



RNC: 130671419

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**ITN
INFORMACION
TECNOLOGICA NETWORKING, SRL.**

Compañía:	JUNTA CENTRAL ELECTORAL	COTIZACION No. :	2018-038
Dirección :	AV. LUPERON, ESQ. 27 DE FEBREO, STO DGO	Fecha	05/ abril /2018
Contacto :	Miguel Hidalgo	RPE :	15398
E Mail :	ivan_agramonte@jce.do	Proyecto :	Switch Cisco Catalyst 2960
Teléfono :	(809) 338-5419 ext. 201		10/100/1000
Requerimiento:	2018-000702	Contacto :	Ing. Frank Vargas

ITEM	CANTIDAD	DESCRIPCION	MARCA	Uni.	PRECIO		SUB TOTAL
I		La Garantía de Fabrica y la Certificación serán Entregada con los Equipos.					\$ 970,387.04
1	8	SWITCH CISCO CATALYST 2960 DE 24 PUERTOS , 10/100/1000 (Catalyst 2960-X 24 GigE Poe 370 ax 1G SFP)	CISCO	Uni.	\$ 121,298.38	\$ 174,669.67	\$ 970,387.04



	SUB TOTAL	RD\$970,387.04
OBSERVACIONES:		
Pago: 75% con la orden de compra y 25% contra entrega.	TOTAL DE ITBIS	RD\$174,669.67
Validez de la oferta: 30 días.		
Tiempo de entrega: 10 días		
Garantía: 12 Meses	GRAN TOTAL	RD\$1,145,056.71

Elaborada por
Ing. Frank Vargas
Director de Operaciones



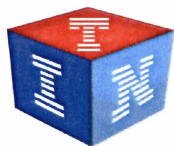
Recibida Conforme por

Soluciones Total en Gestión de Redes Convergente

Dirección: Calle 19 No. 97 Alma Rosa II, Sto. Dgo. Este RD.

frankvargas@claro.net.do; fvargas@itn.com.do: Teléfonos: (809) 594-9111.

CONSULTORIA .INSTALACION .CERTIFICACION .DISTRIBUCION Y VENTAS, FIBRAS OPTICAS . CABLEADO ESTRUCTURADO. SISTEMA DE CCTV. UPS
ENLACES DE MICROONDAS (DATA. VOZ Y VIDEO) .REDES INALAMBRICAS, ENLACES PUNTO A PUNTO Y MULTIPUNTO .EQUIPOS ACTIVOS



Networking
Gestión de Redes Convergentes

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La Garantía de Fábrica y la Certificación ya fueron solicitadas al Fabricante y serán Entregadas contra la Contra la Orden de Compra.

Att.

La Administracion

Ing. Frank Vargas



Soluciones Total en Gestión de Redes Convergente

Dirección: C/ 19 No. 24 Alma Rosa I I, Sto. Dgo. Este RD.

Fvargas@itn.com.do; frankvargas@claro.net.do ; Teléfonos: (809) 594-9111.

CONSULTORIA .INSTALACION .CERTIFICACION .DISTRIBUCION Y VENTAS, FIBRAS OPTICAS. CABLEADO ESTRUCTURADO. SISTEMA DE CCTV. UPS
ENLACES DE MICROONDAS (DATA. VOZ Y VIDEO) .REDES INALAMBRICAS, ENLACES PUNTO A PUNTO Y MULTIPUNTO .EQUIPOS ACTIVOS



Junta Central Electoral

Garantía de Identidad y Democracia

27 de Febrero esq. Luperon, Plaza de la Bandera Sto. Dgo. D.N

Tel: 809-338-5419/ Exts - 214/216/220/ Fax: 809-539-8978

División de Cotizaciones y Seguimiento de Compras

SOLICITUD DE COTIZACIÓN

RNC: 401-00754-1

No.: 2018-000702

Fecha.: 02/04/2018

Hora.: 08:42 am

Nombre: 0000-ITN INFORMACION TECNOLOGICA NETWORKING S R L

Dirección: C/ ISABEL DE TORRES # 09 CANCINO 1

Ciudad: DISTRITO NACIONAL

Contacto: ING. FRANK VARGAS

RPE: 15398

RNC: 130-67141-9

Tel. : 8095949111

Fax : 8097885014

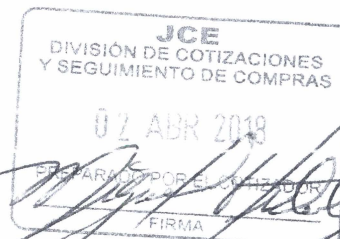
Estimado Señor:

