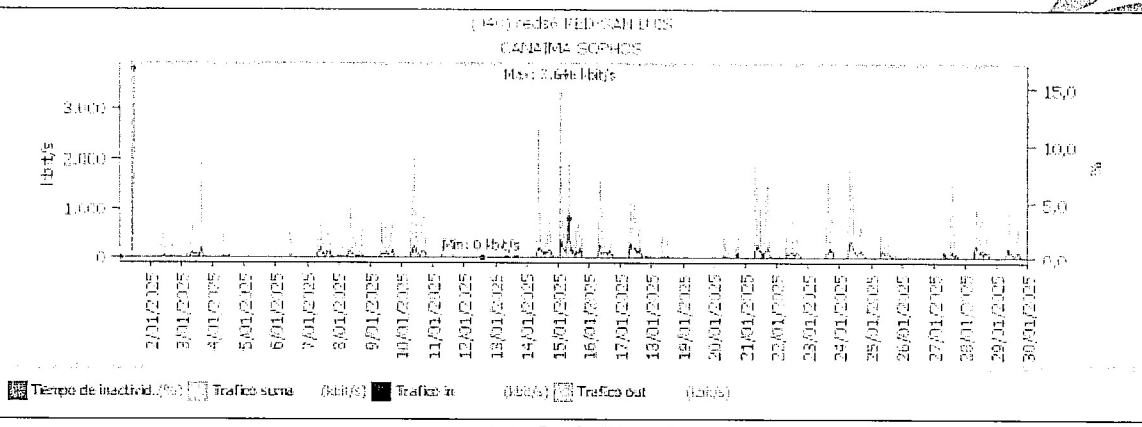
13. Sede Triunfo



14. Sede San Antonio

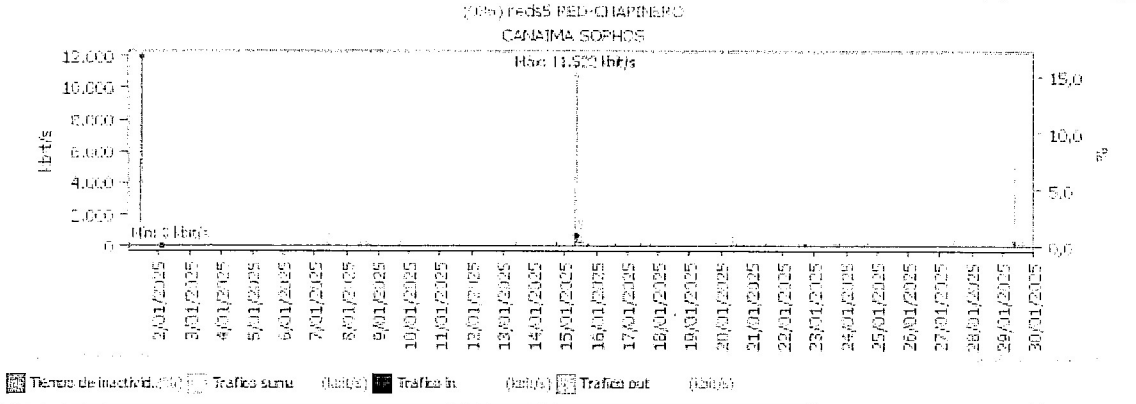


15. Sede San Luis



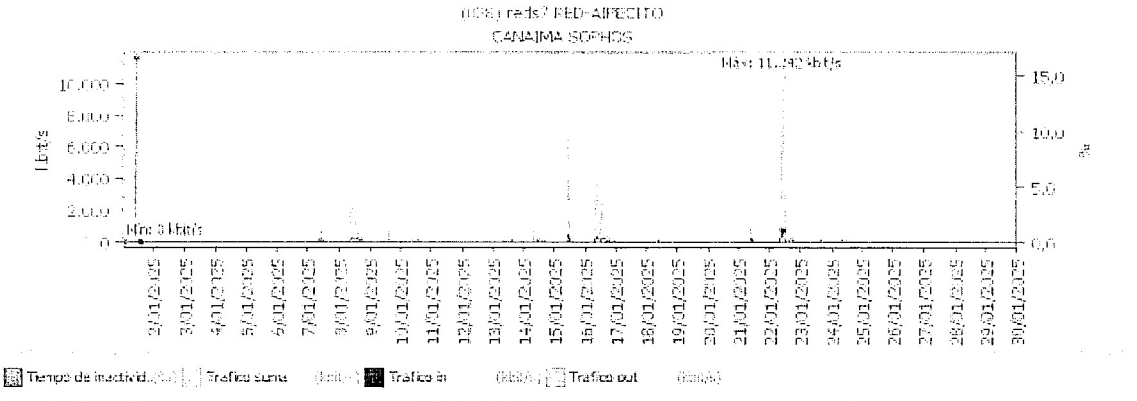
16. Sede Vegalarga

17. Sede Chapinero



18. Sede El Cedral

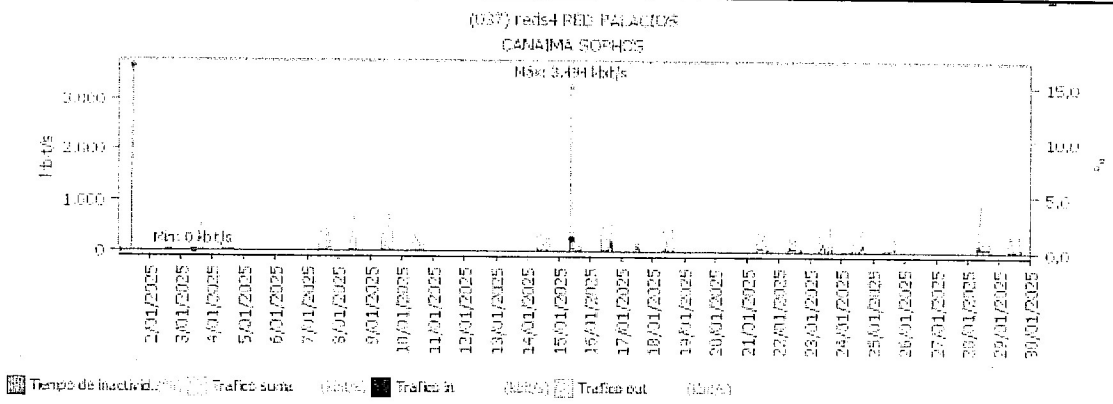
19. Sede Aipecito



20. Sede Palestina

urfnet
Visión

21. Palacio



22. Sede Santa Helena

23. Sede Guacirco

24. Sede Peñas Blancas

25. Sede San Jorge

26. Sede Colegio

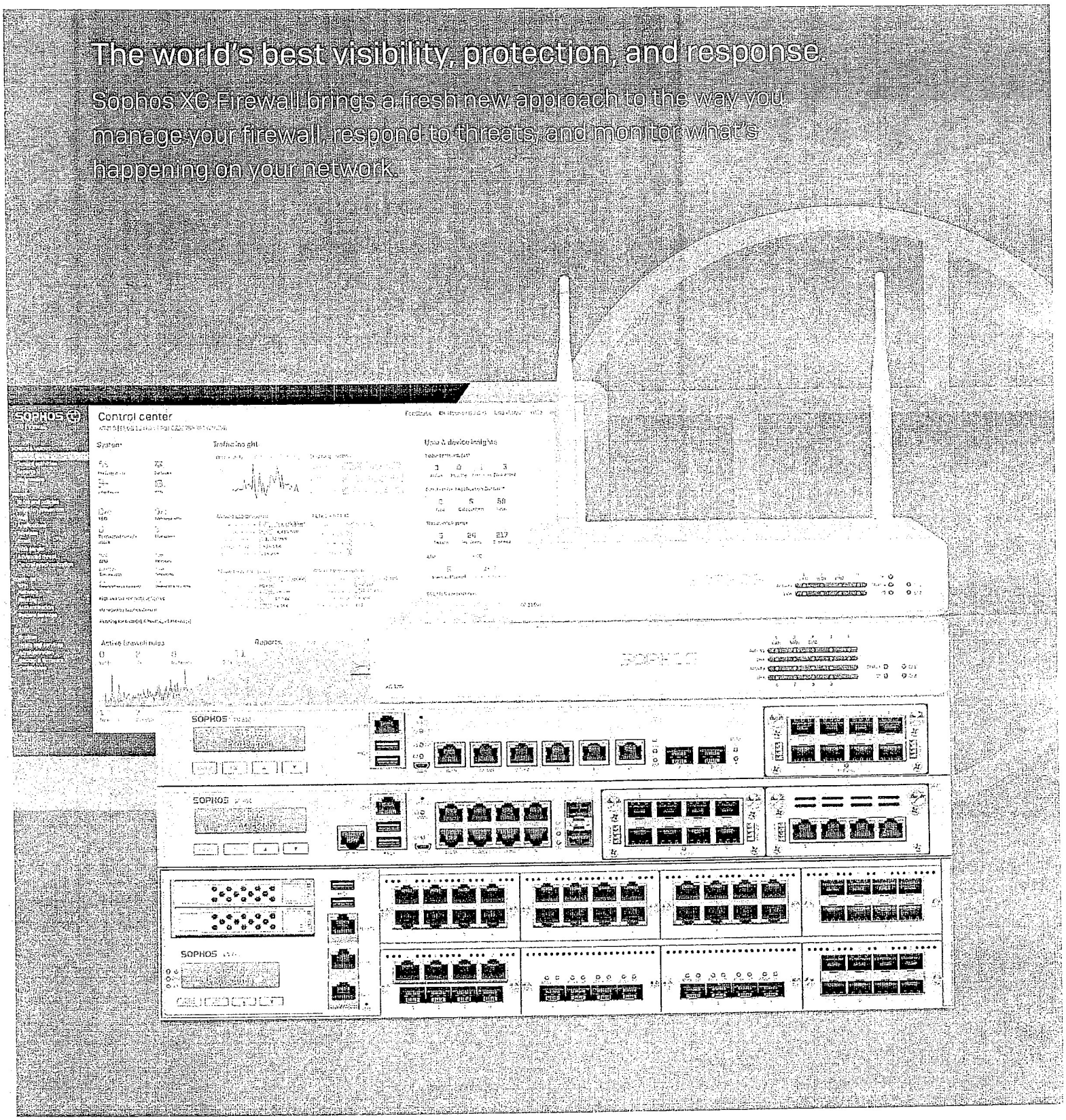
27. Sede Piedra Marcada

SOPHOS

Sophos XG Firewall

The world's best visibility, protection, and response

Sophos XG Firewall brings a fresh new approach to the way you manage your firewall, respond to threats, and monitor what's happening on your network.



