## **Quick Install Guide: FLEX4**

The FLEX4 adapter enables extended Ethernet and PoE reach beyond traditional distances using 1, 2 or 4 pair UTP infrastructure. When paired with the FLEX24-10G Switch, FLEX8 Switch or FLEX-Base Extender, the adapter delivers 10/100Mbps, symmetrical full duplex. The FLEX offering is designed specifically to enable easy deployment over Multi-Pair UTP for reaches beyond that of standard Ethernet eliminating the costs and disruption associated with IDF closet requirements.

#### FLEX4 (NV-FLX-04)

- Paired with FLEX24-10G, FLEX8 or FLEX-Base
- 1 uplink port and 4 downlink ports
- Up to 30W PoE per downlink port
- Local power option

### FLEX4 Adapter





## Hardware Topology

10/100Mbps (full duplex, symmetrical) & PoE++ over multi-pair UTP with 2,000ft (610M) reach.

## NV-FLX-024-10G/NV-FLX-08



\*Base Extender can be powered locally for use with non-PoE switches.

# **Quick Install Guide: FLEX4**

### Installation Overview

- 1. Remove the FLEX4 from its packaging.
- 2. Must ensure cable is properly terminated before connecting any FLEX product.
- Remove all legacy equipment from the UTP cable infrastructure.
   NOTE: In order to avoid damage to endpoints, it is important that non-IP devices are not connected when you connect the FLEX4.
- 4. Connect the Network Infrastructure cable from the FLEX24-10G switch, FLEX8 switch or FLEX-Base to the FLEX4 (LRE side).
- 5. Using CAT5 or higher category cable, connect the endpoint to FLEX4 (Endpoint side).

## **Technical Specifications**

Model	FLEX4				
Part Number	NV-FLX-04				
Dimensions	9.8cm x 9.6cm x 2.5cm (LxWxH); 3.86" x 3.78" x 0.98" (LxWxH)				
Weight	214 g (7.6 oz.)				
Interface: Network Infrastructure side (FLEX)	1 RJ45 port: UTP /STP cable (1-pair, 2-pair or 4-pair)				
Interface: IEEE Side (IP Device)	4 RJ45 ports: adapter is IEEE 802.3 af/at compliant and will negotiate power requirements with IP end device				
Power Supply	PoE from the FLEX switch, or external power supply; maximum 30W (over 2-pairs) each port				
Power Consumption	1.5W				
DC IN	<ul> <li>Optional (sold separately) 48-56VDC via an external AC/DC Power Adapt (IEC Class II isolated only)</li> <li>NOTE 1: Local power supply used must have its output isolated from Earth potential.</li> <li>NOTE 2: If voltage of local power supply is lower than the power voltage provided from the PoE switch, then power on the PoE switch should be turned off.</li> </ul>				
Operating Temperature	-40C to +70C (-40F to +158F) Tests conducted against international safety standard at maximum ambient temperatures of 60°C at 64W and 55C° at 120W				
Mean Time Before Failure (MTBF)	20+ years				
Humidity	10% to 95% (non-condensing) at 35° C				
Ambient Temperature	Minimum ambient temperature for cold start-up is 32°F (0°C)				

### Note the Following:

All of the above instructions provide basic installation information necessary for the proper and safe functioning of this equipment. Persons installing or maintaining this product must read all of the safety instructions and the parts of system grounding, which are applicable to the system being maintained. Only trained, qualified service personnel shall install or maintain this product.

### \land Warnings

#### FAILURE TO FOLLOW ALL INSTRUCTIONS MAY RESULT IN IMPROPER EQUIPMENT OPERATION AND/OR RISK OF ELECTRICAL SHOCK.

ANY CONNECTION TO AN OUTSIDE PLANT LEAD, AN OFF-PREMISE APPLICATION, OR ANY OTHER EXPOSED PLANT APPLICATION MAY RESULT IN A FIRE OR SHOCK HAZARD, AND/OR DEFECTIVE OPERATION, AND/OR EQUIPMENT DAMAGE.

Keep these instructions with the equipment.

Do not attempt to install or service this equipment unless you are skilled in the installation and maintenance of electronic telecommunications equipment and have successfully completed specific training for this equipment.