Solicitamos que nos presenten cotizaciones para los artículos que se describen a continuación, solo tendrían que consignar los precios y valores en las casillas correspondientes y devolver esta solicitud en sobre cerrado y lacrado al departamento de Compras, debidamente sellada y firmada. El plazo máximo establecido es de (5) días hábiles

No.	CANT.	UNIDAD	DESCRIPCION DEL (LOS) ARTICULO(S)
1	8	UNIDAD (ES)	SWITCH CISCO CATALYST 2960 DE 24 PUERTOS
			VELOCIDAD DE 10/100/1000
			EL OFERENTE DEBE TENER CERTIFICACIÓN CISCO Y
			GARANTÍA DE CISCO
====> Debajo de esta linea no hay articulos <====			

COMUNICAR EN SU COTIZACIÓN LOS SIGUIENTES DATOS:

CONDICIONES DE PAGO, TIEMPO DE ENTREGA Y GARANTÍA. NOTA: SOLICITAMOS, DEPOSITAR POR LA DIVISIÓN DE COMPRAS LAS COTIZACIONES EN UN SOBRE CERRADO CON EL NÚMERO DE LA SOLICITUD Y EL SELLO DE LA EMPRESA O ENTREGARSELAS A LOS MENSAJEROS DE COMPRAS.



Nota(1) Todo oferente que participe en un concurso, invitación o compras en esta institución, deberá comprometerse a que una vez su oferta sea aceptada, realizará la entrega o despacho de equipos, materiales, bienes servido o el producto que se trate a partir de la recepción de la orden de compra. El pago de la Recepción de la Orden de Compra y el pago se procederá a partir de la recepción de la factura original, en los próximos 15 días.

Nota(2) La JCE, aplicará 0.5% sobre los pagos realizados por el estado y sus dependencias a personas físicas y jurídicas, por la adquisición de bienes y servicios en general, no ejecutados en relación de dependencia, con carácter de pago a cuenta, según lo establece el literal D, párrafo 1 de la ley 182-09

Nota(3) Nota: La institución no realizará pago final sin haber recibido el bien o servicio solicitado

Observaciones: Siempre deberá indicar su mejor precio, indicar RNC: Nota enviar cotización de acuerdo a las Cantidades y Unidades requeridas.

Licda. María Estela De León

Enc. de Compras y Suministro

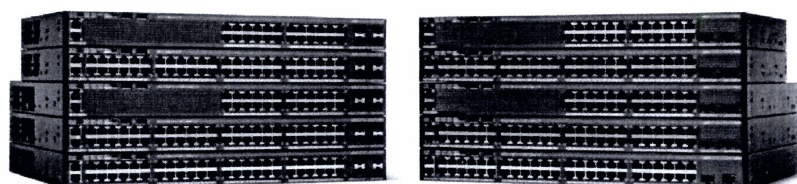
DESCRIPCIÓN DEL (LOS) ARTICULO(S)
Hacemos Constar que los artículos cotizados, los mantendremos reservados a los precios indicados por un periodo de _____ días a partir de la fecha. A los precios de los artículos cotizados, hay que agregarle el ITBIS SI _____ NO _____ Crédito a _____ Días _____ Nuestro Compromiso de entregar es en (_____) días, después de la fecha de recepción de la Orden de Compra
Firma / Sello / Fecha

Cisco Catalyst 2960-X and 2960-XR Series Switches

Product Overview

Cisco® Catalyst® 2960-X and 2960-XR Series Switches are fixed-configuration, stackable Gigabit Ethernet switches that provide enterprise-class access for campus and branch applications (Figure 1). They operate on Cisco IOS® Software and support simple device management as well as network management. The Cisco Catalyst 2960-X and 2960-XR Series provide easy device onboarding, configuration, monitoring, and troubleshooting. These fully managed switches can provide advanced Layer 2 and Layer 3 features as well as optional Power over Ethernet Plus (PoE+) power. Designed for operational simplicity to lower total cost of ownership, they enable scalable, secure, and energy-efficient business operations with intelligent services. The switches deliver enhanced application visibility, network reliability, and network resiliency.