Sedes	Anchos de Banda	Total sin Iva	Total sin Iva	Total Con Iva	Valor Por Hora	Numero de Horas	Horas Prestadas	% Disponibilidad	% de descuento	Valor del descuento	Valor a facturar por sede	Días de servio	Valor en horas
Servicio de Internet Dedicado Sede Canaima	250	2.585.746	2.585.746	3.077.038	$ 4.274	0	720	100	0%	$0	3.077.038	30	720
Sede Palmas	FIBRA OSCURA	955.300	969.573	1.153.792	$ 1.602	0	720	100	0%	$0	1.153.792		
Sede Caimi	100	983.500	983.500	1.170.365	$ 1.626	0	720	100	0%	$0	1.170.365		
Sede 7 de Agosto	100	983.500	983.500	1.170.365	$ 1.626	0	720	100	0%	$0	1.170.365		
Sede Eduardo Santos	FIBRA OSCURA	955.300	955.300	1.136.807	$ 1.579	0	720	100	0%	$0	1.136.807		
Sede Granjas	FIBRA OSCURA	955.300	955.300	1.136.807	$ 1.579	0	720	100	0%	$0	1.136.807		
Sede IPC	FIBRA OSCURA	955.300	955.300	1.136.807	$ 1.579	0	720	100	0%	$0	1.136.807		
Sede Santa Isabel	FIBRA OSCURA	955.300	955.300	1.136.807	$ 1.579	0	720	100	0%	$0	1.136.807		
Sede Bodega	FIBRA OSCURA	0	0	0	$ -	0	720	100	0%	$0	-		
Sede Caguan	30	445.000	445.000	529.550	$ 735	0	720	100	0%	$0	529.550		
Sede Fortalecillas	30	445.000	445.000	529.550	$ 735	0	720	100	0%	$0	529.550		
Sede San Francisco	10	430.000	430.000	511.700	$ 711	0	720	100	0%	$0	511.700		
Sede Triunfo	10	430.000	430.000	511.700	$ 711	0	720	100	0%	$0	511.700		
Sede San Antonio	10	430.000	430.000	511.700	$ 711	0	720	100	0%	$0	511.700		
Sede San Luis	20	670.000	670.000	797.300	$ 1.107	0	720	100	0%	$0	797.300		
Sede Vegalarga	30	445.000	445.000	529.550	$ 735	0	720	100	0%	$0	529.550		
Sede Chapinero	10	430.000	430.000	511.700	$ 711	0	720	100	0%	$0	511.700		
Sede El Cedral	10	430.000	430.000	511.700	$ 711	408	312	43,33333	100%	$511.700	-		
Sede Aipecito	10	430.000	430.000	511.700	$ 711	0	720	100	0%	$0	511.700		
Sede Palestina	10	430.000	430.000	511.700	$ 711	360	360	50	100%	$511.700	-		
Sede Palacio	10	430.000	430.000	511.700	$ 711	0	720	100	0%	$0	511.700		
Sede Santa Helena	10	430.000	430.000	511.700	$ 711	720	0	0	100%	$511.700	-		
Sede Guacirco	30	445.000	445.000	529.550	$ 735	0	720	100	0%	$0	529.550		
Sede Peñas Blancas	10	430.000	430.000	511.700	$ 711	0	720	100	0%	$0	511.700		
Sede San Jorge	10	430.000	430.000	511.700	$ 711	720	0	0	100%	$511.700	-		
Sede Colegio	10	430.000	430.000	511.700	$ 711	360	360	50	100%	$511.700	-		
Sede Piedra Marcada	10	430.000	430.000	511.700	$ 711	360	360	50	100%	$511.700	-		
				0	$ -	0	720	100	0%	$0	-		
		17.369.246		20.686.388	$ 28.731					$3.070.200	17.616.188		
SOPHOS		5.389.590	5.389.590	6.413.612	$ 8.908			SOPHOS	5.389.590	1.024.022	6.413.612		
				27.100.000							24.029.800		

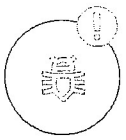
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Sophos XG Firewall

Sophos XG Firewall introduces an innovative approach to the way that you manage your firewall, and how you can detect and respond to threats on your network.

See it. Stop it. Secure it.

Our comprehensive next-generation firewall protection has been built to expose hidden risks, block both known and unknown threats, and automatically respond to incidents.



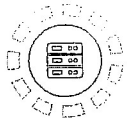
Exposes hidden risks

Sophos XG Firewall provides unrivaled visibility into risky users, unknown and unwanted apps, advanced threats, suspicious payloads, encrypted traffic and much more. Rich on-box reporting is built in and powerful centralized reporting for multiple firewalls is available, in the cloud.



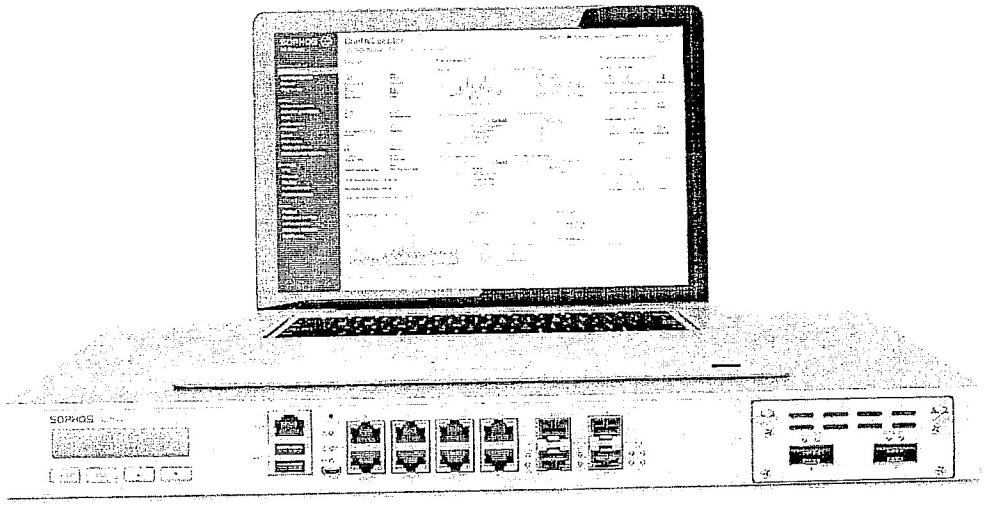
Blocks unknown threats

Sophos XG Firewall provides all the latest advanced technology you need to protect your network from ransomware and advanced threats including top-rated IPS, Advanced Threat Protection, Cloud Sandboxing and full AI-powered threat analysis. Dual AV, Web and App Control, Email Protection and a full-featured Web Application Firewall. You'll quickly be set up and managing



Automatically responds to incidents

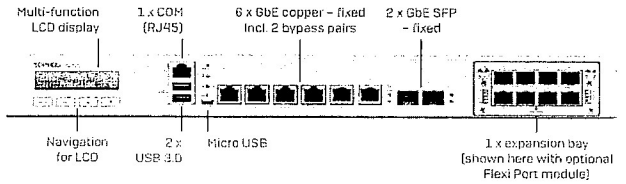
XG Firewall is the only network security solution that is able to fully identify the source of an infection on your network and automatically limit access to other network resources in response. This is made possible with our unique Sophos Security Heartbeat that shares telemetry and health status between Sophos endpoints and your firewall.



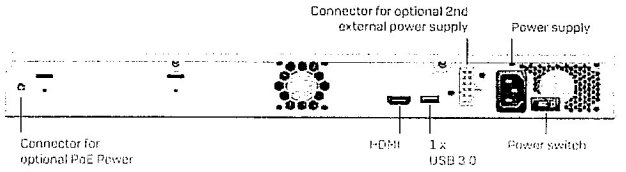
Sophos XG Series 1U: Distributed Edge
XG 210, XG 230

Technical Specifications

Front View



Back View



Environment	
Power consumption	XG 210: 19W, 65 BTU/hr (idle) 35W, 119 BTU/hr (full load) XG 230: 21W, 72 BTU/hr (idle) 41W, 141 BTU/hr (full load)
Operating temperature	0-40°C (operating) -20 to +80°C (storage)
Humidity	10%-90%, non-condensing

Product Certifications	
Certifications	CB, UL, CE, FCC Class A, ISED, VCCI, RCM, CCC, KC, BIS

Performance	XG 210 Rev. 3	XG 230 Rev. 2
Firewall throughput	29,000 Mbps	32,000 Mbps
Firewall IMIX	12,100 Mbps	14,800 Mbps
IPS throughput	4,200 Mbps	4,900 Mbps
NGFW throughput	3,200 Mbps	4,500 Mbps
Threat Protection throughput	800 Mbps	1,000 Mbps
Concurrent connections	6,570,000	6,570,000
New connections/sec	88,900	108,900
IPsec VPN throughput	1,920 Mbps	2,100 Mbps
Xstream SSL decryption + Threat Protection	230 Mbps	280 Mbps
Xstream SSL Concurrent connections	18,432	18,432

Physical interfaces	
Storage (local quarantine/logs)	Integrated SSD
Ethernet interfaces (fixed)	6 GbE copper (incl. 2 bypass pairs) 2 GbE SFP*
No. of Flexi Port slots	1
Flexi Port modules (optional)	8 port GbE copper 8 port GbE SFP* 2 port 10 GbE SFP+* 4 port 10 GbE SFP+* 2 port 40 GbE QSFP+* 4 port GbE PoE 8 port GbE PoE 4 port GE copper LAN bypass
Connectivity modules (optional)	SFP DSL module (VDSL2) SFP/SFP+ Transceivers
I/O ports	2 x USB 3.0 (front) 1 x Micro USB (front) 1 x USB 3.0 (rear) 1 x COM (RJ45) (front) 1 x HDMI (rear)
Display	Multi-function LCD module
Power supply	Internal auto-ranging 100-240VAC, 50-60 Hz Redundant PSU optional (external)

Physical specifications	
Mounting	1U rack mount (2 rackmount ears included)
Dimensions Width x Depth x Height	438 x 344.4 x 44 mm 17.24 x 13.56 x 1.75 inches
Weight	5.2 kg / 11.46 lb (unpacked) 7.7 kg / 16.98 lbs (packed)

* Transceivers (mini GBICs) sold separately

The Xstream Advantage

The XG Firewall Xstream architecture is engineered to deliver extreme levels of visibility, protection, and performance to help address some of the greatest challenges facing network administrators today.

