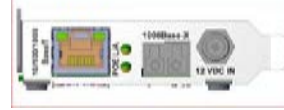


N-GXE-POE-EPS-KIT

PoE NIC External Power Supply Kit

Install Guide

- Custom power solution
- Powers the N-GXE-POE-xx-01
- Fits in the HP™ t730 Thin Client



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Introduction

The Transition Networks N-GXE-POE-EPS-KIT is a custom power solution for powering the PoE NIC externally in situations where an HP™ t730 Thin Client cannot supply adequate PoE or PoE+ power. The Transition Networks PoE NIC (N-GXE-POE-xx-01) requires 32W for PoE load, 42W for PoE+ and fits in the HP t730 Thin Client.

Kit Contents

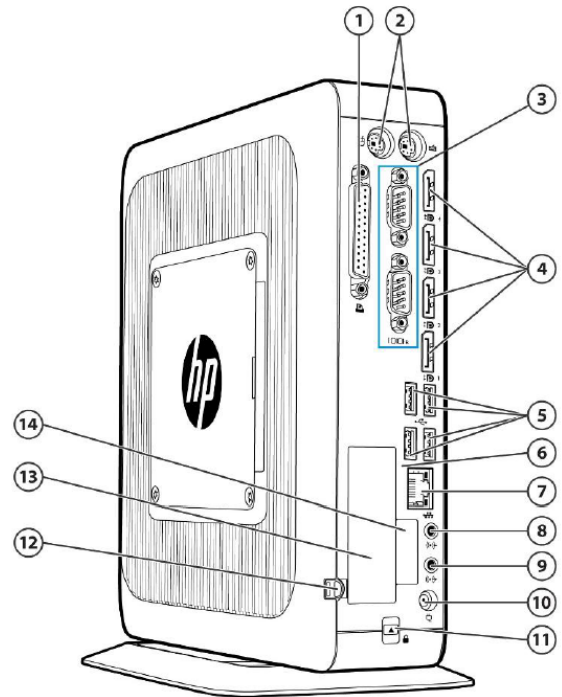
The N-GXE-POE-EPS-KIT includes:

- One 40W Power Supply
- One Low-profile NIC mounting bracket for providing power cable connector access
- One Cable Assembly
- One Power Cord, NEMA 5-15P to IEC320 C13

HP™ t730 Thin Client

The HP t730 Thin Client back panel is described below.

1. Parallel port
2. PS/2 ports for keyboard and mouse
3. Serial ports (2)
4. DisplayPort 1.2 digital video outputs (4)
5. Hi-Speed USB 2.0 ports (4)
6. SuperSpeed USB 3.0 port (1) secured inside
7. Gigabit Ethernet RJ45 connector
8. Audio line in port
9. Audio line out port
10. +19V DC power input
11. Cable lock slot
12. Retractable power cord retention hook
13. PCI Express (low profile) expansion slot
14. Fiber Optic NIC expansion slot



See the [HP website](#) for more information.

See the HP documentation for exceptions and limitations (e.g., Fiber optic and Wi-Fi NIC options cannot be supported together).

Power Cord

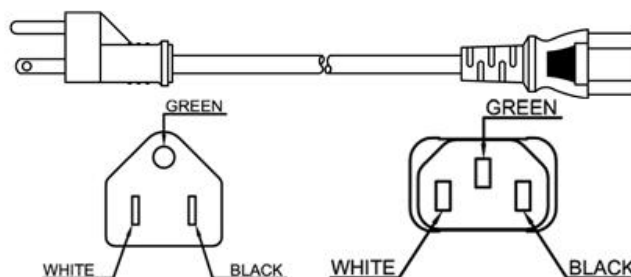
The provided Power Cord is a NEMA 5-15P to IEC320 C13. This North American power cord can also be used in these countries: Bahamas, Jamaica, Barbados, Laos, Belize, Mexico, Canada, Micronesia, Cayman Islands, Nicaragua, Costa Rica, No. Mariana Island, Cuba, Palmyra Atoll, Dominican Republic, Panama, Ecuador, Peru, El Salvador, Philippines, Guam, Puerto Rico, Guatemala, Thailand, Haiti, Venezuela, Honduras, and Virgin Islands.



NEMA 5-15P To IEC-60320-C13



NEMA 5-15P



IEC-60320-C13

Power Supply

The external switching power supply is a highly reliable 40W desktop style single-output green adapter. It is a class I power unit with FG, equipped with a standard IEC320-C14 AC inlet, and adopting the input range from 90 VAC to 264 VAC. The design allows the power supply to save the energy when it is either under operating mode or standby mode. It comes in a flame retardant plastic case and is certified for the international safety regulations.