Figure 1. Cisco Catalyst 2960-X Series Switches



Product Highlights

Cisco Catalyst 2960-X and 2960-XR Series Switches feature:

- 24 or 48 Gigabit Ethernet ports with line-rate forwarding performance
- 4 fixed 1 Gigabit Ethernet Small Form-Factor Pluggable (SFP) uplinks or 2 fixed 10 Gigabit Ethernet SFP+ uplinks
- PoE+ support with a power budget of up to 740W and Perpetual PoE
- Cisco IOS LAN Base¹ or LAN Lite¹ and Cisco IOS IP Lite²
- Device management with web UI, over-the-air access via Bluetooth, Command-Line Interface (CLI), Simple Network Management Protocol (SNMP), and RJ-45 or USB console access
- Network management with Cisco Prime®, Cisco Network Plug and Play, and Cisco DNA™ Center
- Stacking with FlexStack-Plus and FlexStack-Extended
- Layer 3 features with routed access (Open Shortest Path First [OSPF]), static routing, and Routing Information Protocol (RIP)
- Visibility with Domain Name System as an Authoritative Source (DNS-AS) and Full (Flexible) NetFlow
- Security with 802.1X, Serial Port Analyzer (SPAN) and Bridge Protocol Data Unit (BPDU) Guard

¹ 2960-X Series only.

² 2960-XR Series only

- Reliability with higher Mean Time Between Failures (MTBF) and Enhanced Limited Lifetime Warranty (E-LLW)
- Resiliency with optional dual field-replaceable power supplies²

Power Supply

An **external redundant power supply** option is supported on the Cisco Catalyst 2960-X Series Switches. These switches come with one fixed power supply and an option for an external redundant power supply (Cisco Redundant Power System [RPS] 2300).

Dual redundant power supplies are supported on the Cisco Catalyst 2960-XR Series Switches. These switches ship with one power supply by default. The second power supply can be purchased at the time of ordering the switch or as a spare. These power supplies have built-in fans to provide cooling (Figure 2).

Figure 2. Cisco Catalyst 2960-XR Series power supply

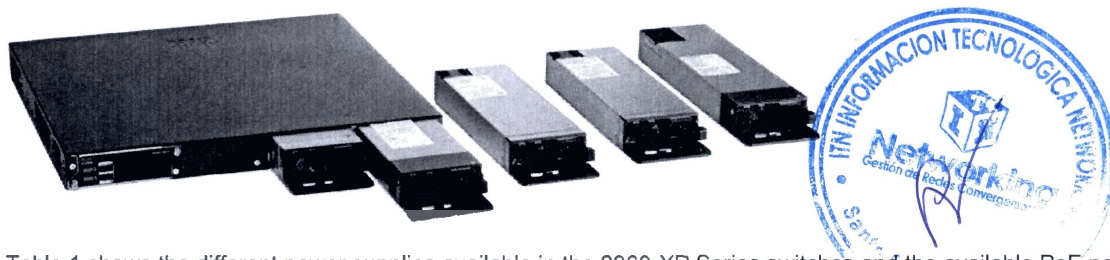


Table 1 shows the different power supplies available in the 2960-XR Series switches and the available PoE power. Table 2 lists the PoE and PoE+ power capacity for the Cisco Catalyst 2960-X and 2960-XR Series. Table 3 gives the available PoE and switch power for the 2960-XR Series with different power supply combinations.

Table 1. Cisco Catalyst 2960-XR Series default power supply configurations

Product ID	Default power supply	Available PoE power
WS-C2960XR-24TS-I	PWR-C2-250WAC	—
WS-C2960XR-48TS-I		
WS-C2960XR-24TD-I		
WS-C2960XR-48TD-I		
WS-C2960XR-24PD-I	PWR-C2-640WAC	370W
WS-C2960XR-48LPD-I		
WS-C2960XR-24PS-I		
WS-C2960XR-48LPS-I		
WS-C2960XR-48FPD-I	PWR-C2-1025WAC	740W
WS-C2960XR-48FPS-I		

Table 2. Cisco Catalyst 2960-X and 2960-XR Series PoE and PoE+ power capacity

Model	Maximum number of PoE+ (IEEE 802.3at) ports	Maximum number of PoE (IEEE 802.3af) ports	Available PoE power (single PS source)
Cisco Catalyst 2960X-48FPD-L	24 ports up to 30W	48 ports up to 15.4W	740W
Cisco Catalyst 2960X-48LPD-L	12 ports up to 30W	24 ports up to 15.4W	370W
Cisco Catalyst 2960X-24PD-L	12 ports up to 30W	24 ports up to 15.4W	370W
Cisco Catalyst 2960X-48FPS-L	24 ports up to 30W	48 ports up to 15.4W	740W
Cisco Catalyst 2960X-48LPS-L	12 ports up to 30W	24 ports up to 15.4W	370W
Cisco Catalyst 2960X-24PS-L	12 ports up to 30W	24 ports up to 15.4W	370W

