


The QNAP logo is displayed in white, bold, uppercase letters within a blue rounded rectangular box in the top-left corner of the page.

TS-451DeU

使用手冊

A decorative graphic at the bottom of the page features a network of interconnected nodes and lines, transitioning from light blue to dark blue, with some nodes highlighted in white and others in various shades of blue and red.

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1. 重要資訊

原包裝

請保留原包裝及包裝材料。當產品需要退回或送修時請使用原包裝，以免損壞產品。

若因包裝不當導致運送中產品發生之損壞，QNAP 恕不提供退款或保固服務。

硬體瑕疵

如果您的 QNAP 產品有硬體瑕疵，請將產品寄回 QNAP 或 QNAP 授權服務中心，以進行維修或換貨。只要您或未經授權的第三方嘗試修復產品或執行產品維修流程，皆會導致產品保固失效。

對於因未獲授權進行修改或安裝不支援之第三方應用程式所導致的任何損害或資料遺失，QNAP 一概不予負責。

如需詳細資訊，請參見：[QNAP 產品保固服務條款](#)。

安全資訊

以下指示可協助確保人身安全及環境安全。請在執行任何操作前，仔細閱讀本安全指示。

一般指示

- 裝置應放置在實施進出管制的安全場所，並透過包括工具、鎖鑰或其他安全機制來控管。
- 唯有具技能且獲得授權的合格裝置管理員才能實際接觸裝置；合格裝置管理員必須熟悉所有管制方法、安全注意事項、安裝及保養程序。

警告



為避免受傷或元件損壞，在觸碰硬碟及其他內部系統元件前，請先確認其是否已經冷卻。



請遵守靜電放電 (ESD) 程序以防止潛在傷害或元件損壞。

電源

警告



為了降低電線走火或觸電風險，務必只將電源線連接至正確接地的電源插座。



為防止嚴重傷害事故發生，在安裝或更換系統元件前，經訓練的維修技術人員必須先從裝置上拔除所有電源供應器的電源線。

移動的零件

警告



轉動的風扇葉片：裝置接上電源時，請使身體部位遠離任何正在轉動的風扇葉片。



移動的元件：使身體部位遠離其他任何正在移動的元件。

該裝置不適合在兒童可能在場的地方使用。

系統電池

警告



吞食危險

- 本產品可能含有鈕扣電池。
- 請將電池放在兒童接觸不到的地方。
- 如果吞下鈕扣型鋰電池，可能會在 2 小時內造成嚴重或致命的傷害。
- 如果您認為電池可能已被吞下或位於身體的任何部位，請立即就醫。

- 更換電池時，請務必使用相同類型的電池，以免電池爆炸造成受傷或使元件損壞。
- 請遵照當地法規或電池製造商的指示，妥善處置廢棄電池。
- 即使是使用過的電池也可能導致嚴重傷害或死亡。
- 致電當地毒物防治中心以取得治療資訊。
- 有關裝置中鈕扣電池的類型及電壓資訊，請參閱硬體規格表。

- 不得將非充電電池進行充電。
- 請勿強制放電、充電、拆解、加熱或焚燒。這樣做可能會因外洩、洩漏或爆炸導致化學灼傷的傷害。
- 確保依據極性 (+ 和 -) 正確地安裝電池。
- 請勿混合使用新舊電池或不同品牌或類型的電池，例如鹼性電池、碳鋅電池或充電電池。
- 取出長期未使用設備中的電池，並根據當地法規立即回收或進行處理。
- 務必完全固定電池盒。如果電池盒未關緊，請停止使用本產品，並取出電池，將其放在遠離兒童的地方。

機架滑軌

機架式機型可能需要機架滑軌才能安裝到伺服器機架或機櫃。

為確保設備及人身安全，在安裝機架滑軌並安裝裝置之前，請仔細閱讀機架滑軌的安裝說明。

若要檢查您的裝置是否為機架式裝置，請參閱硬體規格表。

警告

- 當機架滑軌安裝在伺服器機架時，除非正在安裝或卸下裝置，否則請勿完全展開及鬆開滑軌。
- 將滑軌完全展開並鬆開可能會導致重型設備掉落。這可能會導致設備損壞、破壞，甚至致命的傷害。
- 在準備將滑軌進行裝置安裝或拆卸之前，請仔細閱讀並確保您瞭解安裝說明。
- 切勿在安裝或拆卸裝置時，將任何物體放置在裝置或滑軌上，或增加裝置或滑軌任何額外的負荷。
- 在安裝裝置時，將裝置完全滑入伺服器機架，以完全鎖定滑軌，並將裝置固定到伺服器機架。

2. 產品概觀

本章介紹 QNAP TS-451DeU NAS 的基本資訊。

關於 TS-451DeU

TS-451DeU 搭載 Intel® Celeron® J4025 雙核心 2.0 GHz 處理器、AES-NI 硬體加密引擎，支援達 8 GB 的 DDR4 記憶體。NAS 提供兩個 M.2 2280 SATA 6 Gbps SSD 插槽以及四個熱抽換 SATA 6 Gbps 硬碟插槽，並同時支援硬碟與固態硬碟。TS-451DeU 也包含兩個 USB 2.0 連接埠和兩個 USB 3.2 Gen 1 連接埠。

硬體規格

提示

型號規格如有變更，恕不另行通知。若要查看最新規格，請前往：<https://www.qnap.com>。

元件	TS-451DeU-2G
處理器	
CPU	Intel® Celeron® J4025
頻率	2 核心/2 執行緒 2.00 GHz 基頻/2.90 GHz 超頻
架構	x86 64 位元
加密引擎	AES-NI
記憶體	
預載記憶體	2GB：1 x 2 GB SODIMM DDR4
記憶體插槽	2 x SODIMM DDR4 <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p>重要</p> <ul style="list-style-type: none"> • 僅限使用 QNAP 記憶體模組以維護系統效能和穩定性。若是具有一個以上記憶體插槽的 NAS 裝置，請使用規格相同的 QNAP 記憶體模組。 • 使用不支援的記憶體模組會導致效能降級、產生錯誤，或造成作業系統無法啟動。 </div>
最大記憶體	8 GB RAM：2 x 4 GB

元件	TS-451DeU-2G
快閃記憶體	4 GB (雙啟動作業系統防護)
儲存	
硬碟插槽	4 x 3.5 吋 SATA 6 Gbps 注意 SATA 6 Gbps 硬碟插槽與 SATA 3 Gbps 硬碟回溯相容。
硬碟相容性	3.5 吋插槽： <ul style="list-style-type: none"> • 3.5 吋 SATA 硬碟 • 2.5 吋 SATA 硬碟 • 2.5 吋 SATA 固態硬碟
M.2 SSD 插槽	2 x SATA 6 Gbps
M.2 SSD 機種	2280
SSD 快取加速技術支援	3.5 吋硬碟插槽：1 至 4
熱抽換	支援
網路	
2.5 Gigabit 乙太網路埠	2 x 2.5 GbE RJ45 注意 2.5 Gigabit 乙太網路埠提供三種網路連線速度：2.5G、1G、100M 和 10M。
外接 I/O 埠和擴充插槽	
USB 連接埠	<ul style="list-style-type: none"> • 2 x USB 2.0 Type-A • 2 x USB 3.2 Gen 1 Type-A
介面	
按鈕	<ul style="list-style-type: none"> • 電源 • 重設

元件	TS-451DeU-2G
尺寸	
外型	1U 機架式
尺寸 (高 x 寬 x 深)	43.3 x 430 x 294.9 mm (1.74 x 16.92 x 11.61 吋)
淨重	4.15 kg (9.15 lbs)
滑軌相容性	RAIL-B02 注意 NAS 不含機架滑軌，必須另外購買。如需詳細資訊，請聯絡授權經銷商或前往 https://shop.qnap.com 。
其他	
電源供應器	100W，100-240V AC，50/60 Hz
系統電池	CR2032 鋰電池 (3V，225 mAh)
噪音值	21.6 dB(A) 注意 從旁觀者位置 (距 NAS 一公尺內) 測試噪音值。在測試用的 NAS 中安裝最多數量的硬碟，並以低速運行。
風扇	系統：3 x 40 mm，12V DC 風扇
操作溫度	0°C 到 40°C (32°F 到 104°F)
相對濕度	<ul style="list-style-type: none"> 不凝結相對溼度：5% 至 95% 濕球溫度：27°C (80.6°F)
安全鎖	Kensington 安全插槽