Power Supply Specifications

Input Voltage	90 VAC to 264 VAC, 127 VDC to 370 VDC
Number of Outputs	1 Output
Output Power	40 W
Output Voltage-Channel 1	12 V
Output Current-Channel 1	3.34 A
DC Output Connector	2.1 mm Barrel Plug
DC Output Cord Length	1 m
Efficiency	Level VI
Load Regulation	Regulated
Unit Weight	9.876709 oz
Output DC Voltage	12V
Output Rated Current	3.34A
Output Current Range	0 ~ 3.34A
Output Rated Power (max.)	40W
Output Hold Up Time (Typ.)	50ms / 230VAC 15ms / 115VAC at full load
Input Voltage Range	90 ~ 264VAC 127 ~ 370VDC
Input Frequency range	47 ~ 63Hz
Input Efficiency (Typ.)	89.5%
Input AC Current (Typ.)	1A / 115VAC 0.5A / 230VAC
Input Inrush Current	65A / 230VAC
Input Leakage Current	0.75mA / 240VAC
Overload Protection	105 ~ 150% rated output power. Protection type: Hiccup mode, recovers automatically after fault condition is removed
Over Voltage Protection	12.6 ~ 16.2V. Type: Shut down o/p voltage, re-power on to recover
Working Temperature	-30 ~ +70°C with derating
Working Humidity	20% ~ 90% RH non-condensing
Storage Temperature	-40 ~ +85°C
Storage Humidity	10 ~ 95% RH
Temperature Coefficient	±0.03% / °C (0~50°C)
Safety Standards	UL60950-1, TUV EN60950-1, BSMI CNS14336, CCC GB4943, J60950-1 approved
EMC Emission	Compliance to EN55022 class B, EN61000-3-2,3, FCC PART 15 / CISPR22 class B, CNS13438 class B, GB9254, GB17625.1
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A
MTBF	736.4K hrs min. MIL-HDBK-217F (25°C)
Dimensions	125 x 50 x 31.5mm (L x W x H)

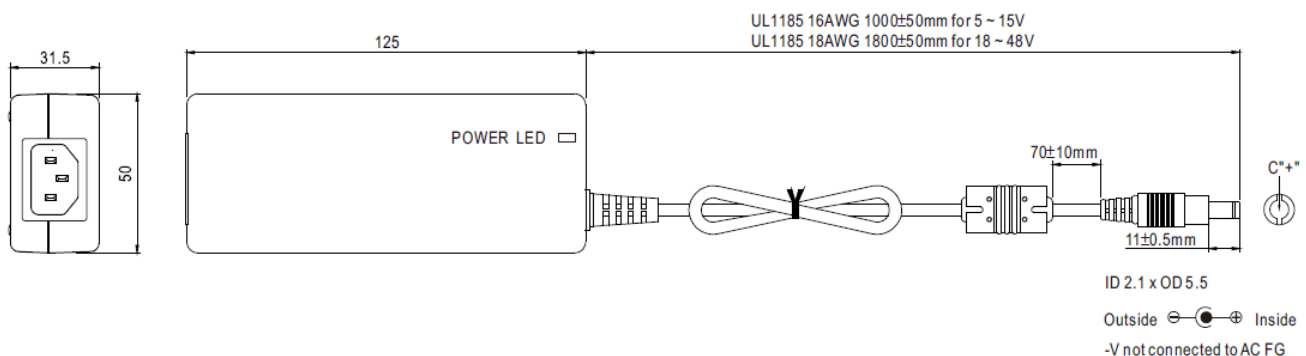


Power Supply Installation Notes

1. Before attaching the DC plug of an adaptor to equipment, unplug the adaptor from the AC power and verify the unit is within the voltage and current rating on the equipment.
2. Keep the connections between the adaptor and its power cord and between the DC plug and equipment tight and properly connected.
3. Protect the power cord from being stepped on or squashed.
4. Keep good ventilation for the unit in use to prevent it from overheating. Also a 10-15 cm clearance must be kept when the adjacent device is a heat source.
5. Use an approved power cord greater or equal to SVT, 3G×18AWG or H03VV-F, 3G×0.75mm².
6. If the final equipment is not used for long periods of time, disconnect the equipment from power supply to avoid being damaged by voltage peaks or lightning strike.