Xstream SSL Inspection

According to the latest statistics, approximately 80% of web traffic is encrypted, making it invisible to most firewalls. An increasing amount of malware and potentially unwanted apps exploit the fact that organizations are simply not using SSL inspection. Network administrators' main fears are that SSL inspection will have a performance impact or cause something to break, impacting the user experience.

XG Firewall removes the blind spots caused by encrypted traffic by allowing you to use SSL inspection whilst maintaining performance efficiency.

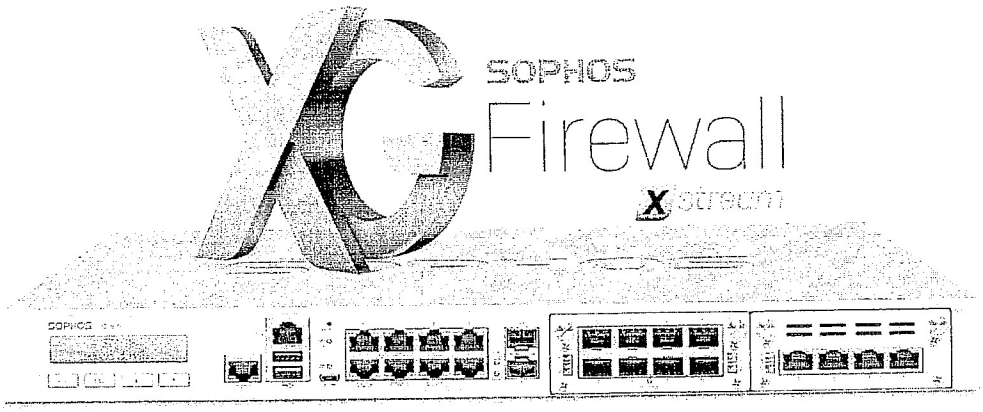
Xstream DPI Engine

We believe you should never have to decide between security and performance. XG Firewall includes a high-speed Deep Packet Inspection (DPI) engine to scan your traffic for threats without a proxy slowing down the process. The firewall stack can completely offload the processing to the DPI engine, significantly reducing latency and so improving overall efficiency.

XG Firewall provides robust deep packet threat protection in a single streaming engine for AV, IPS, Web, App Control and SSL inspection.

Xstream Network Flow FastPath

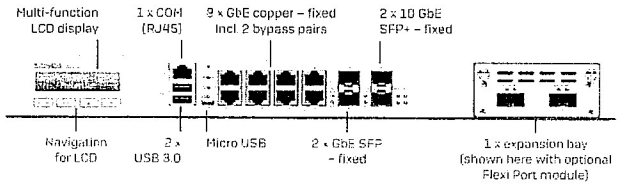
Traffic which is known to be secure can be offloaded to the Xstream Network Flow FastPath. This accelerated path for trusted traffic boosts performance dramatically by freeing up resources from unnecessary traffic inspection tasks. This is particularly important for voice and video applications which are very sensitive to latency and so can quickly lead to a degradation of the user experience. XG Firewall includes automatic and policy-based intelligent offloading for trusted traffic processing at wire speed.



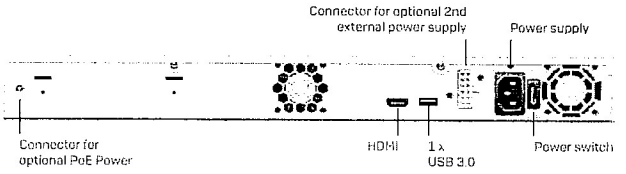
Sophos XG Series 1U: Distributed Edge
XG 310, XG 330

Technical Specifications

Front View



Back View



Environment	
Power consumption	XG 310: 32W, 109 BTU/hr (idle) 49W, 167 BTU/hr (full load) XG 330: 36W, 122 BTU/hr (idle) 54W, 184 BTU/hr (full load)
Operating temperature	0-40°C (operating) -20 to +80°C (storage)
Humidity	10%-90%, non-condensing

Product Certifications	
Certifications	CB, UL, CE, FCC Class A, ISED, VCCI, RCM, CCC, KC, BIS

Performance	XG 310 Rev.2	XG 330 Rev.2
Firewall throughput	35,000 Mbps	38,000 Mbps
Firewall IMIX	21,200 Mbps	24,200 Mbps
IPS throughput	7,200 Mbps	10,000 Mbps
NGFW throughput	5,300 Mbps	9,300 Mbps
Threat Protection throughput	1,550 Mbps	2,100 Mbps
Concurrent connections	10,170,000	10,490,000
New connections/sec	138,000	140,000
IPsec VPN throughput	3,050 Mbps	3,940 Mbps
Xstream SSL decryption + Threat Protection	370 Mbps	560 Mbps
Xstream SSL Concurrent connections	55,296	55,296

Physical interfaces	
Storage (local quarantine/logs)	Integrated SSD
Ethernet interfaces (fixed)	8 GbE copper (incl. 2 bypass pairs) 2 GbE SFP* 2 10 GbE SFP+*
No. of Flexi Port slots	1
Flexi Port modules (optional)	8 port GbE copper 8 port GbE SFP* 2 port 10 GbE SFP+* 4 port 10 GbE SFP+* 2 port 40 GbE QSFP+* 4 port GbE PoE 8 port GbE PoE 4 port GbE copper LAN bypass
Connectivity modules (optional)	SFP DSL module (VDSL2) SFP/SFP+ Transceivers
I/O ports	2 x USB 3.0 (front) 1 x Micro USB (front) 1 x USB 3.0 (rear) 1 x COM (RJ45) (front) 1 x HDMI (rear)
Display	Multi-function LCD module
Power supply	Internal auto-ranging 100-240VAC, 50-60 Hz Redundant PSU optional (external)

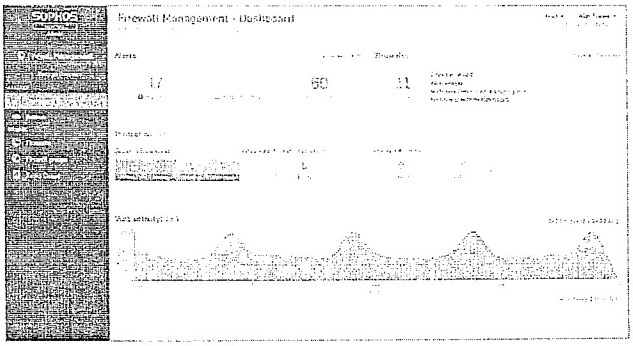
Physical specifications	
Mounting	1U rack mount (2 rackmount ears included)
Dimensions Width x Depth x Height	438 x 405.5 x 44 mm 17.24 x 15.96 x 1.75 inches
Weight	5.8 kg / 12.78 lbs (unpacked) 8.8 kg / 19.4 lbs (packed)

* Transceivers (mini GBICs) sold separately

Sophos Central

Sophos Central is at the heart of everything we do. Our cloud management platform provides a single pane of glass to not only manage your firewalls, but also your full portfolio of Sophos security solutions.

Central Management



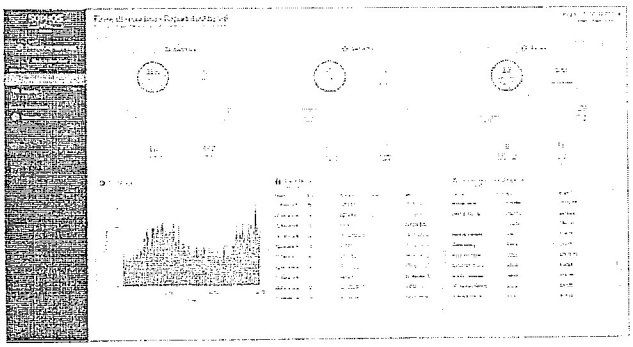
Simply manage multiple firewalls

Sophos Central is the ultimate cloud-management platform - for all your Sophos products. It makes day-to-day setup, monitoring, and management of your XG Firewall easy. It also provides helpful features such as alerting, backup management, one-click firmware updates and rapid provisioning of new firewalls.

- Manage all your XG Firewalls and other Sophos products from a single console
- Configure changes and apply them to a group of firewalls or manage each firewall individually
- Create a backup schedule and store up to 5 backups in the cloud

Note: Central Management is available at no extra cost.

Central Reporting



Firewall Reporting in the cloud

Sophos Central includes powerful reporting tools that enable you to visualize your network, web, application activity, and security over time. You get a flexible reporting experience that combines a variety of built-in reports with powerful tools to create your own custom reports – enabling you to report what you want, how you want.