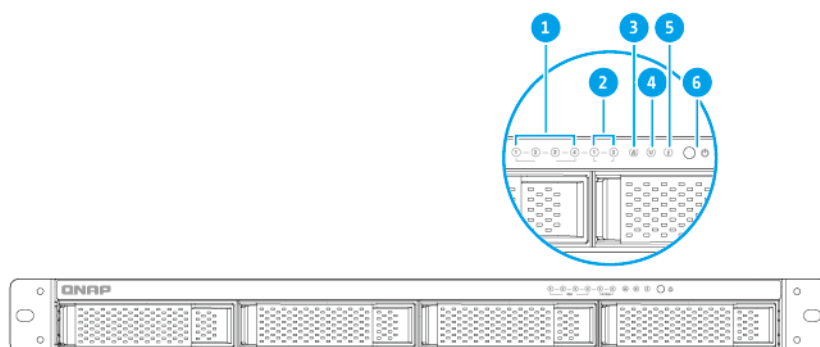
包裝內容

項目	數量
TS-451DeU	1

項目	數量
電源線	1
乙太網路線	2 x Cat5e 連接線
3.5 吋硬碟用螺絲	16
2.5 吋硬碟用螺絲	12
M.2 SSD 散熱器	2
把手套組	<ul style="list-style-type: none"> • 2 x 把手 • 2 x 角形托座 • 8 x 螺絲
快速安裝手冊 (QIG)	1

元件

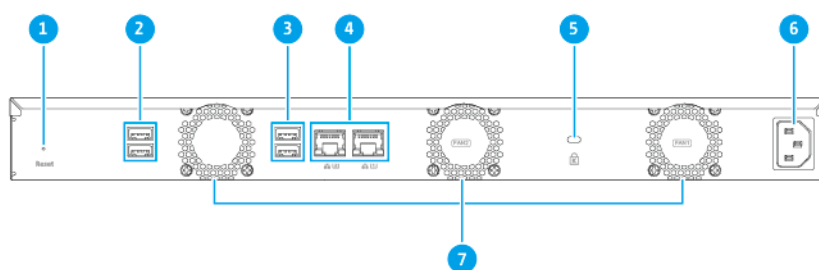
前面板



編號	元件	編號	元件
1	硬碟 LED 燈	4	USB 擴充設備 LED

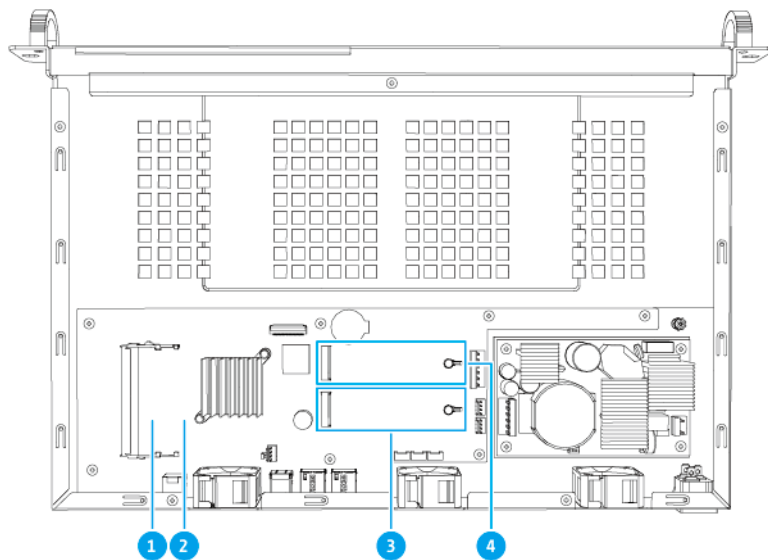
編號	元件	編號	元件
2	M.2 SSD LED 燈	5	狀態 LED 燈
3	LAN LED 燈	6	電源按鈕

後面板



編號	元件	編號	元件
1	重設按鈕	5	Kensington 安全插槽
2	USB 2.0 Type-A 連接埠	6	電源輸入
3	USB 3.2 Gen 1 Type-A 連接埠	7	系統風扇
4	2.5 Gigabit 乙太網路埠	—	—

系統板



注意

圖片不包含機殼蓋。

編號	元件	編號	元件
1	記憶體插槽 2	3	M.2 SSD 插槽 1
2	記憶體插槽 1	4	M.2 SSD 插槽 2

硬碟編號



安裝需求

類別	項目
環境	<ul style="list-style-type: none"> 室溫：0°C 到 40°C (32°F 到 104°F) 不凝結相對溼度：5% 至 95% 濕球溫度：27°C (80.6°F) 平坦且防靜電的表面，不受陽光直射，亦不與液體或化學物質接觸
硬體和週邊設備	<ul style="list-style-type: none"> 儲存硬碟 請前往 https://www.qnap.com/compatibility 查看相容的硬碟機型清單。 網路線
工具	<ul style="list-style-type: none"> 1 號或 2 號十字螺絲起子 防靜電腕帶

設定 NAS

重要

設定 NAS 或安裝 NAS 元件前，請詳閱所有安全要求及資訊。

1. 將 NAS 裝置放置在符合需求的環境。
如需詳細資訊，請參見：[安裝需求](#)。

2. 將 NAS 安裝到機架上。
如需詳細資訊，請參見：[機架滑軌](#)和[把手安裝](#)。
3. 安裝硬碟。
如需詳細資訊，請參見下列主題：
 - [在 3.5 吋托盤上安裝 3.5 吋硬碟](#)
 - [在 3.5 吋托盤上安裝 2.5 吋硬碟或固態硬碟](#)
 - [安裝 M.2 固態硬碟](#)
4. 將 NAS 連接至網路。
5. 選擇性: 連接擴充設備。
如需詳細資訊，請參見：[連接 USB 擴充設備](#)。
6. 連接電源線與所有適用的網路線。
7. 開啟 NAS。
8. 安裝 QTS。
如需詳細資訊，請參見：[QTS 安裝](#)。
9. 登入 QTS。

3. 安裝與設定

本章介紹特定硬體及韌體的安裝與設定步驟。

硬體安裝

本節介紹硬碟安裝、記憶體模組、把手以及新增擴充設備的相關資訊。

取下機殼蓋

警告

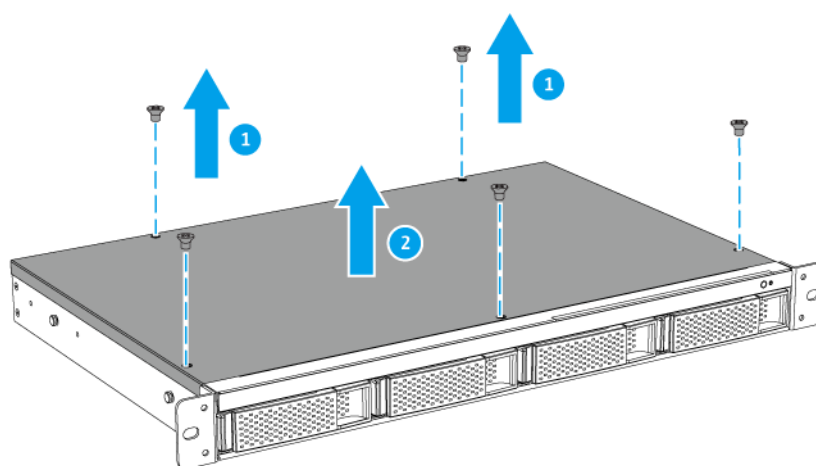


轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。



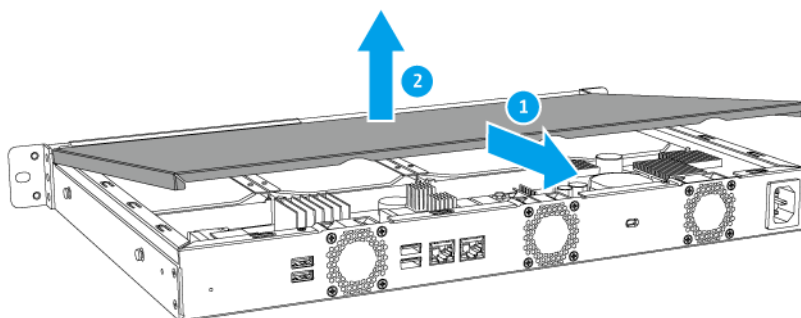
其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

