

NEO 4000e Tape Library Specifications

Physical Characteristics

All Versions	Specifics
Unpacked Dimensions (H x W x D)	17.5 x 16.7 x 31 inches (22.25 x 42.42 x 78.74 cm)
Shipping Dimensions (H x W x D)	28 x 33 x 42 inches (71.1 x 83.8 x 106.7 cm)
Rack Height	10U
Maximum Weight, Unpacked	75 lb. (34 kg) with no drives or media
Maximum Weight, Shipping	136 lb. (62 kg) with no drives or media
Maximum Number of Drives	4
Maximum Number of Magazines	4
Number of Slots per Magazine	15
Maximum Number of Cartridges	60 LTO
Number of Possible Mail Slots	0, 1, 2, 15, or 30
Number of Partitions Supported	Up to 4
Maximum Number of Power Supply	2

Expansion Options

Type	Specifics
Maximum Number of Modules Coupled	Up to 4 NEO 4000e modules*
Maximum Number of Tape Drives per Module	4
Drive Types Supported	LTO-6, LTO-5
Maximum Capacity per Module	LTO-6: 150TB (native), 375TB (compressed) LTO-5: 90TB (native), 180TB (compressed)

* Both NEO 2000e and 4000e modules can be coupled together to form a single system.

Interfaces

Connection Type	Specifics
Ethernet	RJ-45
Serial	RJ-11
Fibre Channel	LC connector, up to 8Gb maximum

Connection Type	Specifics
SAS	Mini-SAS (SFF-8088), up to 6Gb maximum

Operations

Operation	Specifics
Maximum Native Data Transfer Rate	LTO-6: 2.3TB/hr LTO-5: 2TB/hr
Maximum Compressed Data Transfer Rate	LTO-6: 5.8TB/hr LTO-5: 4TB/hr
Mount Time, into Drive (Excluding pass-through channel access)	Less than 15 seconds
Dismount Time, from Drive (excluding drive rewind/unload/eject time)	Less than 15 seconds

Reliability

Feature	Specifics
MTBF (Mean Time Between Failures)	More than 250,000 hours
MCBF (Mean Cycles Between Failures)	More than 4,000,000 cartridge swap cycles
MTR (Mean Time To Repair)	Less than 15 minutes
Maximum Time to Repair	<10 minutes (for most FRUs)
Design Life	7 years at 30% Duty Cycle

Safety

Agency	Standard
NRTL - US	IEC60950-1, Standard for Safety of Information Technology Equipment
NRTL - Canada	CAN/CSA-C22.2 No. 950, Standard for Safety of Information Technology Equipment
CE Marking (European Union)	Low Voltage Directive, 72/23/EEC, European Union
TÜV GS Mark (Germany)	EN60950, (IEC950) Standard for Safety of Information Technology Equipment, Third addition

Electromagnetic Emissions

Agency	Standard
FCC	US Std. 47 CFR, Part 15 Rules, Class A. Notation on Product
Industry Canada (ICES)	Industry Canada Rules, ICES-003, Class A. Notation on product

Agency	Standard
CE Marking (European Union)	EMC Directive, 89/336/EEC Laws, relating to electromagnetic compatibility, European Union EN55022, Standard, RFI limits, Information Technology Equipment, Class A EN55024, Information Technology Equipment, Immunity.
VCCI (Japan)	Class A per CISPR 22, Japan. VCCI statement on product
BSMI (Taiwan)	CNS: 13438, Taiwan. Class A

Temperature, Humidity & Altitude

Operating	
Dry Bulb Temperature	10 °C to 40 °C
Temperature Gradient	1 °C / min. (across the range)
Temperature Shock	15 °C (over 2 min.)
Wet Bulb Temperature	26 °C
Relative Humidity	10% to 80% (noncondensing)
Humidity Gradient	10% / hr.
Altitude (Sea Level)	-1000 ft. to +10,000 ft.
Power On – No Tape Loaded (Unpacked – 72 hours)	
Dry Bulb Temperature	0 °C to 40 °C
Temperature Gradient	15 °C / hr. (across the range)
Temperature Shock	15 °C (over 2 min.)
Wet Bulb Temperature	30 °C
Relative Humidity	10% to 95% (noncondensing)
Humidity Gradient	10% / hr.
Altitude (Sea Level)	-1000 ft. to +10,000 ft.
Non-Operating – Long Term (Packed or Unpacked)	
Dry Bulb Temperature	-40 °C to 60 °C
Temperature Gradient	20 °C / hr. (across the range)
Temperature Shock	15 °C (over 2 min.)
Wet Bulb Temperature	30 °C
Relative Humidity	5% to 80% (noncondensing)
Humidity Gradient	10% / hr.
Altitude (Sea Level)	-1000 ft. to +10,000 ft.
Transit – Short Term (Packed 7 Days)	
Dry Bulb Temperature	-40 °C to 60 °C
Temperature Gradient	25 °C / hr. (across the range)
Temperature Shock	15 °C (over 2 min.)

Wet Bulb Temperature	30° C
Relative Humidity	5% to 95% (noncondensing)
Humidity Gradient	10% / hr.
Altitude (Sea Level)	-1000 ft. to +50,000 ft.

Shock

Operating (Within Spec – No Damage)	
Peak Acceleration	1.5 G's
Duration	11ms
Wave Shape	1/2 sine pulses
Application	X,Y,Z axes, repeat 3 times
Non-Operating, with Tape Cartridges Removed (Unpacked – No Damage)	
Peak Acceleration	25 G's
Duration	11ms
Wave Shape	1/2 sine pulses
Application	X,Y,Z axes, repeat 3 times
Transit/Storage (Packed – No Damage)	
Peak Acceleration	30 G's
Duration	30ms
Wave Shape	1/2 sine pulses
Application	X,Y,Z axes, repeat 3 times
Physical Drop Test (Packed – No Damage)	
Drop Test Distance	12 in.
Application	Per ISTA (1 time)

Vibration

Operating (Within Spec – No Damage)	
Frequency Range	5–1000–5Hz
Peak Acceleration	0.25 G
Wave shape	Sinusoidal, 1 octave/min.
Application	X,Y,Z axes 2 sweeps per axis
Non-Operating (Unpacked – No Damage)	
Frequency Range	5–1000–5Hz
Peak Acceleration	1.0 G
Wave shape	Sinusoidal, 1 octave/min.
Application	X,Y,Z axes 2 sweeps per axis

Transit/Storage (Packed – No Damage)	
Random Vibration Test	ASTM D4728-95
Considerations	Air and Truck only

Power Consumption

Status	Power Consumed
Idle State	344 Watts
Average Running State	430 Watts

Environmental Impact

Status	Heat Produced
Idle State	1174 BTU/h (1238 KJ)
Average Running State	1467 BTU/h (1548 KJ)

Power

Rating	Range
Input Voltage, Low	100-120 VAC \pm 10%
Input Voltage, High	200-240 VAC \pm 10%
NOTE: The low voltage nominal will be 110 VAC and the high voltage nominal will be 220 VAC.	
Input Frequency	47-63 Hz
AC Power Input	Two IEC320-C20 type rear-panel receptacles

FCC Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Japanese Voluntary Control Council for Interference (VCCI)

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Translation

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective actions.

Taiwan BSMI Class A Warning

警告使用者：
這是甲類的資訊產品，在居住的環境中使用時，
可能會造成射頻干擾，在這種情況下，使用者會
被要求採取某些適當的對策。