- Increase your visibility into network activity through analytics
- Analyze data to identify security gaps, suspicious user behavior or other events requiring policy changes
- Use the pre-defined modules or customize each report for specific use cases

Note: Central Reporting is available at no extra cost for the storage of up to 7 days of report data. Premium options with longer data retention are available for optional purchase.

Zero-touch Deployment

Using Sophos Central, you can create a configuration for an XG firewall which you can then deploy at your convenience, for example, at a remote site. There is no need for technical staff on-site, simply provide the configuration file, store it on a USB key and boot the appliance with the USB key connected.

Learn more about the Sophos Central Ecosystem at sophos.com/firewall-central.

Synchronized Security

Security Heartbeat™ - Your firewall and your endpoints are finally talking

Sophos XG Firewall is the only network security solution that is able to fully identify the user and source of an infection on your network and automatically limit access to other network resources in response. This is made possible with our unique Sophos Security Heartbeat that shares telemetry and health status between Sophos endpoints and your firewall and integrates endpoint health into firewall rules to control access and isolate compromised systems.

The good news is, this all happens automatically, and is successfully helping numerous businesses and organizations to save time and money in protecting their environments today.

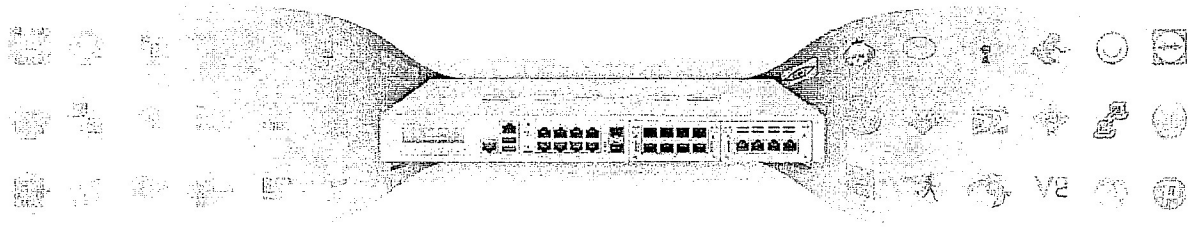
Synchronized Application Control

Using Security Heartbeat, we can do much more than just see the health status of an endpoint. We also have a solution to one of the biggest problems most network administrators face today - lack of visibility into network traffic.

Synchronized Application Control automatically identifies, classifies and controls encrypted, custom, evasive, and generic HTTP or HTTPS applications which are currently going unidentified.

What Next-Gen Firewalls See Today

What XG Firewall Sees



You can't control what you can't see. All firewalls today depend on static application signatures to identify apps But those don't work for most custom, obscure, evasive, or any apps using generic HTTP or HTTPS.

XG Firewall utilizes Synchronized Security to automatically identify, classify, and control all unknown applications easily blocking the apps you don't want and prioritizing the ones you do.

Lateral Movement Protection

Lateral Movement Protection automatically isolates compromised systems at every point in the network to stop attacks dead in their tracks. Healthy endpoints assist by ignoring all traffic from unhealthy endpoints, enabling complete isolation, even on the same network segment, to prevent threats and active adversaries from spreading or stealing data.

Synchronized User ID

User authentication is critically important in a next-generation firewall but often challenging to implement in a seamless and transparent way. Synchronized User ID eliminates the need for client or server authentication agents by sharing user identity between the endpoint and the firewall through Security Heartbeat. It's just another great benefit of having your firewall and endpoints integrated and sharing information.

Synchronized SD-WAN - Powerful, reliable application routing

Synchronized SD-WAN harnesses the power of Synchronized Security to optimize WAN path selection for your important business applications.

With Synchronized Application Control, discovered applications, which would otherwise be unknown, can be used for traffic matching criteria in SD-WAN routing policies. This is yet another way that Synchronized Security can improve the efficiency of your network.

Protection Modules

You can choose from a number of modules to customize the protection offered by your firewall to your individual needs and deployment scenario.

Network Protection
All the protection you need to stop sophisticated attacks and advanced threats while providing secure network access to those you trust.

Next-gen Intrusion Prevention System
Provides advanced protection from all types of modern attacks. It goes beyond traditional server and network resources to protect users and apps on the network as well.

Security Heartbeat
Creates a link between your Sophos Central protected endpoints and your firewall to identify threats faster, simplify investigation and minimize impact from attacks. Easily incorporate Heartbeat status into firewall policies to automatically isolate compromised systems.

Advanced Threat Protection
Instant identification and immediate response to today's most sophisticated attacks. Multi-layered protection identifies threats instantly and Security Heartbeat provides an emergency response.

Advanced VPN technologies
Adds unique and simple VPN technologies including our clientless HTML5 self-service portal that makes remote access incredibly simple or utilize our exclusive light-weight secure SD-RED (Remote Ethernet Device) VPN technology.

Web Protection
Unmatched visibility and control over all your user's web and application activity.

Powerful user and group web policy
Provides enterprise-level Secure Web Gateway policy controls to easily manage sophisticated user and group web controls. Apply policies based upon uploaded web keywords indicating inappropriate use or behavior.

Application Control and QoS
Enables user-aware visibility and control over thousands of applications with granular policy and traffic-shaping (QoS) options based on application category, risk, and other characteristics. Synchronized Application Control automatically identifies all the unknown, evasive, and custom applications on your network.

Advanced Web Threat Protection
Backed by SophosLabs, our advanced engine provides the ultimate protection from today's polymorphic and obfuscated web threats. Innovative techniques like JavaScript emulation, behavioral analysis, and origin reputation help keep your network safe.

High-performance traffic scanning
Optimized for top performance, our Xstream SSL inspection provides ultra-low latency inspection and HTTPS scanning whilst maintaining performance.

See the **Licensing section** at the end of this document for details of all purchase options.

Email Protection
Consolidate your email protection with anti-spam, DLP, and encryption.

Integrated Message Transfer Agent
Ensures always-on business continuity for your email, allowing the firewall to automatically queue mail in the event servers become unavailable.

Live Anti-Spam
Provides protection from the latest spam campaigns, phishing attacks, and malicious attachments.

Self-serve Quarantine
Gives employees direct control over their spam quarantine, saving you time and effort.

SPX Email Encryption
Unique to Sophos, SPX makes it easy to send encrypted email to anyone, even those without any kind of trust infrastructure, using our patent-pending password-based encryption technology.

Data Loss Prevention
Policy-based DLP can automatically trigger encryption or block/notify based on the presence of sensitive data in emails leaving the organization.

Web Server Protection
Harden your web servers and business applications against hacking attempts while providing secure access.

Business Application Policy Templates
Pre-defined policy templates let you protect common applications like Microsoft Exchange Outlook Anywhere or SharePoint quickly and easily.

Protection from the latest hacks and attacks
With a variety of advanced protection technologies including URL and form hardening, deep-linking and directory traversal prevention, SQL injection and cross-site scripting protection, cookie signing and more.

Reverse proxy
With authentication options, SSL offloading, and server load balancing ensure maximum protection and performance for your servers being accessed from the internet.

Sandstorm Protection

AI-driven static and dynamic file analysis techniques combine to bring unprecedented threat intelligence to your firewall and so effectively identify and block ransomware, known and unknown threats.

How to buy Sandstorm Protection

Sandstorm Protection is available as an add-on subscription and is also included in our 'Plus' Bundles, e.g. EnterpriseGuard Plus, FullGuard Plus.

Powered by SophosLabs

Powered by the industry-leading SophosLabs, the Sandstorm Protection subscription includes a fully cloud-based threat intelligence and threat analysis platform. This provides deep learning-based file analysis, detailed analysis reporting and a threat meter to show the risk summary for a file.

We use layers of analytics to identify known and potential threats, reduce unknowns and derive verdicts and intelligence reports for the most commonly used file types.

Static File Analysis

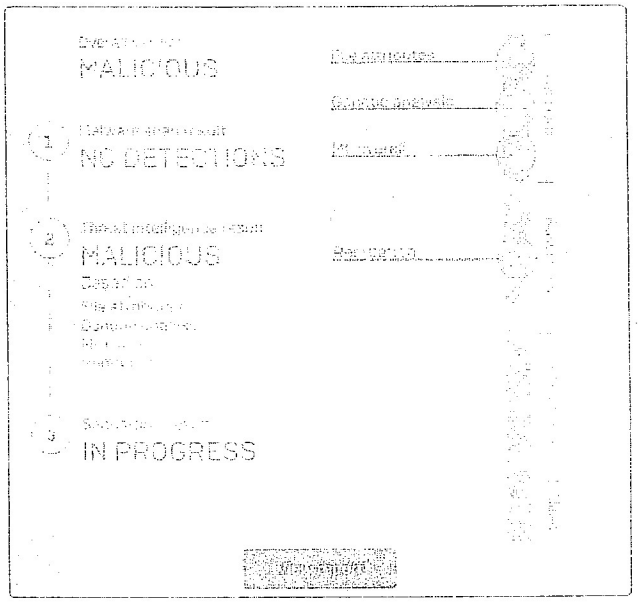
By harnessing the power of multiple machine learning models, global reputation, deep file scanning, and more, you can quickly identify threats without the need to execute the files in real time.

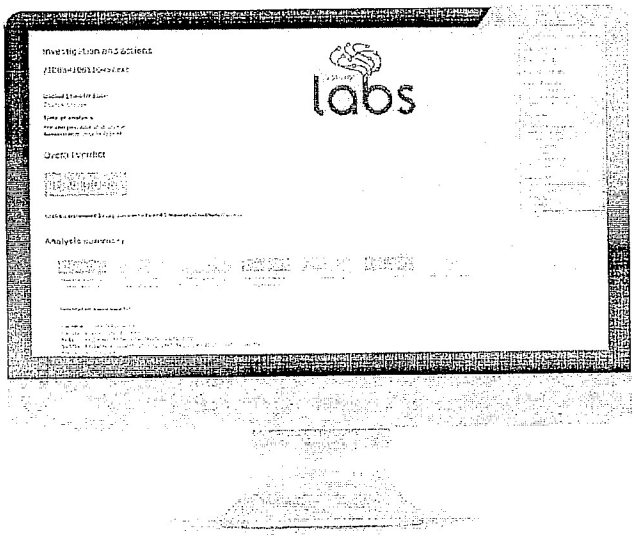
Dynamic File Analysis

Execute a file in a secure cloud-based sandbox to observe its behavior and intent. Screenshots provide added insight into any key events during the analysis.