1. 關閉 NAS 電源。
2. 從電源插座拔下電源線。
3. 中斷所有連接線和外接裝置的連線。
4. 取下機殼蓋。
 - a. 鬆開螺絲。



- b. 將殼蓋往後推。

- c. 提起殼蓋，使其脫離 NAS。



裝上機殼蓋

警告



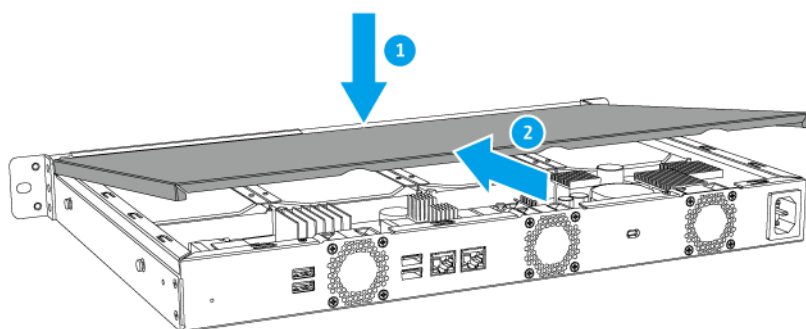
轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。



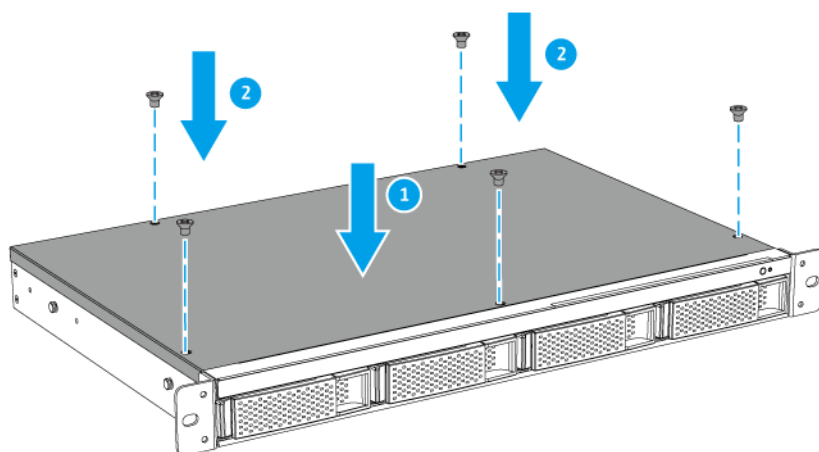
其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

1. 將殼蓋放在 NAS 上。

2. 將殼蓋往前推。



3. 鎖緊螺絲。



4. 連上所有連接線和外接裝置。
5. 將電源線插入電源插座。
6. 開啟 NAS 電源。

硬碟安裝

TS-451DeU 與 3.5 吋和 2.5 吋硬碟、2.5 吋固態硬碟以及 M.2 固態硬碟相容。

在 3.5 吋托盤上安裝 3.5 吋硬碟

請前往 <https://www.qnap.com/compatibility> 查看相容的硬碟機型清單。

警告

- 安裝硬碟時會刪除硬碟上的所有資料。
- 請遵守靜電放電 (ESD) 程序以防止元件損壞。

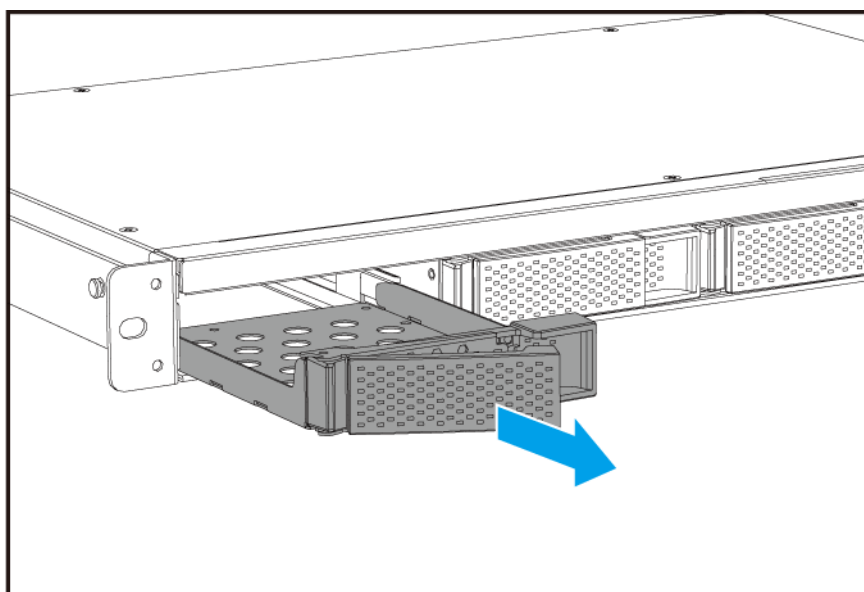


轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。



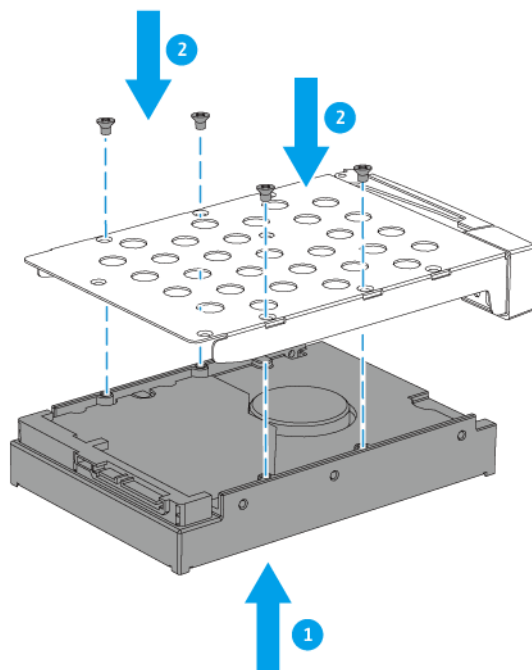
其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

