

IP MIGRATION MADE SIMPLE

NVT PHYBRIDGE FLEX SWITCH DATA SHEET



Fast Ethernet and PoE++ (50 watts per port) over 2,000ft (610m) Reach

The FLEX managed switch delivers fast Ethernet and PoE++ (50 watts per port) over multiple pairs of UTP cable with six times the reach of traditional switches.

FLEX was designed to simplify IP migration by eliminating the need for IDF closets given the long reach capabilities. Benefits include:

- Accelerating your return on investment by reducing infrastructure costs.
- Collapsing planning and deployment time.
- Eliminating infrastructure barriers, risks, disruption and costs.
- Creating a robust IP platform that is easy to configure, deploy and manage.

Unlike other Network Switches, FLEX Delivers:

Speed, Reach and Power

The Flex switch can operate in standard mode (without an adapter) and long reach PoE mode for extended reach. One switch, many options.

Cable Type	Data Rate	Reach
4 pair CAT5e	100 Mbps	2,000ft / 610m
2 pair CAT5e	100 Mbps	1,000ft / 300m
2 pair CAT5e	10Mbps	2,000ft/ 610m
1 pair CAT5e	100 Mbps	950ft / 290m (adapter must be locally powered)

Industry Leading PowerWISE® Technology

Power sharing for redundancy, load balancing, AC/DC options, hot swappable power supply and auto sensing 100-240VAC delivering 500 to 1,000 watts of power.

FLEX is one of the most energy efficient switches on the market consuming less than 20 watts of power to operate.

Managed Switch with Plug-and-Play Option

FLEX can operate in transparent mode functioning as a bridge allowing for plug-and-play deployment or as a fully managed switch with high value features including:

- Power management by port for easy reset of ports.
- Port MAC locking for higher security and peace of mind.
- Simple Network Manager, an intuitive web GUI that makes managing the switch a breeze.



FLEX Switch

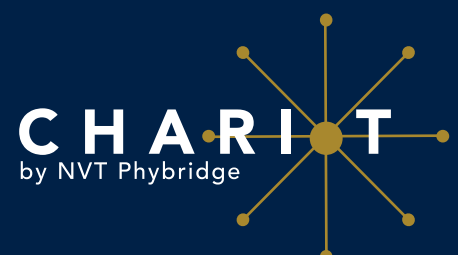
At-a-Glance

The FLEX switch is a high-performing, enterprise grade, 24 Port managed switch that helps maximize your return on investment and reduce your total cost of ownership.

FLEX can leverage 2 or 4 pair UTP infrastructure to create a robust platform delivering high power for your IP devices.

Advantages

- Quick, easy and cost effective IP migration eliminating the need for multiple IDF closets
- Robust enterprise grade switch features ensuring uptime
- Simple GUI interface making configuring, managing and troubleshooting the network a breeze