Threat Intelligence Analysis Reporting

Rich intelligence reports provide you with much more than just a 'good', 'bad', or 'unknown' verdict. Full insight into the nature and capabilities of a threat are delivered through the use of data science and SophosLabs research.





Sophos XG Series Appliances – at a glance

Our XG Series hardware appliances are purpose-built with the latest multi-core technology, generous RAM provisioning, and solid-state storage. Whether you're protecting a small business or a larger distributed enterprise, you're getting industry leading performance.

Product Matrix

Model	Tech Specs					Throughput*				
	Revision #	Form Factor	Ports/Slots (Max Ports)	w-model*	Swappable Components	Firewall (Mbps)	IPsec VPN (Mbps)	NGFW (Mbps)	Threat Protection (Mbps)	Xstream SSL (Mbps)
XG 86(w)	1	desktop	4	Wi-Fi 5	n/a	3,100	225	350	145	75
XG 106(w)	1	desktop	4	Wi-Fi 5	opt. ext. Power	3,550	330	400	150	75
XG 115(w)	3	desktop	4	Wi-Fi 5	opt. ext. Power	4,000	560	1,000	375	130
XG 125(w)	3	desktop	9/1 (9)	Wi-Fi 5	opt. ext. Power, 3G/4G	7,000	1,500	1,275	400	170
XG 135(w)	3	desktop	9/1 (9)	Wi-Fi 5	opt. ext. Power, 3G/4G, Wi-Fi**	7,500	1,700	1,800	600	210
XG 210	3	1U	8/1 (16)	n/a	opt. ext. Power	29,000	1,920	3,200	800	230
XG 230	2	1U	8/1 (16)	n/a	opt. ext. Power	32,000	2,100	4,500	1,000	280
XG 310	2	1U	12/1 (20)	n/a	opt. ext. Power	35,000	3,050	5,300	1,550	370
XG 330	2	1U	12/1 (20)	n/a	opt. ext. Power	38,000	3,940	9,300	2,100	560
XG 430	2	1U	10/2 (26)	n/a	opt. ext. Power	55,000	5,000	10,000	2,200	600
XG 450	2	1U	10/2 (26)	n/a	opt. int. Power	65,000	6,100	13,900	3,400	770
XG 550	2	2U	8/4 (32)	n/a	Power, SSD, Fan	75,000	8,500	15,300	6,000	1,000
XG 650	2	2U	8/6 (48)	n/a	Power, SSD, Fan	85,000	9,000	18,000	7,700	1,350
XG 750	2	2U	8/8 (64)	n/a	Power, SSD, Fan	100,000	12,500	19,200	9,400	1,400

* 802.11ac Wave 2

** 2nd Wi-Fi module option on 135w only (requires XG v17 MR6 or higher)

What you get with every XG Series appliance

- Full Wireless Protection included in the Base License
- On-box reporting or reporting for 7 days via Sophos Central
- Free management via Sophos Central
- The flexibility to add optional connectivity modules to adapt your firewall to changes in your environment

Note: The latest XG Firewall (SFOS) version 18.x requires at least 4 GB of RAM

Sophos XG Series Desktop: SMB and Branch Office

Our Desktop appliances offer the perfect balance between price and performance for your small business or branch offices. All models offer a range of built-in and add-on connectivity options. A 'w' at the end of the model name indicates that the appliance has built-in Wi-Fi.

XG 86 and XG 86w

These entry-level desktop firewalls are the ideal choice for budget-conscious small businesses, retail and small or home offices.

- Optionally available with integrated 802.11ac WLAN
- Fanless

Note: The XG 86 and 86w do not support some advanced features like on-box reporting, dual AV scanning, WAF AV scanning and the email message transfer agent (MTA) functionality. If you need these capabilities, the XG 106(w) is recommended.

See detailed technical specifications

XG 106, XG 106w, XG 115, XG 115w

These desktop firewall appliances offer an excellent price-to-performance ratio making them ideal for small businesses or branch offices. These models come equipped with 4 GbE copper ports built-in and 1 shared SFP interface, e.g. for use with our optional DSL modem or an SFP Fiber transceiver to connect the device to a server or switch. An optional second power supply provides an unmatched redundancy option in this product segment.

- Optionally available with integrated 802.11ac WLAN
- 4 GbE copper ports built-in and 1 shared SFP
- Optional second power supply

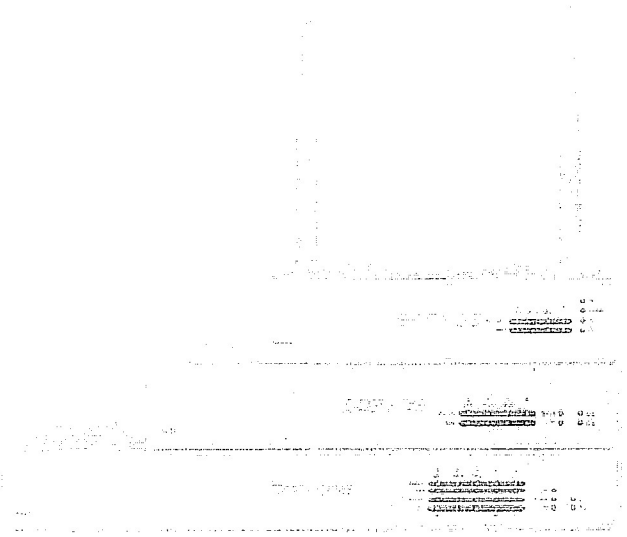
See detailed technical specifications

XG 125, XG 125w, XG 135, XG 135w

These powerful firewall appliances offer 1U performance with a desktop form factor and price. If you have a small business or branch offices to protect and are working on a tight budget, these models are the ideal choice. These models come equipped with 8 GbE copper ports built-in, plus 1 SFP port, e.g. for use with our optional DSL modem or an SFP Fiber transceiver to connect the device to a server or switch. An expansion bay provides the option to add additional connectivity such as our 3G/4G module. A 2nd Wi-Fi radio module is also available for the XG 135w. An optional second power supply ensures business continuity for these models.

- Optionally available with integrated 802.11ac WLAN
- 8 GbE copper ports built-in, plus 1 SFP port
- Expansion bay for optional 3G/4G module
- 2nd Wi-Fi radio module option for XG 135w
- Optional second power supply

See detailed technical specifications



Sophos XG Series 1U: Distributed Edge

Our 1U rackmount appliances are the ideal choice for mid-sized and distributed organizations looking for a choice of connectivity options and the flexibility to adapt the network as and when needs change. Our redundancy options in this range are second to none.

1U Short

XG 210, XG 230

The Sophos XG 210 and XG 230 are designed to protect small to mid-sized businesses and branch offices. Based on the latest multi-core technology and equipped with 6 GbE copper ports, 2 GbE SFP fiber ports plus one Flexi Port slot to configure with an optional module, they provide high flexibility and throughput at an excellent price-to-performance ratio. An external redundant power supply is optional for these models.

- 6 GbE copper ports plus 2 GbE SFP built-in
- One 'Flexi Port' modular bay to use with a range of optional LAN modules
- Optional 2nd external power supply

See detailed technical specifications

XG 310, XG 330

The Sophos XG 310 and XG 330 are scalable appliances suitable for distributed organizations or mid-sized companies. With solid-state drives for on-box reporting, logs and spam quarantine, they're highly responsive even in high traffic environments. Each model is equipped with 8 GbE copper ports, 2 GbE SFP fiber ports, 2 10 GbE SFP+ fiber ports plus one Flexi Port slot to configure with an optional module. They provide optimal performance and flexibility plus redundancy through an optional external power supply.

- 8 GbE copper ports, 2 GbE SFP plus 2 10 GbE SFP+ built-in
- One 'Flexi Port' modular bay to use with a range of optional LAN modules
- Optional 2nd external power supply

See detailed technical specifications

1U Long

XG 430, XG 450

The Sophos XG 430 and XG 450 offer optimal performance and efficiency for distributed organizations or larger mid-sized companies. The connectivity options are second to none for rack mountable appliances, with each model coming equipped with 8 GbE copper ports, 2 10 GbE SFP+ ports and 2 additional Flexi Port slots which you can configure with your choice of optional modules. For high-availability, the XG 450 also offers unparalleled redundancy features in a 1U appliance with a second SSD (RAID) integrated and an optional second power supply is available for both models.

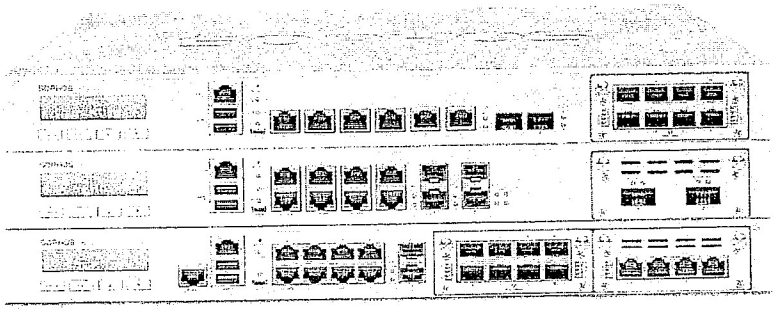
- 8 GbE copper ports plus 2 10 GbE SFP+ built-in
- Two 'Flexi Port' modular bays to use with a range of optional LAN modules
- 2nd SSD (RAID) integrated
- Optional 2nd internal power supply

See detailed technical specifications

Our connectivity tips:

With Sophos APX Series access points, you can manage your Wi-Fi networks using your firewall as a controller. And should you want to securely connect your smaller offices or remote locations to your main office, Sophos SD-RED is the ideal choice.