1. 關閉 NAS 電源。
2. 取出硬碟托盤。
 - a. 將托盤把手往外拉。
 - b. 將托盤拉出。



3. 在托盤上安裝硬碟。
 - a. 將硬碟放在托盤上，讓硬碟底部的孔洞與托盤底部的孔洞對齊。

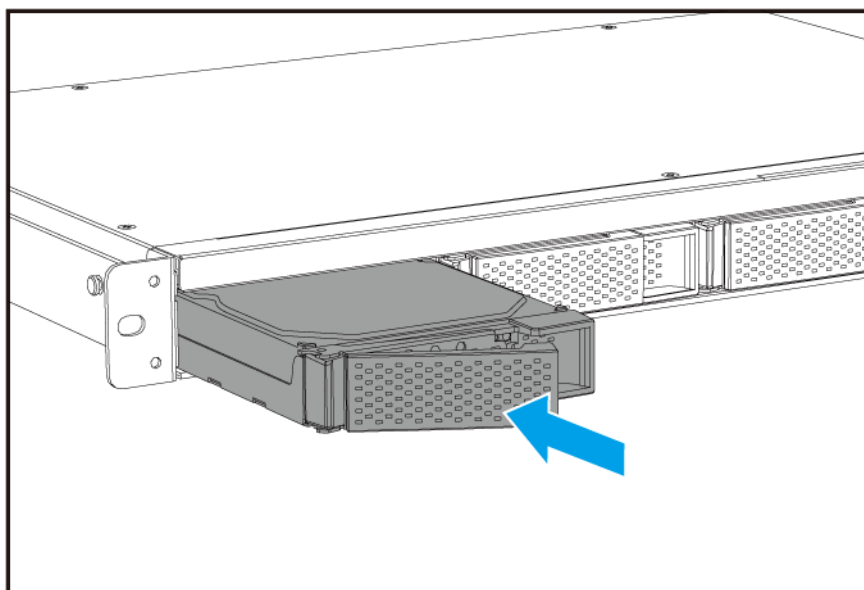
b. 鎖上螺絲。



4. 將托盤裝入插槽。

- a. 將托盤插入插槽。**
- b. 將托盤推入插槽。**

- c. 推入把手。
- d. 將托盤上鎖。



5. 開啟 NAS。

在 3.5 吋托盤上安裝 2.5 吋硬碟或固態硬碟

請前往 <https://www.qnap.com/compatibility> 查看相容的硬碟機型清單。

警告

- 安裝硬碟時會刪除硬碟上的所有資料。
- 請遵守靜電放電 (ESD) 程序以防止元件損壞。



- **轉動的風扇葉片**：使雙手及身體其他部位遠離正在轉動的風扇葉片。

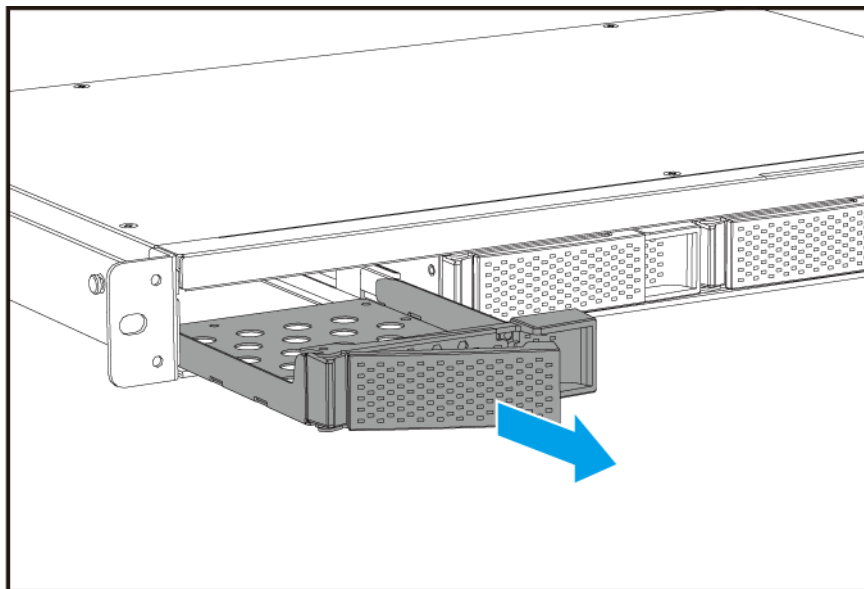


- **其他移動的元件**：使雙手及身體其他部位遠離正在移動的其他元件。

1. 關閉 NAS 電源。

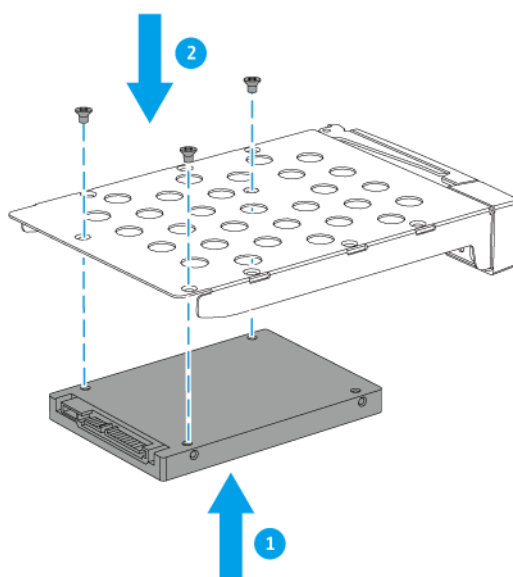
2. 取出硬碟托盤。

- a. 將托盤把手往外拉。
- b. 將托盤拉出。

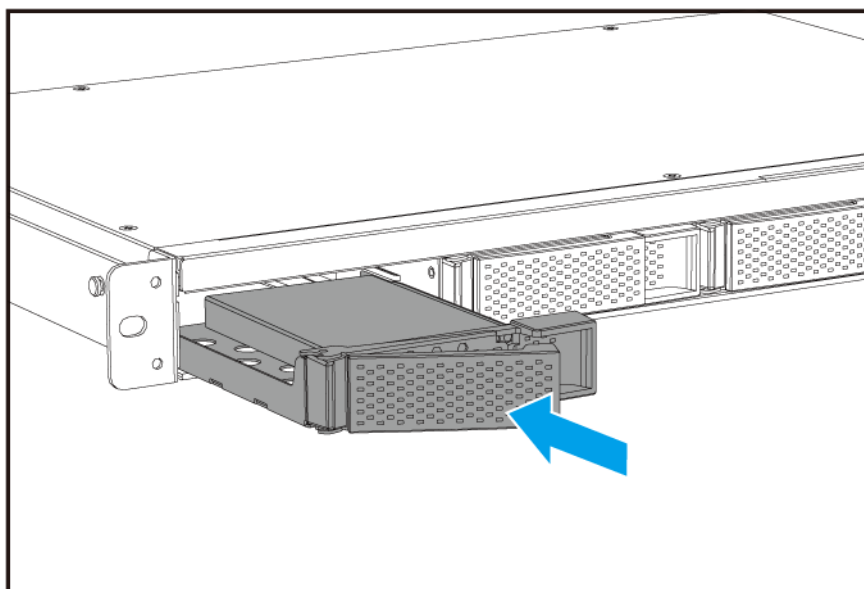


3. 在托盤上安裝硬碟。

- a. 將托盤放在硬碟上，讓托盤的孔洞與硬碟的孔洞對齊。
- b. 鎖上螺絲。



4. 將托盤裝入插槽。
 - a. 將托盤插入插槽。
 - b. 將托盤推入插槽。
 - c. 推入把手。
 - d. 將托盤上鎖。



5. 開啟 NAS。

安裝 M.2 固態硬碟

TS-451DeU 在系統板上有兩個 M.2 SATA 6 Gbps SSD 插槽。請前往 <http://www.qnap.com/compatibility> 查看相容 M.2 SSD 的清單。

警告

- 安裝硬碟時會刪除硬碟上的所有資料。
- 請遵守靜電放電 (ESD) 程序以防止元件損壞。



轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。



其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

注意

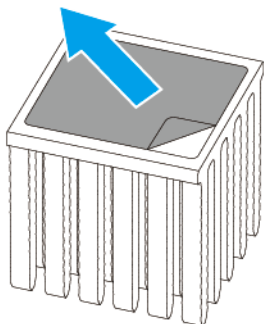
- QNAP 建議在 M.2 SSD 控制器上安裝散熱器，以提高散熱效率並確保效能一致。
- 安裝非 QNAP 散熱器之前，請先確認其大小和形狀是否適合。

1. 關閉 NAS 電源。
2. 從電源插座拔下電源線。
3. 中斷所有連接線和外接裝置的連線。
4. 取下機殼蓋。
如需詳細資訊，請參見：[取下機殼蓋](#)。
5. 在 M.2 SSD 控制器上安裝散熱器。
 - a. 找到 M.2 SSD 上的控制器。