Model	Maximum number of PoE+ (IEEE 802.3at) ports	Maximum number of PoE (IEEE 802.3af) ports	Available PoE power (single PS source)
Cisco Catalyst 2960X-24PSQ-L	3 ports up to 30W	7 ports up to 15.4W	110W
Cisco Catalyst 2960XR-48FPD-I	24 ports up to 30W	48 ports up to 15.4W	740W
Cisco Catalyst 2960XR-48LPD-I	12 ports up to 30W	24 ports up to 15.4W	370W
Cisco Catalyst 2960XR-24PD-I	12 ports up to 30W	24 ports up to 15.4W	370W
Cisco Catalyst 2960XR-48FPS-I	24 ports up to 30W	48 ports up to 15.4W	740W
Cisco Catalyst 2960XR-48LPS-I	12 ports up to 30W	24 ports up to 15.4W	370W
Cisco Catalyst 2960XR-24PS-I	12 ports up to 30W	24 ports up to 15.4W	370W

Intelligent power management allows flexible power allocation across all ports.

Table 3. Cisco Catalyst 2960-XR Series available PoE and switch power capabilities with different combinations of power supplies

Primary power supply	Secondary power supply	Available power for PoE+	Switch power redundancy	Available PoE power when one PS fails
PWR-C2-250WAC	—	—	No	—
PWR-C2-250WAC	PWR-C2-250WAC	—	Yes	—
PWR-C2-640WAC	—	370W	No	—
PWR-C2-640WAC	PWR-C2-640WAC	370W	Yes	370W
PWR-C2-1025WAC	—	740W	No	—
PWR-C2-1025WAC	PWR-C2-1025WAC	740W	Yes	740W

Switch Models and Configurations

Cisco Catalyst 2960-X Series Switches include a single, fixed power supply and are available with either the Cisco IOS LAN Base or LAN Lite feature set. Cisco Catalyst 2960-XR Series Switches include a field-replaceable modular power supply and can accommodate a second power supply. The 2960-XR Series is available only with the Cisco IOS IP Lite feature set. Tables 4 and 5 list the configurations of the 2960-X and 2960-XR Series, respectively.

Table 4. Cisco Catalyst 2960-X Series configurations

Model	10/100/1000 Ethernet ports	Uplink interfaces	Cisco IOS Software image	Available PoE power	FlexStack-Plus and FlexStack-Extended capability
Cisco Catalyst 2960X-48FPD-L	48	2 SFP+	LAN Base	740W	Y
Cisco Catalyst 2960X-48LPD-L	48	2 SFP+	LAN Base	370W	Y
Cisco Catalyst 2960X-24PD-L	24	2 SFP+	LAN Base	370W	Y
Cisco Catalyst 2960X-48TD-L	48	2 SFP+	LAN Base	—	Y
Cisco Catalyst 2960X-24TD-L	24	2 SFP+	LAN Base	—	Y
Cisco Catalyst 2960X-48FPS-L	48	4 SFP	LAN Base	740W	Y
Cisco Catalyst 2960X-48LPS-L	48	4 SFP	LAN Base	370W	Y
Cisco Catalyst 2960X-24PS-L	24	4 SFP	LAN Base	370W	Y
Cisco Catalyst 2960X-24PSQ-L	24 (8 PoE)	2 SFP, 2 10/100/1000BT	LAN Base	110W	—
Cisco Catalyst 2960X-48TS-L	48	4 SFP	LAN Base	—	Y
Cisco Catalyst 2960X-24TS-L	24	4 SFP	LAN Base	—	Y
Cisco Catalyst 2960X-48TS-LL	48	2 SFP	LAN Lite	—	—
Cisco Catalyst 2960X-24TS-LL	24	2 SFP	LAN Lite	—	—

Table 5. Cisco Catalyst 2960-XR Series configurations

Model	10/100/1000 Ethernet ports	Uplink interfaces	Cisco IOS Software image	Available PoE power	Power supply	FlexStack-Plus and FlexStack-Extended capability
Cisco Catalyst 2960XR-48FPD-I	48	2 SFP+	IP Lite	740W	1025WAC	Y
Cisco Catalyst 2960XR-48LPD-I	48	2 SFP+	IP Lite	370W	640WAC	Y
Cisco Catalyst 2960XR-24PD-I	24	2 SFP+	IP Lite	370W	640WAC	Y
Cisco Catalyst 2960XR-48TD-I	48	2 SFP+	IP Lite	—	250WAC	Y
Cisco Catalyst 2960XR-24TD-I	24	2 SFP+	IP Lite	—	250WAC	Y
Cisco Catalyst 2960XR-48FPS-I	48	4 SFP	IP Lite	740W	1025WAC	Y
Cisco Catalyst 2960XR-48LPS-I	48	4 SFP	IP Lite	370W	640WAC	Y
Cisco Catalyst 2960XR-24PS-I	24	4 SFP	IP Lite	370W	640WAC	Y
Cisco Catalyst 2960XR-48TS-I	48	4 SFP	IP Lite	—	250WAC	Y
Cisco Catalyst 2960XR-24TS-I	24	4 SFP	IP Lite	—	250WAC	Y

Software

All Cisco Catalyst 2960-X and 2960-XR Series Switches use a single universal Cisco IOS Software image for all SKUs. Depending on the switch model, the Cisco IOS image automatically configures the LAN Lite, LAN Base, or IP Lite feature set.