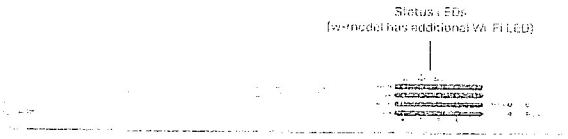
Find out more at the end of this brochure.



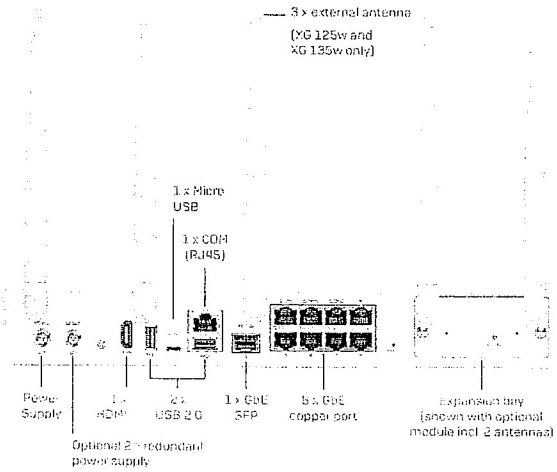
Sophos XG Series Desktop: SMB and Branch Office XG 125, XG 125w, XG 135, XG 135w

Technical Specifications

Front View



Back View



Environment	
Power consumption	18.6W, 63.426 BTU/hr (idle) 20.04W, 66.336 BTU/hr (full load)
Operating temperature	0-40°C (operating) -20 to +80°C (storage)
Humidity	10%-90%, non-condensing

Product Certifications	
Certifications	CB, UL, CE, FCC, ISED, VCCI, MIC (Japan), RCM, CCC, KC Planned: BIS

Performance	XG 125(w) Rev. 3	XG 135(w) Rev. 4
Firewall throughput	7,000 Mbps	7,500 Mbps
Firewall IMIX	3,500 Mbps	4,300 Mbps
IPS throughput	1,530 Mbps	1,900 Mbps
NGFW throughput	1,275 Mbps	1,800 Mbps
Threat Protection throughput	400 Mbps	600 Mbps
Concurrent connections	1,570,000	4,200,000
New connections/sec	29,300	37,200
IPsec VPN throughput	1,500 Mbps	1,700 Mbps
Xstream SSL decryption + Threat Protection	170 Mbps	210 Mbps
Xstream SSL Concurrent connections	8,192	12,288

Wireless Specification (XG 125w and XG 135w only)	
No. of antennas	3 external
MIMO capabilities	3 x 3:3
Wireless interface	802.11a/b/g/n/ac (2.4 GHz / 5 GHz)

Physical Interfaces	
Storage (local quarantine/logs)	Integrated SSD
Ethernet interfaces (fixed)	8 GbE copper 1 GbE SFP*
No. of expansion slots	1
Connectivity Modules (optional)	SFP DSL module (VDSL2) 3G/4G module 802.11ac Wi-Fi radio 2x2:2 (XG 135w only) SFP transceivers
I/O ports (rear)	2 x USB 2.0 1 x Micro-USB 1 x COM (RJ45) 1 x HDMI
Power supply	External auto ranging DC: 12V, 100-240VAC, 36W@50-60 Hz Redundant PSU optional (external)

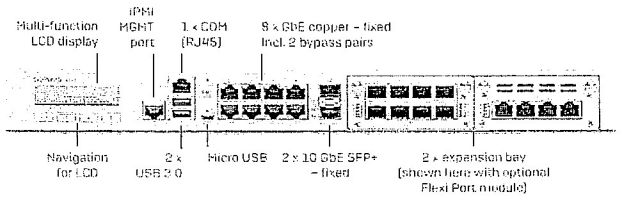
Physical specifications	
Mounting	Rackmount kit available (to be ordered separately)
Dimensions Width x Depth x Height	320 x 212 x 44 mm 12.60 x 8.35 x 1.73 inches
Weight	1.9 kg / 4.19 lbs (unpacked) 3.3 kg / 7.27 lbs (packed) (w models minimally higher)

* SFP transceivers sold separately

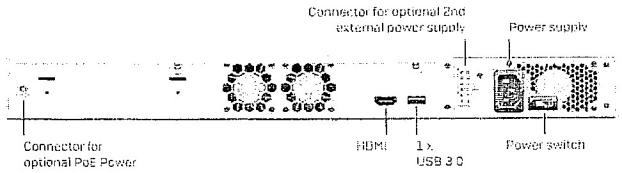
Sophos XG Series 1U: Distributed Edge
XG 430, XG 450

Technical Specifications

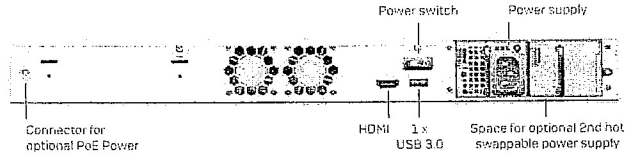
Front View



Back View XG 430



Back View XG 450



Environment

Power consumption	XG 430: 28W, 96 BTU/hr (idle) 79W, 270 BTU/hr (full load) XG 450: 31W, 107 BTU/hr (idle) 83W, 283 BTU/hr (full load)
Operating temperature	0-40°C (operating) -20 to +80°C (storage)
Humidity	10%-90%, non-condensing

Product Certifications

Certifications	CB, UL, CE, FCC Class A, ISED, VCCI, RCM, CCC, KC, BIS

Performance	XG 430 Rev. 2	XG 450 Rev. 2
Firewall throughput	55,000 Mbps	65,000 Mbps
Firewall IMIX	26,900 Mbps	34,000 Mbps
IPS throughput	10,800 Mbps	14,700 Mbps
NGFW throughput	10,000 Mbps	13,900 Mbps
Threat Protection throughput	2,200 Mbps	3,400 Mbps
Concurrent connections	13,640,000	13,640,000
New connections/sec	146,000	187,000
IPsec VPN throughput	5,000 Mbps	6,100 Mbps
Xstream SSL decryption + Threat Protection	600 Mbps	770 Mbps
Xstream SSL Concurrent connections	102,400	102,400

Physical Interfaces		
Storage (local quarantine/logs)	integrated SSD	2 x integrated SSD
Ethernet interfaces (fixed)	8 GbE copper (incl. 2 bypass pairs) 2 10 GbE SFP+*	
No. of Flexi Port slots	2	
Flexi Port modules (optional)	8 port GbE copper 8 port GbE SFP* 2 port 10 GbE SFP+* 4 port 10 GbE SFP+* 2 port 40 GbE QSFP+* 4 port GbE PoE 8 port GbE PoE 4 port GbE copper LAN bypass	
Connectivity modules (optional)	SFP DSL module (VDSL2) SFP/SFP+ Transceivers	
I/O ports	2 x USB 3.0 (front) 1 x Micro USB (front) 1 x USB 3.0 (rear) 1 x COM (RJ45) (front) 1 x IPMI (front) 1 x HDMI (rear)	
Display	Multi-function LCD module	
Power supply	Internal auto-ranging 100-240VAC, 50-60 Hz Redundant PSU optional (external)	Internal auto-ranging 100-240VAC, 50-60 Hz Hot Swap Redundant PSU optional (internal)

Physical Specifications

Mounting	1U rackmount (sliding rails incl.)	
Dimensions Width x Depth x Height	438 x 507.7 x 44 mm 17.24 x 19.99 x 1.75 inches	
Weight	7.6 kg / 16.76 lbs (unpacked) 13.7 kg / 30.2 lbs (packed)	7.8 kg / 17.2 lbs (unpacked) 14.8 kg / 32.63 lbs (packed)

* Transceivers (SFP/SFP+) sold separately

Sophos XG Series 2U: Performance and Data Center

Our 2U rackmount appliances are built for distributed enterprises looking for a firewall to handle higher traffic volumes. These models offer you the flexibility to tailor your connectivity to your environment and come with the redundancy features to keep your business running.

Performance

XG 550, XG 650

The Sophos XG 550 and XG 650 are high-performance firewalls equipped to provide protection for larger distributed and growing organizations. They offer CPU technology to effortlessly handle use as an all-in-one solution or a powerful next-generation firewall. The models offer either 4 (XG 550) or 6 (XG 650) Flexi Port expansion bays to tailor your connectivity to your environment. An 8 port GbE copper module is supplied as a default. Hot-swappable dual SSDs and power supplies are standard redundancy features in this class.

- 8 port GbE copper module supplied as default
- Multiple expansion bays to add connectivity modules incl. options for up to 40 GbE QSFP+
- Dual SSDs and power supplies

See detailed technical specifications

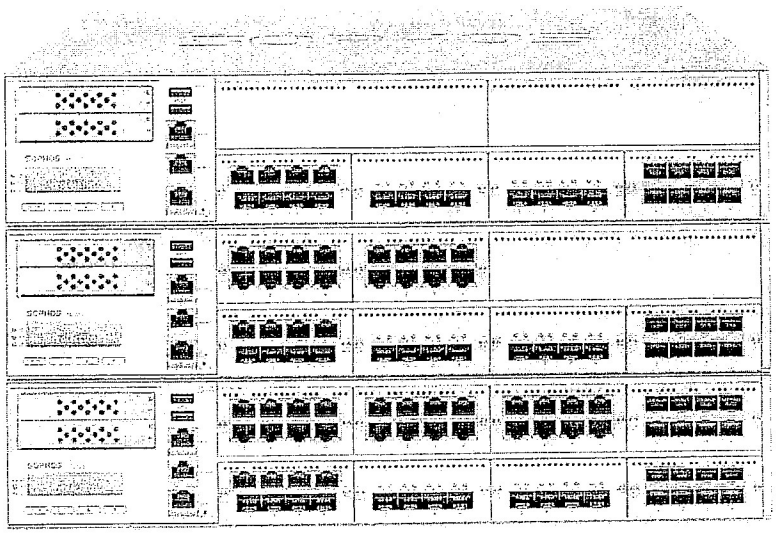
Data Center

XG 750

The Sophos XG 750 is a high-performance firewall suitable for high traffic and larger distributed enterprise environments. Multi-core CPUs and redundancy features such as dual SSDs, power supplies and swappable fans, ensure that you have the best performance and that your network stays protected at all times. With a total of 8 Flexi Port bays, one of which comes equipped with a default 8 port GbE copper module, connectivity knows no bounds and can reach a maximum of 64 ports using the optional modules.