NVT PHYBRIDGE

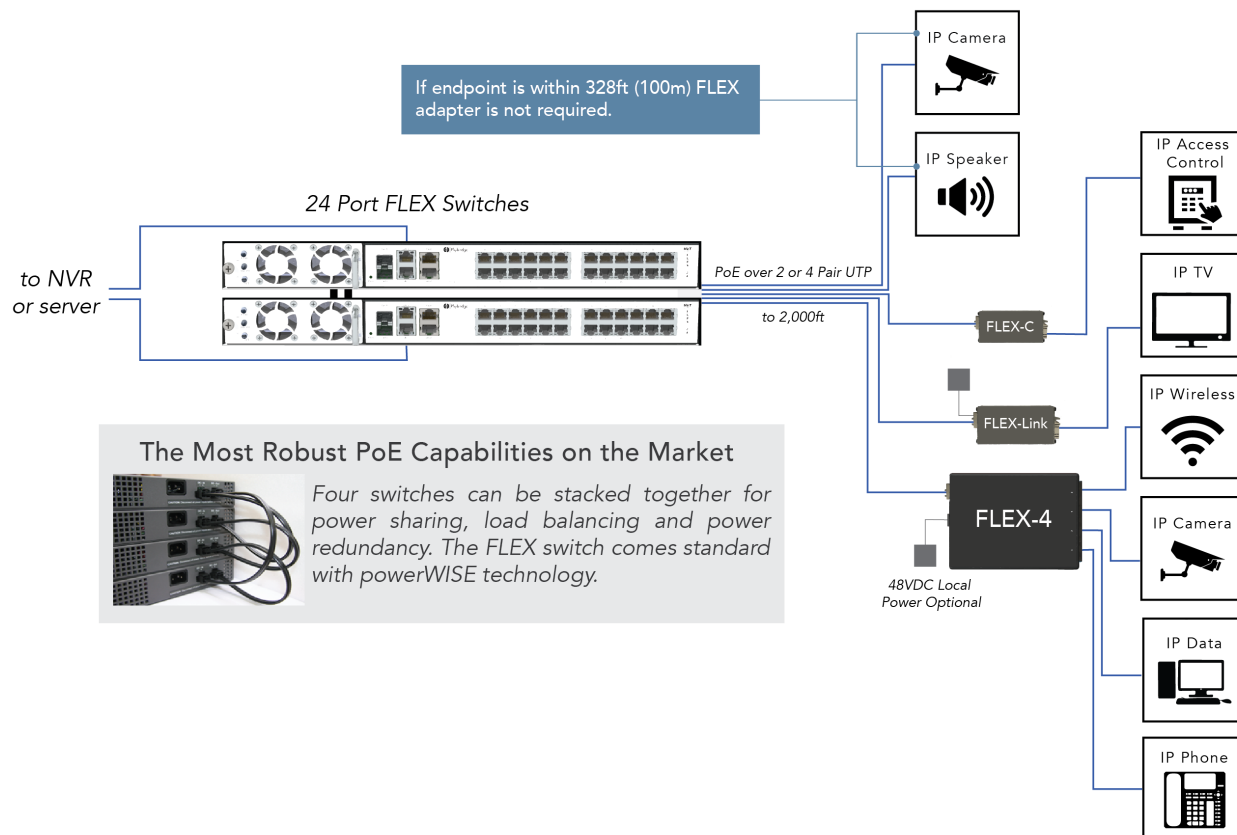
FLEX SWITCH

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FLEX Switch Technical Specifications

Model	FLEX24	Management	1 LAN port (MGMT): RJ45, 10/100 Base-T auto-sensing, IEEE 802.3 1 UART console port: RJ45 (RJ45 to DB9 cable included)
Part Number	NV-FLX-024	Power Supply	Hot-Swappable Power Supply Unit Auto-sensing 100-240VAC, 50/60 Hz Power Output: 500W max at 100VAC, 1000W max at 240VAC *Optional 1000W at 100VAC power supplies available at additional cost.
Dimensions	19 inches x 1U without rack ears: • 1.75" x 17.13" x 9.92" (HxWxD) • 4.45cm x 43.5cm x 25.2cm (HxWxD)	Power Consumption	20W
Weight	7.36 lb. (3.34 kg)	Power Injection (PoE)	DC voltage: 48VDC to 56VDC IEEE 802.3af/at PoE++ (50 Watts) compatible
Mounting	Standalone, rack or shelf-mountable; 2 brackets included for installation	PowerWISE® Power Sharing	2 male connectors (rear) DC IN and DC OUT: 48VDC to 56VDC
Interface: Ethernet Uplink (Trunk IP)	Maximum 2 uplinks, each 1Gb/s (full duplex), either: • 2 mini-GBIC ports: 1000 Base-TX/SX/LX/EX/ZX/LHX (determined by SFP, transceiver module installed), Ethernet IEEE 802.3z, fiber optic cable; or • 2 RJ45 ports: 10/100/1000 Base-T auto-sensing, independent speed selection, Ethernet IEEE 802.3, CAT5e copper cable	Operating temperature	14°F to 122°F (-10°C to 50°C)
Interface: Downlink (PoE and IP to Adapter)	24 x RJ45 Jacks Speed: 10/100Mb/s (full duplex) PoE Power: 50 Watts Maximum	Humidity	10% to 95% (non-condensing) at 95°F (35°C)

Specifications subject to change without notice.