Note that each switch model is tied to a specific feature level; LAN Lite cannot be upgraded to LAN Base, and LAN Base cannot be upgraded to IP Lite.

For more information about the features included in the LAN Lite, LAN Base, and IP Lite feature sets, refer to Cisco Feature Navigator: <https://tools.cisco.com/ITDIT/CFN/jsp/index.jsp>.

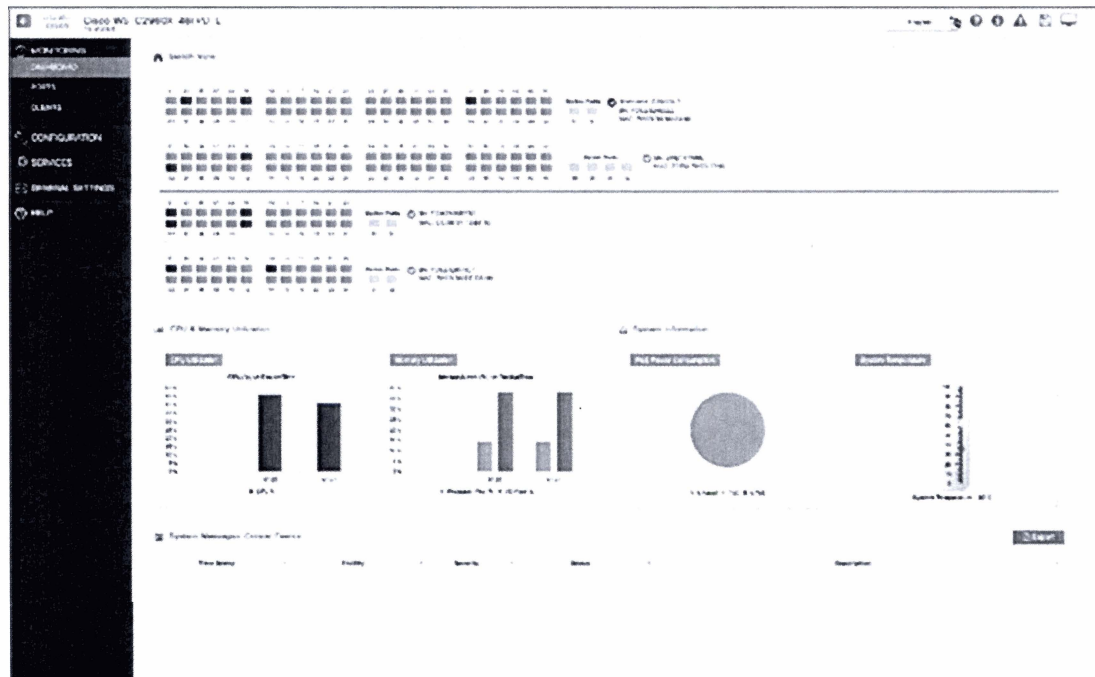
Switch Management

Cisco Catalyst 2960-X and 2960-XR Series Switches support the following on-device management features:

- **Web UI** via Cisco Configuration Professional. Configuration Professional provides a user interface for day-zero provisioning, which enables easy onboarding of the switch. Configuration Professional also has an intuitive dashboard for configuring, monitoring, and troubleshooting the switch (Figure 3). For more information about Cisco Configuration Professional, please refer to: <https://www.cisco.com/c/en/us/products/cloud-systems-management/configuration-professional/index.html?dtid=osscdc000283>.



Figure 3. Cisco Configuration Professional web UI for the Cisco Catalyst 2960-X and 2960-XR Series



- **Bluetooth** for over-the-air access. The switches support an external Bluetooth dongle that plugs into the USB port on the switch and allows a Bluetooth-based RF connection with an external laptops and tablets (Figure 4). Laptops and tablets can access the switch CLI using a Telnet or Secure Shell (SSH) client over Bluetooth. The GUI can be accessed over Bluetooth with a browser.

Figure 4. Over-the-air switch access using Bluetooth