# **Quick Install Guide: FLEX4**

#### ▲ Safety Warnings and Precautions

- Refer to the FLEX24-10G-10G or FLEX8 Quick Install Guides under "Safety Warnings" for the FLEX adapters
- Reportez-vous aux Quick Install Guides FLEX24-10G ou FLEX8 sous "Safety Warnings" pour les adaptateurs FLEX
- Beachten Sie die FLEX24-10G- oder FLEX8- Quick Install Guides unter "Safety Warnings" für die FLEX-Adapter
- Consulte las Quick Install Guides FLEX24-10G o FLEX8 bajo "Safety Warnings" para los adaptadores FLEX
- Katso FLEX24-10G- tai FLEX8 Quick Install Guides FLEX-sovittimien "Safety Warnings" alla
- Raadpleeg de FLEX24-10G of FLEX8 Quick Install Guides onder "Safety Warnings" voor de FLEX-adapters
- Se FLEX24-10G eller FLEX8 Quick Install Guides under "Safety Warnings" för FLEX-adaptrarna
- Se FLEX24-10G eller FLEX8 Quick Install Guides under "Safety Warnings" for FLEX-adaptere
- Ανατρέξτε στους οδηγούς FLEX24-10G ή FLEX8 Quick Install Guides στην ενότητα "Safety Warnings" για τους προσαρμογείς FLEX
- Fare riferimento alla sezione FLEX24-10G o FLEX8 Quick Install Guides sotto "Safety Warnings" per gli adattatori FLEX
- Consulte o FLEX24-10G ou FLEX8 Quick Install Guides em "Safety Warnings" para os adaptadores FLEX
- Irreferi għall-FLEX24-10G jew FLEX8 Quick Install Guides taħt "Safety Warnings" għall-adapters FLEX
- Vaadake FLEX24-10G või FLEX8 Quick Install Guides alusel "Safety Warnings" FLEX adapterid
- A FLEX adapterek "Safety Warnings" című részében olvassa el a FLEX24-10G vagy a FLEX8 Quick Install Guides című részt
- Nanašajo na FLEX24-10G ali FLEX8 Quick Install Guides pod "Safety Warnings" za FLEX adapterji
- Další informace naleznete v příručkách FLEX24-10G nebo FLEX8 Quick Install Guides v části "Safety Warnings" pro adaptéry FLEX
- Kreiptis į FLEX24-10G ar FLEX8 Quick Install Guides pagal "Safety Warnings" Už FLEX adapteriai
- Skatiet FLEX24-10G vai FLEX8 Quick Install Guides zem "Safety Warnings", lai FLEX adapteri
- Pozrite si FLEX24-10G alebo FLEX8 Quick Install Guides v časti "Safety Warnings" pre adaptéry FLEX
- Sjá FLEX24-10G eða FLEX8 Quick Install Guides undir "Safety Warnings" fyrir FLEX-millistykki
- Zobacz FLEX24-10G lub FLEX8 Quick Install Guides w sekcji "Safety Warnings" w przypadku adapterów FLEX
- Se FLEX24-10G eller FLEX8 Quick Install Guides under "Safety Warnings" for FLEX-adaptere
- Consultați ghidurile FLEX24-10G sau FLEX8 Quick Install Guides din secțiunea "Safety Warnings" pentru adaptoarele FLEX
- Обърнете се към FLEX24-10G или FLEX8 Quick Install Guides в "Safety Warnings" за адаптери FLEX

## **Compliance and Environmental Information**

All the compliance and environmental information is available on our website www.nvtphybridge.com

### **PoE Power Available to FLEX4**

FLEX4	20ft	250ft	500ft	750ft	1,000ft	1,250ft	1,500ft	1,750ft	2,000ft
	(6m)	(76m)	(152m)	(228m)	(305m)	(381m)	(457m)	(533m)	(610m)
Cat6 4-Pairs	50W	48	46	44	42	39	37	35	33
Cat6 2-Pairs	30W	30	29	28	26	24	22	20	18
Cat5e 4-Pairs	50W	47	44	41	38	35	33	30	27
Cat5e 2-Pairs	30W	30	28	25	23	20	18	15	12

\*Note: PoE Power is shared on all 4 ports of FLEX4, to a max of 30 Watts output per port.

### Support and Warranty

#### **Technical Support**

The NVT Phybridge Technical Support Group is available to assist you with product installation, configuration, monitoring and troubleshooting procedures. Should you experience trouble with this equipment or for repair or warranty information, please contact NVT Phybridge at <u>www.nvtphybridge.com/support/</u> or directly through email at <u>support@nvtphybridge.com</u>

#### Warranty

The FLEX adapters are backed by NVT Phybridge's award-winning customer support and 5-year warranty.