- 8 port GbE copper module supplied as default
- Eight expansion bays to add connectivity modules incl. options for up to 40 GbE QSFP+
- Dual SSDs, power supplies, and swappable fans

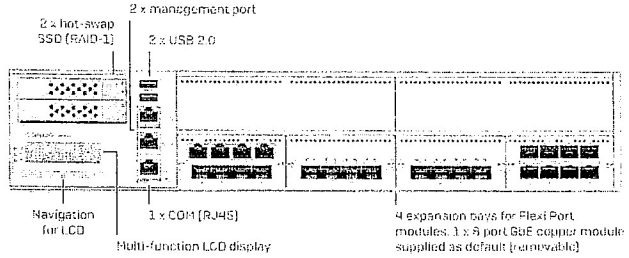
See detailed technical specifications



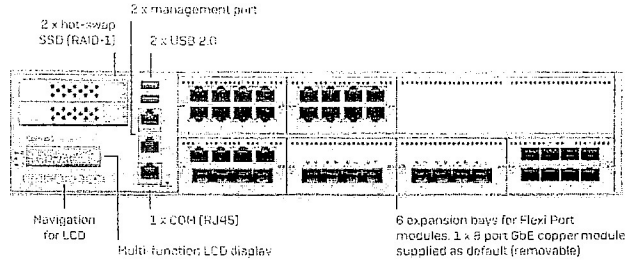
Sophos XG Series 2U: Performance
XG 550, XG 650

Technical Specifications

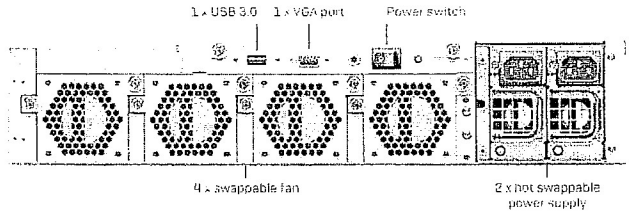
Front View XG 550



Front View XG 650



Back View



Environment	
Power consumption	XG 550: 270.5W, 922.98BTU/hr (idle) 416.1W, 1419.79BTU/hr (full load) XG 650: 320.5W, 1093.59BTU/hr (idle) 493.1W, 1682.53BTU/hr (full load)
Operating temperature	0-40°C (operating) -40 to +70°C (storage)
Humidity	5%-90%, non-condensing

Product Certifications	
Certifications	CB, UL, CE, FCC Class A, ISED, VCCI, RCM, CCC, KC, BIS

Performance*	XG 550 Rev 2	XG 650 Rev 2
Firewall throughput	75,000 Mbps	85,000 Mbps
Firewall IMIX	34,000 Mbps	34,500 Mbps
IPS throughput	17,000 Mbps	20,250 Mbps
NGFW throughput	15,300 Mbps	18,000 Mbps
Threat Protection throughput	6,000 Mbps	7,700 Mbps
Concurrent connections	15,740,000	30,000,000
New connections/sec	213,800	220,000
IPsec VPN throughput	8,500 Mbps	9,000 Mbps
Xstream SSL decryption + Threat Protection	1,000 Mbps	1,350 Mbps
Xstream SSL Concurrent connections	204,800	512,000

Physical Interfaces		
Storage (local quarantine/logs)	2 x integrated hot-swap SSD (RAID)	
Ethernet interfaces (removable)	8 GbE copper	
No. of Flexi Port slots	4	6
Flexi Port modules (optional)	8 port GbE copper 8 port GbE SFP* 2 port 10 GbE SFP+* 2 port 40 GbE QSFP+* 4 port 10 GbE SFP+* 4 port SFP* plus 4 port GbE copper LAN bypass	
Connectivity modules (optional)	SFP DSL module (VDSL2) SFP/SFP+ Transceivers	
I/O ports	2 x USB 2.0 (front) 1 x USB 3.0 (rear) 2 x Mgmt Port (eth0/eth1, front) 1 x COM (RJ45) (front) 1 x VGA (rear)	
Display	Multi-function LCD module	
Power supply	2 x hot-swap internal auto-ranging 100-240VAC, 50-60 Hz PSU	

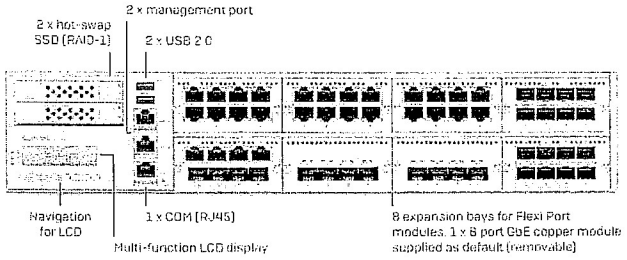
Physical specifications	
Mounting	2U sliding rails (included)
Dimensions Width x Depth x Height	438 x 600 x 88 mm 17.24 x 23.62 x 3.46 inches
Weight	17.6 kg / 39.24 lbs (unpacked) 27 kg / 59.53 lbs (packed)

* Transceivers (min. 4 SFPs) sold separately

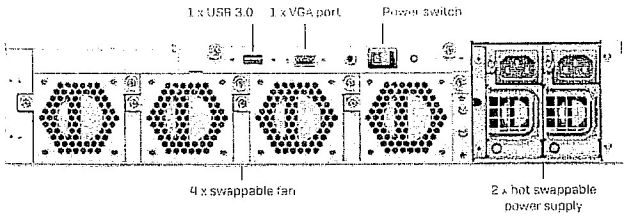
Sophos XG Series 2U: Data Center
XG 750

Technical Specifications

Front View



Back View



Environment	
Power consumption	326.5W, 1114.01BTU/hr (idle) 512.2W, 1747.62BTU/hr (full load)
Operating temperature	0-40°C (operating) -40 to +70°C (storage)
Humidity	5%-90%, non-condensing

Product Certifications	
Certifications	CB, UL, CE, FCC Class A, ISED, VCCI, RCM, CCC, KC, BIS

Performance	XG 750 Rev.2
Firewall throughput	100,000 Mbps
Firewall IMIX	38,000 Mbps
IPS throughput	23,000 Mbps
NGFW throughput	19,200 Mbps
Threat Protection throughput	9,400 Mbps
Concurrent connections	30,000,000
New connections/sec	223,500
IPsec VPN throughput	12,500 Mbps
Xstream SSL decryption + Threat Protection	1,400 Mbps
Xstream SSL Concurrent connections	512,000

Physical Interfaces	
Storage (local quarantine/logs)	2 x integrated hot-swap SSD (RAID)
Ethernet interfaces (removable)	8 GbE copper
No. of Flexi Port slots	8
Flexi Port modules (optional)	8 port GbE copper 8 port GbE SFP* 2 port 10 GbE SFP+* 2 port 40 GbE QSFP+* 4 port 10 GbE SFP+* 4 port SFP* plus 4 port GbE copper LAN bypass
Connectivity modules (optional)	SFP DSL module (VDSL2) SFP/SFP+ Transceivers
I/O ports	2 x USB 2.0 (front) 1 x USB 3.0 (rear) 2 x Mgmt Port (eth0/eth1, front) 1 x COM (RJ45) (front) 1 x VGA (rear)
Display	Multi-function LCD module
Power supply	2 x hot-swap external auto ranging 100-240VAC, 50-60 Hz

Physical specifications	
Mounting	2U sliding rails (included)
Dimensions Width x Depth x Height	438 x 600 x 88 mm 17.24 x 23.62 x 3.46 inches
Weight	17.8 kg / 39.24 lbs (unpacked) 27 kg / 59.53 lbs (packed)

* Transceivers (mini-GBICs) sold separately

Adapt Connectivity with Optional Modules

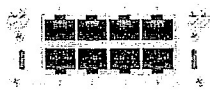
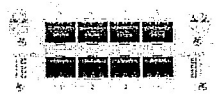
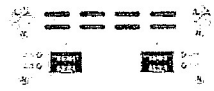
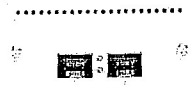
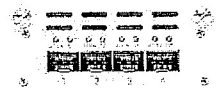
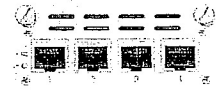
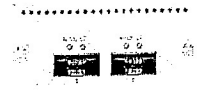
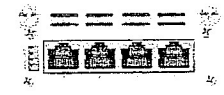
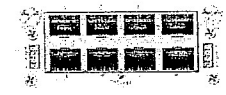
Connectivity Modules

Add additional connectivity options to your appliances to enhance the range and performance of your network.

Modules		
3G/4G Module: (for XG/SG 125(w) and 135(w) Rev. 3 only) 2 external antennas, SIM card slot Supports LTE (Cat-6)/DC-HSPA+/HSPA+/HSPA/UMTS (WCDMA, APAC version also TD-SCDMA)	DSL Modem – SFP: (for all current SG/XG Series with an SFP Port) SFP format supports all VDSL2 standards defined in ITU –T G.993.2, G.997.1, and the VDSL2 profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a	2nd Wi-Fi Radio Module: (for XG/SG 135w Rev.3 only) 802.11a/b/g/n/ac, 2 x 2 MIMO, 2.4 or 5 GHz, 2 external antennas

Flexi Port Modules for 1U and 2U

Configure your hardware to suit your infrastructure and change it as and when you need to. Our optional Flexi Port LAN modules give you the freedom to select the connectivity you need – copper, fiber, 10GbE, 40 GbE – you decide.