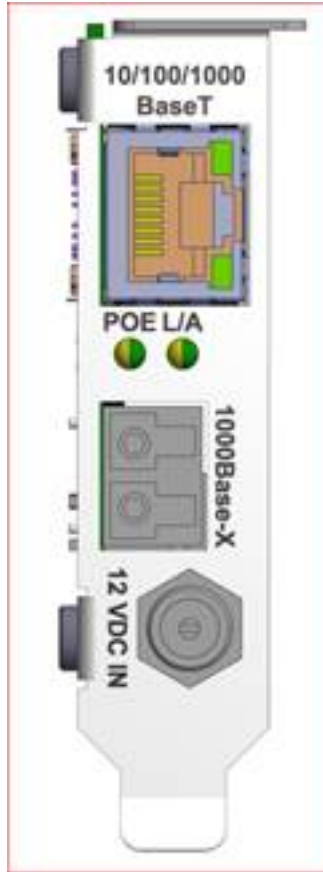


1. Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not remove the case of the adaptor by yourself!
2. Risk of fire or electrical shock. The openings should be protected from foreign objects or dripping liquids.
3. Using wrong DC plug or forcing a DC plug into an electronic device may damage the device or cause it to malfunction. Refer to DC plug compatibility information.
4. Adaptors should be placed on a reliable surface. A drop or fall could cause damage.
5. Do not put adaptors in places with high moisture or near the water.
6. Do not put adaptors in places with high ambient temperature or near fire source. Refer to the specifications section.
7. Output current and output wattage must not exceed the rated values on specifications.
8. Disconnect the unit from the AC power before cleaning. Do not use any liquid or aerosol cleaner. Only use a damp cloth to wipe it.
9. Contact a local qualified recycler when you want to dispose of this product.



Low-profile NIC Mounting Bracket for Power Connector Access

The Low-profile NIC Mounting Bracket for Power Connector Access is designed to replace original low profile NIC bracket from N-GXE-POE-xx-01. It allows power to be provided to the NIC.



Cable Assembly

The Cable Assembly is used to power the PoE NIC externally in situations where a Thin Client cannot supply adequate PoE or PoE+ power. Note that the NIC must be installed before the power connector is connected.



Related Manuals

These related manuals are also available:

- N-GXE-POE-EPS-KIT Quick Start Guide (33695)
- N-GXE-POE-xx-01 User Guide (33599)
- TN EPC Utility User Guide (33657)

For Transition Networks Application Notes, Brochures, Case Studies, Data Sheets, Specifications, Webinars, White papers, etc. go to <https://www.transition.com/support/library/> (no registration required).

For Transition Networks Drivers, Firmware, Release Notes, Manuals (Install Guides, Quick Start Guides, User Guides) go to the Product Support webpage at <https://www.transition.com/support/product-support/> (no logon required).

Installation

N-GXE-POE-EPS-KIT Installation Instructions

CAUTION: Only qualified persons should install the NIC. Failure to observe this caution could result in poor performance or damage to the equipment. Before installing the N-GXE-POE-xx-01, review the Pre-Installation Checklist and Safety Precautions below.



CAUTION: Wear a grounding device and observe electrostatic discharge precautions when installing the N-GXE-POE-xx-01 in a system. Failure to observe this caution could result in damage to the N-GXE-POE-xx-01. Before installing the N-GXE-POE-xx-01, review the Pre-Installation Checklist and Safety Precautions below. Before installing the N-GXE-POE-xx-01, ensure that system power is OFF, the power cord is unplugged from the power outlet, and that proper electrical grounding procedures have been followed.



WARNING: High voltage inside the system may present a safety hazard. Make sure that the system power is off before removing the cover. Unplug and disconnect the PC and then wait for 15-20 seconds before plugging the PoE NIC into the PC. When removing NIC, unplug Ethernet cable before removing PC cover.

Pre-Installation Checklist

Before installing your N-GXE-POE-xx-01, review the preceding sections, and then verify the following:

1. Verify that your system is using the latest BIOS.
2. If you download the driver software and WinPcap from the Transition Networks website, record the path where you saved the downloads.
3. If your system is active, shut it down. Do not install the NIC until system power is completely removed. When system shutdown is complete, power OFF and unplug your system.
4. Holding the N-GXE-POE-xx-01 by the edges, remove it from its shipping package and place it on an antistatic surface.
5. Check the N-GXE-POE-xx-01 for signs of damage, particularly on the PCB edge connector.



CAUTION: Never attempt to install a damaged NIC card. If the N-GXE-POE-xx-01 is damaged, report it to Transition Networks.



6. **CAUTION:** Wear a grounding device and observe electrostatic discharge precautions when installing the N-GXE-POE-xx-01 in a system. Failure to observe this caution could result in damage to the N-GXE-POE-xx-01. Before installing the N-GXE-POE-xx-01, ensure that system power is OFF, the power cord is unplugged from the power outlet, and that proper electrical grounding procedures have been followed.