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FLEX SWITCH

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FLEX-Link Adapter

The FLEX-Link adapter enables extended Ethernet and PoE reach beyond traditional distances. The Flex-Link adapter, when used with the Flex Switch, delivers fast Ethernet (100 Mbps, symmetrical full duplex) and PoE++ (up to 50W) over four pair UTP, PoE+ over two pairs UTP (up to 30W) with reach of up to 2,000ft (610m). To account for cable losses and increase PoE delivery, the FLEX-Link adapter has the option of using a local external power supply as well. FLEX-Link adapter is designed specifically to enable easy deployment over UTP for reaches beyond that of standard Ethernet eliminating the costs and disruption associated with IDF closet requirements.

Flex Offering - Power Availability at Variable Distances (Watts)

Cable Type	1ft (.302m)	100ft (30m)	300ft (91m)	500ft (152m)	700ft (213m)	900ft (274m)	1,100ft (335m)	1,300ft (396m)	1,500ft (457m)	1,700ft (518m)	2,000ft (610m)
CAT3/5/5E 4 Pairs	49	48	46	43	41	39	37	34	32	30	26
CAT3/5/5E 2 Pairs	49	47	42	38	33	28	24	19	15	10	3
CAT6/6E 4 Pairs	49	48	46	45	43	41	39	37	35	33	30
CAT6/6E 2 Pairs	49	47	44	40	36	32	28	25	21	17	11

FLEX-Link Technical Specifications

Model	FLEX-Link			Interface: IEEE side (for IP end point device)	• RJ45 port: 100 Base-T, IEEE 802.3af/at
Part Number	NV-FLXLK			Power injection (PoE)	DC voltage on RJ45 ports: 37V – 55V, maximum 50W (over 4 pairs) IEEE 802.3af/at compliant Cisco UPoE compatible
Dimensions	2.4cm x 3.7cm x 7.8cm (HxWxD) 0.94" x 1.45" x 3.07" (HxWxD)			Power supply	PoE from the switch or external power supply
Weight	65 g (2.29 oz.)			DC IN (Barrel Connector)	Optional (sold separately) 55VDC via an external AC/DC Power Adapter (IEC Class II isolated only) NOTE: local power supply used must have its output isolated from Earth potential.
Mounting	Inline between the Ethernet cable (to IP endpoint, IEEE), and the network infrastructure cable (to switch, or FLEX-Base adapter)			Power consumption	1.8W
Interface: Network Infrastructure side (FLEX side)	RJ45 port: UTP cable (4-pair, 2-pair or 1-pair)			Operating temperature	0°C to +50°C (32°F to +122°F)
	Cable Type	Data Rate	Reach	Humidity	10% to 95% (non-condensing) at 35° C (95° F)
	4 pair CAT5e	100 Mbps	2,000ft / 610m	Specifications subject to change without notice.	
	2 pair CAT5e	100 Mbps	1,000ft / 300m		
	2 pair CAT5e	10Mbps	2,000ft / 610m		
	1 pair CAT5e	100 Mbps	950ft / 290m (adapter must be locally powered)		

Compliance and Agency Approval

EMC	Emission (FLEX24= Class A, FLEX-Link= Class B): FCC Part 15, EN 55022:2010 Immunity: EN 55024:2010
Safety	UL 60950-1 2nd Ed 2014-10-14, CSA C22.2 No. 60950-1-07 2nd Ed 2014-10, IEC 60950-1:2005 + A1 + A2, EN 60950-1:2006 + A11 + A12 + A1 + A2
Environment	EU RoHS Directive 2011/65

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