Flexi Port Modules for 1U		Flexi Port Modules for 2U	
	8 port GbE copper Flexi Port module (for SG/XG 2xx/3xx/4xx only)		8 port GbE copper Flexi Port module (for XG 750 and SG/XG 550/650 Rev.2 only)
	8 port GbE SFP Flexi Port module (for SG/XG 2xx/3xx/4xx only)		8 port GbE SFP Flexi Port module (for XG 750 and SG/XG 550/650 Rev.2 only)
	2 port 10 GbE SFP+ Flexi Port module (for SG/XG 2xx/3xx/4xx only)		2 port 10 GbE SFP+ Flexi Port module (for XG 750 and SG/XG 550/650 Rev.2 only)
	4 port 10 GbE SFP+ Flexi Port module (for SG/XG 2xx/3xx/4xx only)		4 port 10 GbE SFP+ Flexi Port module (for XG 750 and SG/XG 550/650 Rev.2 only)
	4 port GbE copper LAN bypass Flexi Port module (for XG 2xx/3xx/4xx only)		4 port GbE SFP plus 4 port GbE copper LAN bypass Flexi Port module (for XG 750 and XG 550/650 Rev.2 only)
	2 port 40 GbE QSFP+ Flexi Port module (for SG/XG 210 Rev.3 and SG/XG 230, 3xx and 4xx Rev.2 only)		2 port 40 GbE QSFP+ Flexi Port module (for XG 750 and SG/XG 550/650 Rev.2 only)
	4 port GbE copper PoE Flexi Port module (for SG/XG 210 Rev.3 and SG/XG 230, 3xx and 4xx Rev.2 only)		
	8 port GbE copper PoE Flexi Port module (for SG/XG 210 Rev.3 and SG/XG 230, 3xx and 4xx Rev.2 only)		

Please note: Transceivers (mini GBICs) are sold separately.

Sophos Wireless Protection

Simple, Secure, Reliable

Simplify and secure your wireless networking using XG Firewall as a wireless controller. Your Sophos Access Points are automatically discovered when they are connected, allowing you to configure a variety of corporate, guest, or contractor wireless networks quickly and easily. You get seamless wireless integration with your firewall protection, consistent security policies across both wired and wireless traffic, and reliable high-speed connectivity.

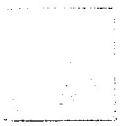
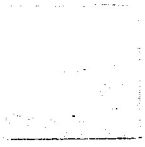
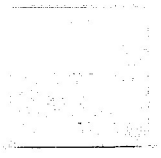
Hardware Appliances with integrated Wi-Fi

All our XG Series desktop appliances are available with an integrated wireless access point. Coverage can be further extended by adding Sophos Access Points.

Technical Specifications

Our APX Series access points are built on the latest enterprise-class, high-speed wireless chipsets with custom designed antennas, top performing CPU and memory resources, and hardware accelerated encryption. With 802.11ac Wave 2 technology, they are custom-built for increased throughput at load and better performance and security.

Please note: APX 320/530/740 support was added in v17.5 Maintenance Release 3. Support for the APX 120 was added in v17.5 Maintenance Release 5.

Model	APX 120	APX 320	APX 530	APX 740
				
Deployment	Indoor; desktop, wall, or ceiling mount			
WLAN Standards	802.11 a/b/g/n/ac			
Radios	1x 2.4 GHz single band 1x 5 GHz single band	1x 2.4 GHz/5 GHz dual-band 1x 5 GHz single band 1x Bluetooth low energy (BLE – for future use)	1x 2.4 GHz single band 1x 5 GHz single band 1x Bluetooth low energy (BLE – for future use)	
Antennas	2x internal dual-band antenna for Radio-1 and 2	2x internal dual-band antenna for Radio-1 2x internal 5 GHz antenna for Radio-2 1x internal 2.4 GHz antenna for BLE	3x internal 2.4 GHz antenna for Radio-1 3x internal 5 GHz antenna for Radio-2 1x internal 2.4 GHz antenna for BLE	4x internal 2.4 GHz antenna for Radio-1 4x internal 5 GHz antenna for Radio-2 1x internal 2.4 GHz antenna for BLE
Performance	2x2:2 MU-MIMO		3x3:3 MU-MIMO	4x4:4 MU-MIMO
Interfaces	1x 12V DC-in 1x RJ45 10/100/1000 Ethernet w/PoE	1x RJ45 connector console serial port 1x RJ45 10/100/1000 Ethernet w/PoE	1x RJ45 connector console serial port 1x RJ45 10/100/1000 Ethernet port 1x RJ45 10/100/1000 Ethernet w/PoE	
Power (MAX.)	11.8 W	11.5 W	16.7 W	22.4 W
Power-over-ethernet (MIN.)	PoE 802.3af		PoE+ 802.3at	
Dimensions Width x Depth x Height	144 x 144 x 33.5 mm 5.67 x 5.67 x 1.32 inches	155 x 155 x 38 mm 6.11 x 6.11 x 1.5 inches	183 x 183 x 39 mm 7.21 x 7.21 x 1.54 inches	195 x 195 x 43 mm 7.68 x 7.68 x 1.7 inches
Weight	0.256 kg	0.474 kg	0.922 kg	1.012 kg

If you prefer to free up the resources on your firewall and are looking for enhanced scalability, you can optionally manage your Sophos access points in the cloud using Sophos Central. A separate license is required.

See sophos.com/compare-xg for further technical details.

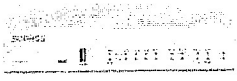
SD-RED

Sophos SD-RED: Empowering your SD-WAN strategy

Sophos has long been a pioneer in providing an easy-to-use, secure way to connect branch offices and other remote locations. XG Firewall includes a number of SD-WAN features to help you to accelerate application performance and get better visibility into network health to ensure that your remote locations enjoy the same performance as your main office.

Our SD-RED devices are built on the latest enterprise-class, high-speed networking platforms. They work with your XG Firewall whether you've deployed as hardware, software or in the public cloud. Our full range of Sophos Wireless Access Points are also compatible with Sophos SD-RED. You can use Sophos SD-RED with just the Base License included in your appliance purchase, however, you will need an active Network Protection subscription for management.

Technical Specifications

Model Name	SD-RED 20	SD-RED 60
		
Capacity		
Maximum throughput	250 Mbps	850 Mbps
Physical Interfaces (Built-in)		
LAN Interfaces	4 x 10/100/1000 Base-TX (1 GbE Copper)	4 x 10/100/1000 Base-TX (1 GbE Copper)
WAN Interfaces	1 x 10/100/1000 Base-TX (shared with SFP)	2 x 10/100/1000 Base-TX (WAN1 shared port with SFP)
SFP Interfaces	1x SFP Fiber (shared port with WAN)	1x SFP Fiber (shared port with WAN1)
Power-over Ethernet Ports	None	2 PoE Ports (total power 30W)
USB Ports	2 x USB 3.0 (front and rear)	2 x USB 3.0 (front and rear)
COM Ports	1 x Micro-USB	1 x Micro-USB
Optional Connectivity		
Modular Bay	1 (for use with optional Wi-Fi OR 4G/LTE Card)	1 (for use with optional Wi-Fi OR 4G/LTE Card)
Optional Wi-Fi Module	802.11 a/b/g/n/ac Wave 1 (Wi-Fi 5)dual-band capable 2x2 MIMO 2 antennas	802.11 a/b/g/n/ac Wave 1 (Wi-Fi 5) dual-band capable 2x2 MIMO 2 antennas
Optional 3G/4G LTE Module	MC7430/MC7455 Sierra Wireless Card	MC7430/MC7455 Sierra Wireless Card
Optional VDSL Modem	Optional SFP Modem (support coming in future release)	Optional SFP Modem (support coming in future release)
Physical Specifications		
Dimensions	225 x 44 x 150 (w*h*d) mm 8.86 x 1.73 x 5.91 (w*h*d) inches	225 x 44 x 150 (w*h*d) mm 8.86 x 1.73 x 5.91 (w*h*d) inches
Weight	0.9 kg/1.8 kg (1.98 lbs/3.97 lbs) Unpacked/Packed	1.0 kg/2.2 kg (2.2 lbs/4.85 lbs) Unpacked/Packed
Power Supply Adapter	AC Input: 110-240VAC @50-60 Hz DC Output: 12V +/- 10%, 3.7A, 40W	AC Input: 110-240VAC @50-60 Hz DC Output: 12V +/- 10%, 6.95A, 75W
Power Redundancy Support	Yes, optional 2nd power supply	Yes, optional 2nd power supply
Power Consumption	Idle: 6.1Watt/20.814 BTU Full Load: 22.6Watt/77.114 BTU	Idle: 11.88 Watt/40.536 BTU Full Load without PoE: 25.33 Watt/86.429 BTU Full Load with PoE: 62.48 Watt/213.190 BTU
Noise level (average)	Fan Less, N/A	Fan Less, N/A
Temperature (operational)	0°C to 40°C (32°F to 104°F)	0°C to 40°C
Temperature (storage)	-20°C to 70°C (-4°F to 158°F)	-20°C to 70°C (-4°F to 158°F)
Humidity	10-90% RH, non-condensing	10-90% RH, non-condensing
Safety Regulations		
Certifications (Safety, EMC, Radio)	CE/FCC/IC/RCM/VCCI/CB/UL/CCC/KC/ANATEL	CE/FCC/IC/RCM/VCCI/CB/UL/CCC/KC/ANATEL

See sophos.com/compare-xg for further technical details.