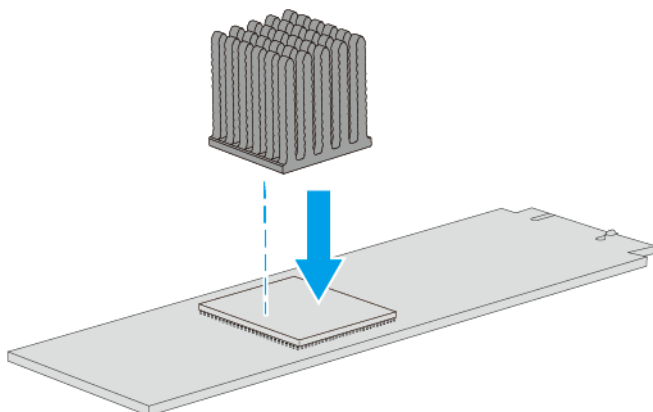
注意

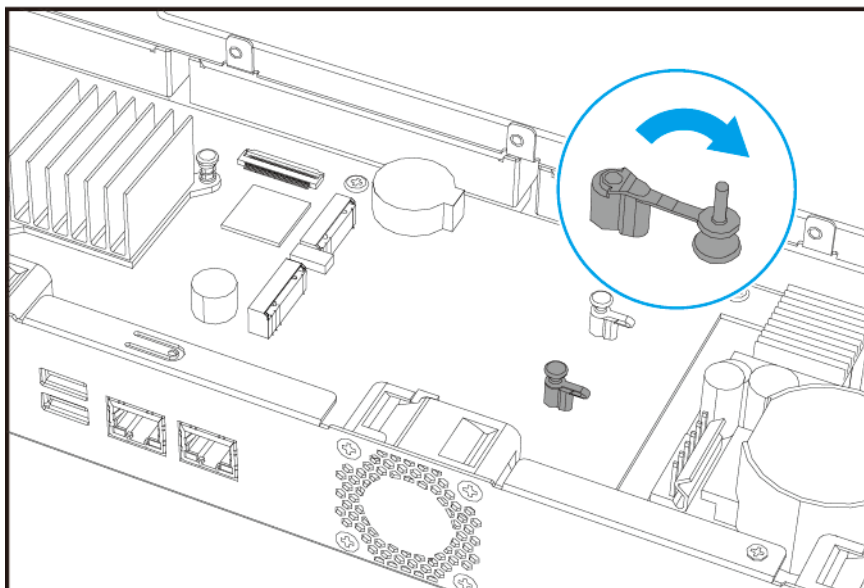
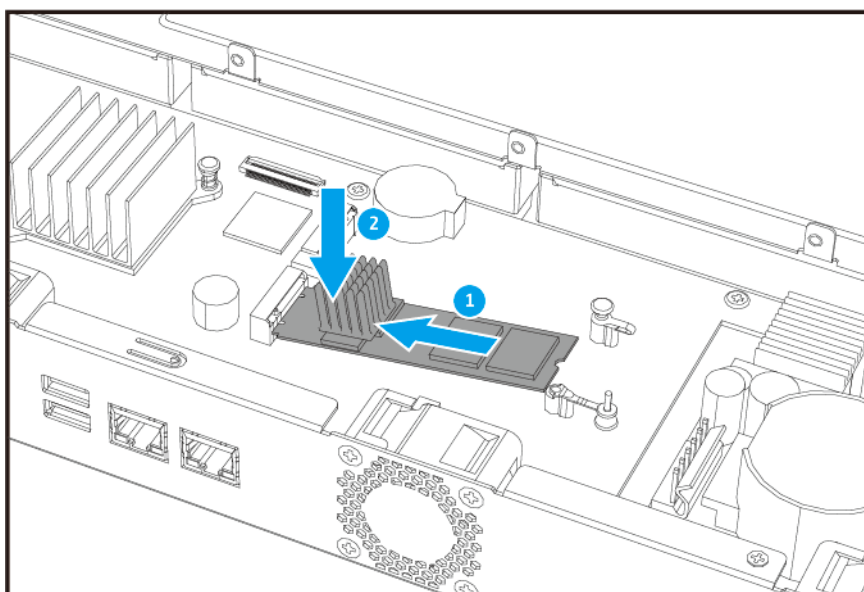
控制器的位置會因 M.2 SSD 的型號與製造商而不同。如需詳細資訊，請參見相關文件或聯絡製造商。

- b. 取下散熱器底部的保護膜。

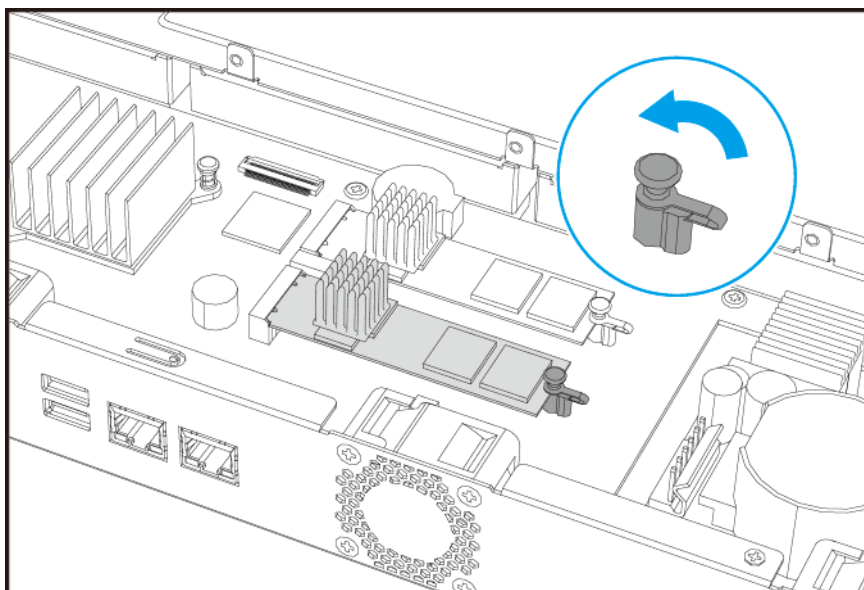


- c. 在控制器上安裝散熱器。



6. 安裝 M.2 SSD。**a. 拉出固定釘。****b. 插入 M.2 SSD。**

- c. 插入固定釘以鎖緊硬碟。



7. 將 NAS 正常擺放。
8. 裝上機殼蓋。
如需詳細資訊，請參見：[裝上機殼蓋](#)。
9. 連上所有連接線和外接裝置。
10. 將電源線插入電源插座。
11. 開啟 NAS。

更換記憶體模組

TS-451DeU 具有兩個記憶體插槽。您可以透過升級記憶體模組來增加 NAS 的記憶體容量。

僅限使用 QNAP 記憶體模組以維護系統效能和穩定性。您可向授權經銷商購買 QNAP 記憶體模組。

重要

確認兩個記憶體模組皆相同。

警告

- 請遵守靜電放電 (ESD) 程序以防止元件損壞。

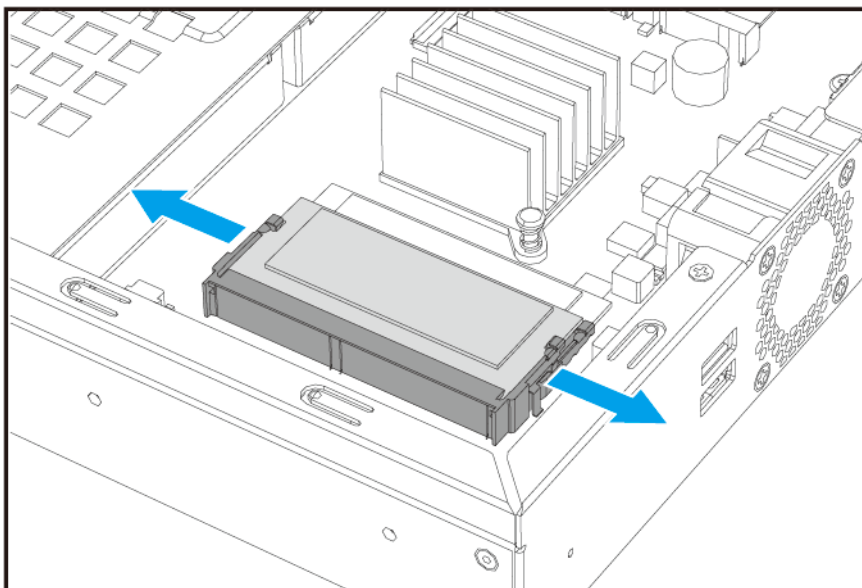


轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。



其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

1. 關閉 NAS 電源。
2. 從電源插座拔下電源線。
3. 中斷所有連接線和外接裝置的連線。
4. 取下機殼蓋。
如需詳細資訊，請參見：[取下機殼蓋](#)。
5. 取下現有的記憶體模組。
 - a. 將固定夾同時往外推以鬆開記憶體模組。