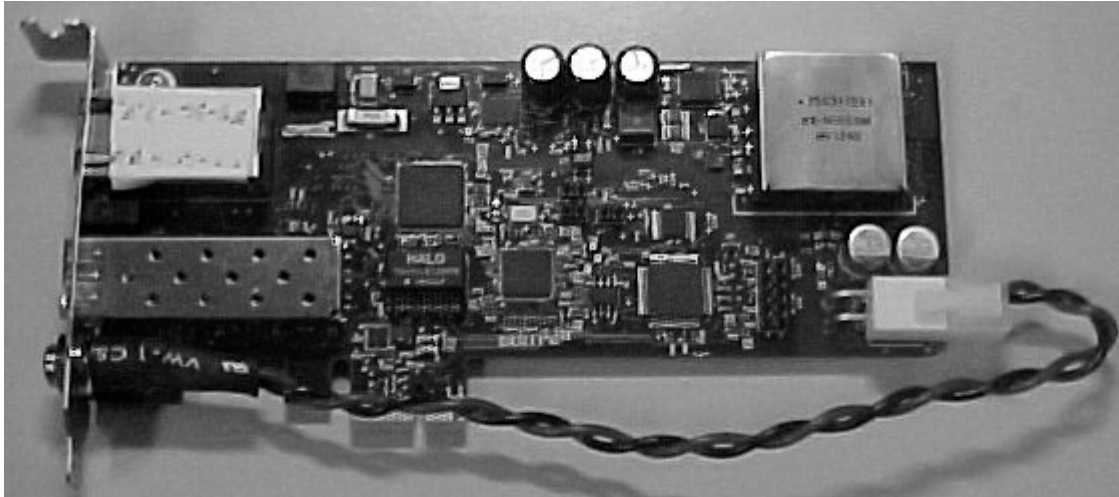
7. **CAUTION:** Install the NIC in an operating environment where the temperature range is from -0°C to +50°C (32°F to +122°F), with relative humidity of 5% to 90% non-condensing. Failure to observe this caution could result in poor equipment performance.




8. **CAUTION:** DO NOT install the NIC in areas where strong electromagnetic fields (EMF) exist. Failure to observe this caution could result in poor equipment performance and data corruption.

Installation Procedure

Review the Pre-Installation Checklist (previous section) before installing your N-GXE-POE-EPS-KIT.



1. Remove original low profile NIC bracket from N-GXE-POE-xx-01. Retain screws for re-use with new low profile bracket.
2. Insert the 2.1mm barrel panel-mount connector into the new PCIe bracket (NIC side). On the front side of the bracket, add washer and fasten retaining bolt.
3. Using the screws retained from the original bracket, attach new PCIe bracket/cable assembly to the NIC.
4. Install the NIC into the HP t730 Thin Client.
5. Plug the white 4-pin connector from the power cable assembly into the power connector on the NIC.
6.  **CAUTION:** Before powering up wall adapter power supply, connect power supply to NIC. Inserting 12V plug into the NIC with power applied may blow the input fuse.

The final assembly will look similar to the figure below.



Operation

Status LEDs

See the status LEDs section of the N-GXE-POE-xx-01 User Guide (33599) or the TN EPC Utility User Guide (33657) for LED and status details.

Troubleshooting

If the device fails, isolate and correct the fault using the following questions and actions.

1. Verify the [N-GXE-POE-EPS-KIT Installation Instructions](#) on page 7.
2. Confirm the [Pre-Installation Checklist](#) items on page 7.
3. Verify the [Installation Procedure](#) on page 8.
4. Use the troubleshooting procedures in the *N-GXE-POE-xx-01 User Guide* (33599).
5. Use the troubleshooting procedures in the *TN EPC Utility User Guide* (33657).
6. Refer to the information provided in the HP t730 Thin Client documentation and help system.
7. Contact Transition Networks Technical Support. See [Contact Us](#) below.

Contact Us

Technical Support: Technical support is available 24-hours a day

US and Canada: 1-800-260-1312

International: 00-1-952-941-7600

Main Office

tel: +1.952.941.7600 | toll free: 1.800.526.9267 | fax: 952.941.2322

sales@transition.com | techsupport@transition.com | customerservice@transition.com

Address

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Minnetonka, MN 55343, U.S.A.

Web: <https://www.transition.com/>

Compliance Information

Modification of NIC voids UL approval. See the N-GXE-POE-xx-01 User Guide (33599) for DoC, FCC, Canadian and European regulations and warnings, and other regulatory agency information.

Record of Revisions

Rev	Date	Notes
A	8/3/16	Initial release.

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