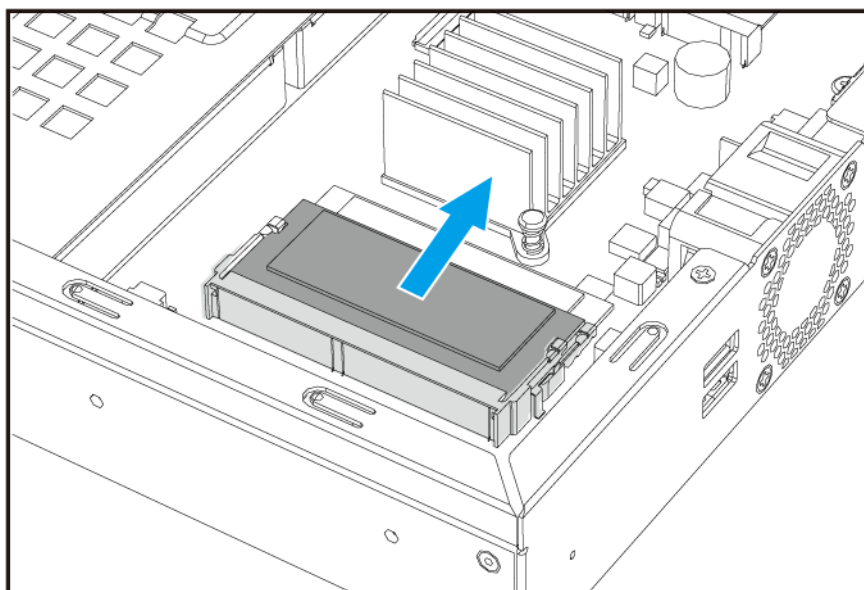


- b. 確認記憶體模組已向上傾斜且完全從插槽鬆脫。

警告

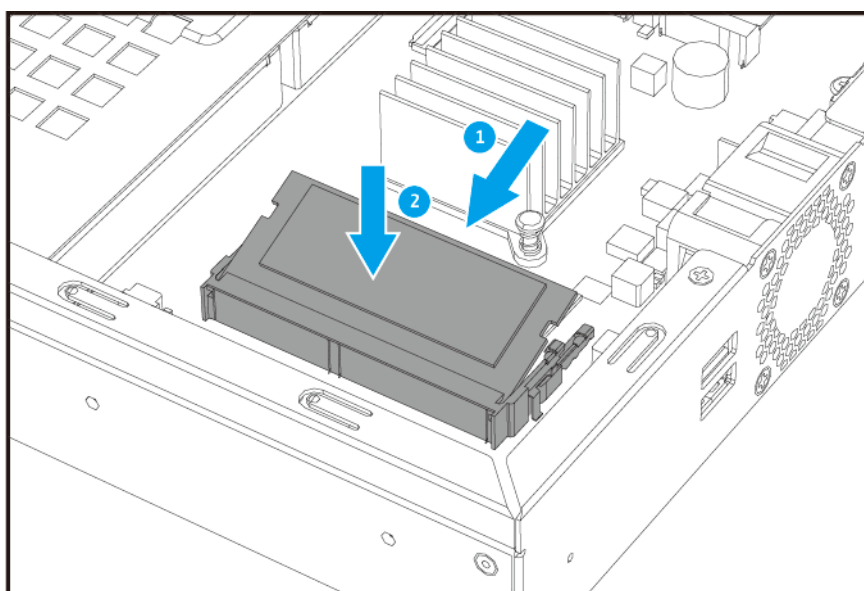
若嘗試取下未完全鬆脫的記憶體模組，可能會損壞記憶體模組與主機板。

- c. 握住模組的邊緣。



6. 安裝新的記憶體模組。

- a. 將接口與插槽的凸出部分對齊。
- b. 將記憶體模組插入插槽。
- c. 確認金屬接頭已完全插入插槽。
- d. 小心按下記憶體模組，直到固定夾正確扣住記憶體模組。



7. 裝上機殼蓋。
- 如需詳細資訊，請參見：[裝上機殼蓋](#)。
8. 連上所有連接線和外接裝置。

9. 開啟 NAS。
10. 確認 NAS 可辨識記憶體模組。
 - a. 以管理員身分登入 QTS。
 - b. 前往 [控制台] > [系統] > [系統狀態] > [硬體資訊]。
 - c. 查看 [記憶體總容量] 的值。

連接 USB 擴充設備

TS-451DeU 支援 USB 擴充設備。如需詳細資訊，請參見下方表格。

您可以向 QNAP 或授權經銷商購買儲存擴充配件。

如需詳細資訊，請瀏覽：<https://shop.qnap.com/>。

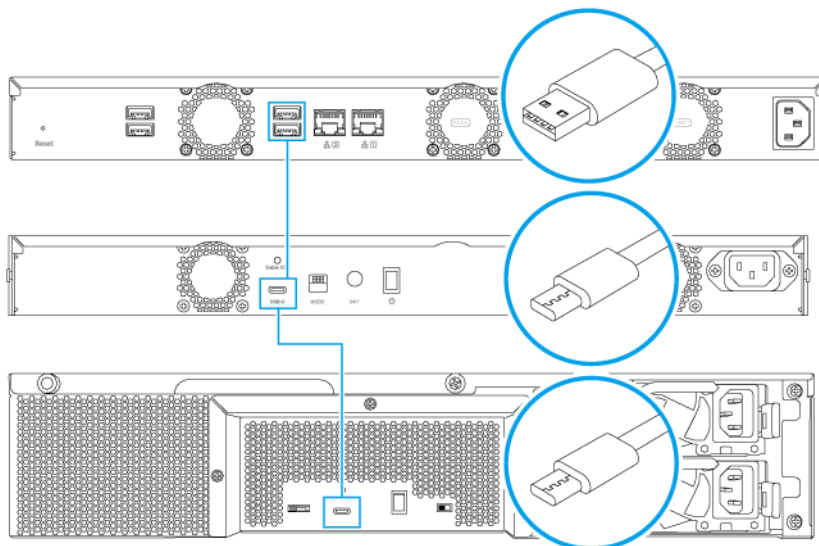
如需相容擴充設備清單以及適用擴充設備的數量上限，請前往：<http://www.qnap.com/go/compatibility-expansion>。

擴充設備型號	描述	必要配件
TR-004	<ul style="list-style-type: none"> • 使用 USB 3.2 Gen 1 Type-C 介面 • 支援 SATA 	<ul style="list-style-type: none"> • USB 3.2 Gen 1 Type-A 轉 Type-C 連接線 • RAIL-B02
TL-R1200C-RP	<ul style="list-style-type: none"> • 使用 USB 3.2 Gen 2 Type-C 介面 • 支援 SATA 	<ul style="list-style-type: none"> • USB 3.2 Gen 2 Type-A 轉 Type-C 連接線 • RAIL-B02

TS-451DeU 最多支援連接兩個 USB 擴充設備。您可以使用下列其中一種配置：

擴充設備類型	支援的設備數量
TR-004	2
TL-R1200C-RP	1

1. 將擴充設備連接至 NAS。
 - a. 將 USB 連接線接至擴充設備上的 USB Type-C 連接埠。
 - b. 將 USB 連接線接至 NAS 上的 USB 3.2 Gen 1 Type-A 連接埠。



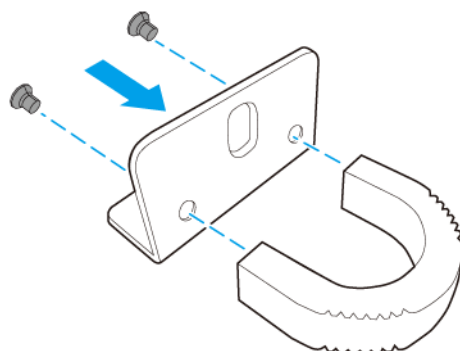
2. 開啟擴充設備的電源。
3. 確認 NAS 可辨識所有擴充設備。
 - a. 以管理員身分登入 QTS。
 - b. 前往 **[主選單]** > **[儲存與快照總管]** > **[總覽]** > **[系統]**。
 - c. 確認畫面列出擴充設備。

把手安裝

安裝把手後，即可輕鬆且穩固地拿取 NAS。

1. 關閉 NAS 電源。
2. 將把手安裝到角形托座上。
 - a. 將把手開口對齊至角形托座上的兩個圓頭螺絲洞。

- b. 鎖上螺絲，將把手鎖定在角形托座上。



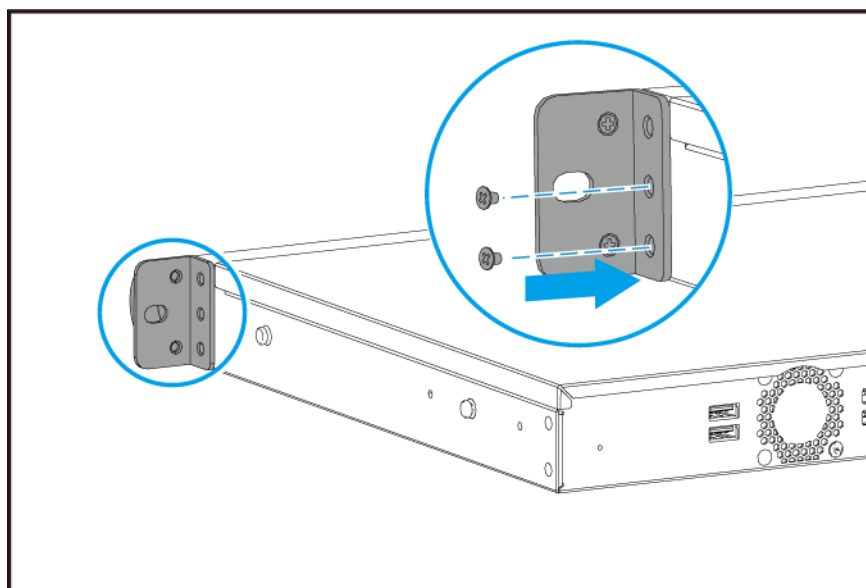
3. 在 NAS 上安裝角形托座。

- a. 將角形托座上的孔洞對齊機殼上的孔洞。

注意

請確定把手與前面板面對相同的方向。

- b. 鎖上螺絲。



4. 在機殼的另一側安裝第二個把手。
5. 開啟 NAS。

機架滑軌

TS-451DeU 與下列型號相容：

- RAIL-B02

NAS 不含機架滑軌，必須另外購買。如需詳細資訊，請聯絡授權經銷商或前往 <http://shop.qnap.com>。

您可以在機架滑軌的包裝中找到安裝資訊。

QTS 安裝

TS-451DeU 使用 QNAP QTS 作業系統。您可以使用下列其中一種方式安裝 QTS。

方法	描述	需求
Qfinder Pro 安裝 (建議使用)	<p>如果 NAS 已連接您的區域網路，您可以執行下列操作：</p> <ul style="list-style-type: none"> • 使用 Qfinder Pro 定位 NAS。 • 完成 [智慧安裝導引] 精靈中的步驟。 <p>如需詳細資訊，請參見：使用 Qfinder Pro 安裝 QTS。</p>	<ul style="list-style-type: none"> • 電腦 • 網路線 • Qfinder Pro 安裝程式
雲端安裝	<p>如果 NAS 已連接網際網路，您可以執行下列操作：</p> <ul style="list-style-type: none"> • 掃描 NAS 上的 QR 碼。 • 指定 Cloud Key。 • 登入 myQNAPcloud 帳號。 • 完成 [智慧安裝導引] 精靈中的步驟。 <p>如需詳細資訊，請參見：使用 Cloud Key 安裝 QTS。</p>	<ul style="list-style-type: none"> • 電腦或行動裝置。 • 網路線 • myQNAPcloud 帳號 • CloudKey

使用 Qfinder Pro 安裝 QTS

警告

安裝 QTS 會刪除硬碟上的所有資料，繼續操作前請先備份資料。

1. 打開 NAS 電源。
2. 將 NAS 連接至區域網路。
3. 在連接相同區域網路的電腦上執行 Qfinder Pro。

注意

若要下載 Qfinder Pro，請前往：<https://www.qnap.com/utilities>。

4. 在清單中找到 NAS，然後按兩下它的名稱或 IP 位址。
[智慧安裝導引] 隨即在預設的網頁瀏覽器中開啟。
5. 按一下 [啟動智慧安裝導引]。
6. 指定下列資訊：
 - **NAS 名稱**：指定 1 到 14 個字元的名稱。名稱支援使用英文字母 (A 到 Z、a 到 z)、數字 (0 到 9) 以及連字號 (-)，但不能以連字號做結尾。
 - **密碼**：指定 1 到 64 個字元的管理員密碼。密碼支援使用所有 ASCII 字元。
7. 按一下 [下一步]。
8. 指定時區、日期和時間。

提示

QNAP 建議連接至 NTP 伺服器，以確保 NAS 符合國際標準時間 (UTC) 的標準。

9. 按一下 [下一步]。
10. 選擇 [自動取得 IP 位址 (DHCP)]。
11. 按一下 [下一步]。
12. 選擇將用於存取 NAS 共用資料夾的裝置類型。
13. 按一下 [下一步]。
14. 檢視設定值。
15. 按一下 [套用]。
確認訊息隨即出現。

警告

按一下 [確認] 後，系統會在安裝 QTS 前刪除硬碟的所有資料。

16. 按一下 [確認]。
QTS 安裝完成。

使用 Cloud Key 安裝 QTS

警告

安裝 QTS 會刪除硬碟上的所有資料，繼續操作前請先備份資料。

1. 打開 NAS 電源。
2. 將 NAS 連接至網際網路。

3. 使用下列其中一種方式前往 QNAP 雲端安裝頁面：

- 使用電腦前往 <http://install.qnap.com/>。
- 使用行動裝置掃描 NAS 上的 QR 碼。

該網頁列出區域網路內所有未初始化的 QNAP NAS 裝置。

4. 在清單中找出自己的 NAS，然後按一下 **[初始化]**。

注意

如果未列出您的 NAS，請按照網頁上的指示指定 NAS 的 Cloud Key。

安裝精靈隨即在預設的網頁瀏覽器中開啟。

5. 建立帳號或登入 myQNAPcloud。

注意

您建立帳號之後，必須返回此頁面完成安裝步驟。

6. 指定 NAS 的 myQNAPcloud 裝置名稱。

注意

- 遠端存取 NAS 時，需要用到 myQNAPcloud 裝置名稱。
- 基於安全考量，NAS 將於初始化後停用 myQNAPcloud Link 遠端連線服務。日後若要再度啟用，請透過 LAN 連接至 QTS，然後安裝 myQNAPcloud Link。

7. 按一下 **[下一步]**。

[智慧安裝導引] 隨即在預設的網頁瀏覽器中開啟。

8. 按一下 **[啟動智慧安裝導引]**。

9. 指定下列資訊：

- **NAS 名稱**：指定 1 到 14 個字元的名稱。名稱支援使用英文字母 (A 到 Z、a 到 z)、數字 (0 到 9) 以及連字號 (-)，但不能以連字號做結尾。
- **密碼**：指定 1 到 64 個字元的管理員密碼。密碼支援使用所有 ASCII 字元。

10. 按一下 **[下一步]**。

11. 指定時區、日期和時間。

提示

QNAP 建議連接至 NTP 伺服器，以確保 NAS 符合國際標準時間 (UTC) 的標準。

12. 按一下 **[下一步]**。

13. 選擇 **[自動取得 IP 位址 (DHCP)]**。

14. 按一下 **[下一步]** 。
 15. 選擇將用於存取 NAS 共用資料夾的裝置類型。
 16. 按一下 **[下一步]** 。
 17. 檢視設定值。
 18. 按一下 **[套用]** 。
- 確認訊息隨即出現。

警告

按一下 **[確認]** 後，系統會在安裝 QTS 前刪除硬碟的所有資料。

19. 按一下 **[確認]** 。
- QTS 安裝完成。

4. 基本操作

本章介紹 NAS 的基本操作。

電源按鈕

操作	使用者動作	結果
開啟電源	按一下按鈕。	NAS 電源開啟。
關閉電源	按住按鈕 1.5 秒。	NAS 電源關閉。
強制關機	按住按鈕 5 秒。	NAS 關機。 重要 僅在 NAS 沒有回應時使用此方法。

重設按鈕

重要

為了保護裝置免受暴力密碼破解攻擊，QNAP 建議您在系統重設後停用預設 admin 帳戶。若要停用預設 admin 帳戶，您必須先建立新的管理員帳戶、登出 admin 帳戶，然後使用新帳戶登入。

操作	使用者動作	結果
基本系統重設	按住按鈕 3 秒。	<p>以下設定將回復至預設值：</p> <ul style="list-style-type: none"> • 系統會自動啟用 admin 帳戶 • 系統管理員密碼：如需預設密碼的詳細資訊，請參閱此常見問題。 • TCP/IP 設定： <ul style="list-style-type: none"> • 透過 DHCP 自動取得 IP 位址設定 • 停用巨型訊框 • 若已啟用 Port Trunking (僅適用於多 LAN 型號)，系統將重設為「主動備份 (容錯移轉)」模式。 • 系統通訊埠：8080 (系統服務埠) • 安全等級：低 (允許所有連線) • LCD 面板密碼：(空白) • VLAN：停用
進階系統重設	按住按鈕 15 秒。	<p>回復為出廠預設值。</p> <ul style="list-style-type: none"> • 若要在進階系統重設後取回舊資料，請在 NAS 上重建先前的資料夾結構。

LED 燈號

LED 燈號指示裝置開機時的系統狀態與相關資訊。下列 LED 燈號資訊僅適用於已正確安裝硬碟，且裝置已連線至網路或主機的狀態下。

如需 LED 燈號的位置資訊，請參見[元件](#)。

LED	狀態	說明
系統狀態	綠燈與紅燈每 0.5 秒交錯閃爍	<ul style="list-style-type: none"> • 硬碟正在格式化。 • 裝置正在初始化。 • 作業系統正在更新。 • RAID 重建作業正在進行。 • 線上 RAID 容量擴充正在進行。 • 線上 RAID 組態遷移正在進行。 • 韌體正在更新。 <div style="background-color: #fff9c4; padding: 10px; margin-top: 10px;"> <p>重要</p> <p>請勿在韌體更新期間拔下電源線或 USB 連接線，也不要強制結束應用程式。</p> </div>
	紅燈	<ul style="list-style-type: none"> • 硬碟無效。 • 磁碟區容量已滿。 • 磁碟區容量將滿。 • 系統風扇異常。 • 資料存取（讀寫）錯誤。 • 硬碟壞軌。 • 裝置處於降階唯讀模式（RAID 5 或 RAID 6 有兩個硬碟故障，但資料仍可讀取）。 • 硬體自我檢查發生錯誤。 • 系統溫度超過臨界值。
	紅燈每 0.5 秒閃爍	NAS 處於降階模式（RAID 1 的一個硬碟故障）。
	綠燈每 0.5 秒閃爍	<ul style="list-style-type: none"> • 裝置啟動中。 • 裝置未設定。 • 硬碟未格式化。
	綠燈每 2 秒閃爍	所有硬碟處於待命模式。
	綠燈每秒閃爍	裝置未設定。
	綠燈	裝置已就緒。

LED	狀態	說明
系統狀態	關閉	<ul style="list-style-type: none"> • 所有硬碟處於待命模式。 • 裝置已關機。
LAN	橙燈	其他裝置存取資料時發生讀寫錯誤。
	橙燈閃爍	使用者正在從網路存取裝置。
硬碟	紅燈閃爍	資料存取中並發生讀寫錯誤。
	紅燈	<ul style="list-style-type: none"> • 硬碟讀寫錯誤。 • 磁碟溫度超過臨界值。
	綠燈閃爍	<ul style="list-style-type: none"> • 正在存取資料。 • 正在複製資料。
	綠燈	<ul style="list-style-type: none"> • 硬碟可供存取。 • 裝置已開機。
	關閉	偵測不到硬碟。
M.2 SSD	紅燈閃爍	硬碟定位中。
	紅燈	發生硬碟讀寫錯誤。
	綠燈閃爍	資料存取中。
	綠燈	硬碟可供存取。
	關閉	偵測不到硬碟。
USB 擴充設備	藍燈	QNAP USB 外接儲存裝置已連接至 USB 埠。
	關閉	未連接 USB 外接儲存裝置。

警示音

期間	頻率	描述
短嗶 (0.5 秒)	1 聲	<ul style="list-style-type: none"> • NAS 啟動中。 • NAS 關閉中 (軟體關機)。 • 使用者按下 [重設] 按鈕。 • 作業系統已更新。
	3 聲	使用者嘗試將 NAS 資料複製到正面 USB 埠中的外接儲存裝置，但資料無法複製。
長嗶 (1.5 秒)	3 聲 (每 5 分鐘)	系統風扇異常。
	2 聲	<ul style="list-style-type: none"> • 磁碟區容量將滿。 • 磁碟區容量已滿。 • 硬碟進入降階模式。 • 使用者開始硬碟重建程序。 • 插入或抽出硬碟。
	1 聲	<ul style="list-style-type: none"> • NAS 強制關機 (硬體關機)。 • NAS 成功開機且可供使用。

5. 疑難排解

本章介紹基本的疑難排解資訊。

強制 Qfinder Pro 或 myQNAPcloud 定位 NAS

如果 Qfinder Pro 或 myQNAPcloud 在 QTS 安裝的期間找不到 NAS，表示硬碟或資料發生問題。

1. 關閉 NAS 電源。
2. 移除所有硬碟。
3. 打開 NAS 電源。
4. 使用 Qfinder Pro 或 myQNAPcloud 定位 NAS。
5. 將硬碟重新插入。
6. 繼續執行 QTS 安裝作業。

熱抽換故障硬碟

當 NAS 於 RAID 1 的一個硬碟故障時支援熱抽換。

1. 登入 QTS。
2. 前往 [主選單] > [儲存空間總管] > [儲存空間] > [磁碟/VJBOD]。
3. 找出故障的硬碟。
4. 準備一個新的硬碟，且容量至少與故障硬碟相同。
5. 將 NAS 的故障硬碟拔出。
6. 等待 20 秒或等到 NAS 發出兩次嗶聲。
7. 將故障硬碟從硬碟托盤取下。
8. 將新的硬碟插入硬碟托盤。
9. 安裝新的硬碟。
NAS 會發出兩次嗶聲。
10. 前往 [主選單] > [儲存空間總管] > [儲存空間]。
11. 找出新硬碟所在的磁碟區，然後確認其狀態為 [重建中]。

復原意外移除的正常硬碟

NAS 支援獨家 RAID 復原技術，若有硬碟意外斷線或遭到移除，使用者可以復原失效的 RAID 硬碟磁碟區。使用者可以將失效的 RAID 1、RAID 5 或 RAID 6 磁碟區回復至降階模式，或將失效的 RAID 0 和 JBOD 組態回復至正常模式。

磁碟 / 磁碟群組	RAID 復原支援	遭移除的硬碟最大數目
單獨	否	N/A
JBOD	是	1
RAID 0	是	1
RAID 1	是	1
RAID 5	是	2
RAID 6	是	3
RAID 10	否	N/A

支援和其他資源

QNAP 提供下列資源：

資源	URL
文件	https://docs.qnap.com
服務入口網站	https://service.qnap.com
下載	https://download.qnap.com
社群論壇	https://forum.qnap.com

6. 詞彙

CloudKey

指定至每個 NAS 裝置的唯一 8 位數代碼

myQNAPcloud Link

讓您透過網際網路存取 NAS，無需配置複雜的連接埠轉送設定

myQNAPcloud

提供各種遠端存取服務，例如 DDNS 與 myQNAPcloud Link

myQNAPcloud ID

用來註冊 myQNAPcloud 帳號的電子郵件地址

Qfinder Pro

QNAP 應用工具可讓您定位和存取區域網路內的 QNAP NAS 裝置

QTS

QNAP NAS 作業系統

7. 聲明

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Version 3, 29 June 2007

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- c. Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d. Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
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印刷电路板	0	0	0	0	0	0
金属螺帽	0	0	0	0	0	0
电缆组装	0	0	0	0	0	0
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