



## **HPE Adaptive Rack Cooling System**

### **Maintenance and Service Guide**

#### **Abstract**

This guide is for an experienced service technician. Hewlett Packard Enterprise assumes you are qualified in the servicing of computer equipment and trained in recognizing hazards in products with hazardous energy levels and are familiar with weight and stability precautions for rack installations.

## Notices

The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services.

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# Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

**<http://www.hpe.com/support/selfrepair>**

## Customer self repair

Hewlett Packard Enterprise products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period Hewlett Packard Enterprise (or Hewlett Packard Enterprise service providers or service partners) identifies that the repair can be accomplished by the use of a CSR part, Hewlett Packard Enterprise will ship that part directly to you for replacement. There are two categories of CSR parts:

- **Mandatory**—Parts for which customer self repair is mandatory. If you request Hewlett Packard Enterprise to replace these parts, you will be charged for the travel and labor costs of this service.
- **Optional**—Parts for which customer self repair is optional. These parts are also designed for customer self repair. If, however, you require that Hewlett Packard Enterprise replace them for you, there may or may not be additional charges, depending on the type of warranty service designated for your product.

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**NOTE:** Some Hewlett Packard Enterprise parts are not designed for customer self repair. In order to satisfy the customer warranty, Hewlett Packard Enterprise requires that an authorized service provider replace the part. These parts are identified as "No" in the Illustrated Parts Catalog.

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Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the Hewlett Packard Enterprise Support Center and a technician will help you over the telephone. Hewlett Packard Enterprise specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to Hewlett Packard Enterprise. In cases where it is required to return the defective part to Hewlett Packard Enterprise, you must ship the defective part back to Hewlett Packard Enterprise within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in Hewlett Packard Enterprise billing you for the replacement. With a customer self repair, Hewlett Packard Enterprise will pay all shipping and part return costs and determine the courier/carrier to be used.

For more information about the Hewlett Packard Enterprise CSR program, contact your local service provider. For the North American program, go to the **Hewlett Packard Enterprise CSR website**

### Parts only warranty service

Your Hewlett Packard Enterprise Limited Warranty may include a parts only warranty service. Under the terms of parts only warranty service, Hewlett Packard Enterprise will provide replacement parts free of charge.

For parts only warranty service, CSR part replacement is mandatory. If you request Hewlett Packard Enterprise to replace these parts, you will be charged for the travel and labor costs of this service.

### Réparation par le client (CSR)

Les produits Hewlett Packard Enterprise comportent de nombreuses pièces CSR (Customer Self Repair = réparation par le client) afin de minimiser les délais de réparation et faciliter le remplacement des pièces défectueuses. Si pendant la période de diagnostic, Hewlett Packard Enterprise (ou ses partenaires ou mainteneurs agréés) détermine que la

réparation peut être effectuée à l'aide d'une pièce CSR, Hewlett Packard Enterprise vous l'envoie directement. Il existe deux catégories de pièces CSR :

- **Obligatoire**—Pièces pour lesquelles la réparation par le client est obligatoire. Si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, les coûts de déplacement et main d'œuvre du service vous seront facturés.
- **Facultatif**—Pièces pour lesquelles la réparation par le client est facultative. Ces pièces sont également conçues pour permettre au client d'effectuer lui-même la réparation. Toutefois, si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, l'intervention peut ou non vous être facturée, selon le type de garantie applicable à votre produit.

**REMARQUE:** Certaines pièces Hewlett Packard Enterprise ne sont pas conçues pour permettre au client d'effectuer lui-même la réparation. Pour que la garantie puisse s'appliquer, Hewlett Packard Enterprise exige que le remplacement de la pièce soit effectué par un Mainteneur Agréé. Ces pièces sont identifiées par la mention "Non" dans le Catalogue illustré.

Les pièces CSR sont livrées le jour ouvré suivant, dans la limite des stocks disponibles et selon votre situation géographique. Si votre situation géographique le permet et que vous demandez une livraison le jour même ou dans les 4 heures, celle-ci vous sera facturée. Pour toute assistance,appelez le Centre d'assistance Hewlett Packard Enterprise pour qu'un technicien vous aide au téléphone Dans les documents envoyés avec la pièce de rechange CSR, Hewlett Packard Enterprise précise s'il est nécessaire de lui retourner la pièce défectueuse. Si c'est le cas, vous devez le faire dans le délai indiqué, généralement cinq (5) jours ouvrés. La pièce et sa documentation doivent être retournées dans l'emballage fourni. Si vous ne返nez pas la pièce défectueuse, Hewlett Packard Enterprise se réserve le droit de vous facturer les coûts de remplacement. Dans le cas d'une pièce CSR, Hewlett Packard Enterprise supporte l'ensemble des frais d'expédition et de retour, et détermine la société de courses ou le transporteur à utiliser.

Pour plus d'informations sur le programme CSR de Hewlett Packard Enterprise, contactez votre Mainteneur Agréé local. Pour plus d'informations sur ce programme en Amérique du Nord, consultez le site [\*\*Web Hewlett Packard Enterprise\*\*](#).

### **Service de garantie "pièces seules"**

Votre garantie limitée Hewlett Packard Enterprise peut inclure un service de garantie "pièces seules". Dans ce cas, les pièces de rechange fournies par Hewlett Packard Enterprise ne sont pas facturées.

Dans le cadre de ce service, la réparation des pièces CSR par le client est obligatoire. Si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, les coûts de déplacement et main d'œuvre du service vous seront facturés.

### **Riparazione da parte del cliente**

Per abbreviare i tempi di riparazione e garantire una maggiore flessibilità nella sostituzione di parti difettose, i prodotti Hewlett Packard Enterprise sono realizzati con numerosi componenti che possono essere riparati direttamente dal cliente (CSR, Customer Self Repair). Se in fase di diagnostica Hewlett Packard Enterprise (o un centro di servizi o di assistenza Hewlett Packard Enterprise) identifica il guasto come riparabile mediante un ricambio CSR, Hewlett Packard Enterprise lo spedirà direttamente al cliente per la sostituzione. Vi sono due categorie di parti CSR:

- **Obbligatorie**—Parti che devono essere necessariamente riparate dal cliente. Se il cliente ne affida la riparazione ad Hewlett Packard Enterprise, deve sostenere le spese di spedizione e di manodopera per il servizio.
- **Opzionali**—Parti la cui riparazione da parte del cliente è facoltativa. Si tratta comunque di componenti progettati per questo scopo. Se tuttavia il cliente ne richiede la sostituzione ad Hewlett Packard Enterprise, potrebbe dover sostenere spese addizionali a seconda del tipo di garanzia previsto per il prodotto.

**NOTA:** alcuni componenti Hewlett Packard Enterprise non sono progettati per la riparazione da parte del cliente. Per rispettare la garanzia, Hewlett Packard Enterprise richiede che queste parti siano sostituite da un centro di assistenza autorizzato. Tali parti sono identificate da un "No" nel Catalogo illustrato dei componenti.

In base alla disponibilità e alla località geografica, le parti CSR vengono spedite con consegna entro il giorno lavorativo seguente. La consegna nel giorno stesso o entro quattro ore è offerta con un supplemento di costo solo in alcune zone. In caso di necessità si può richiedere l'assistenza telefonica di un addetto del centro di supporto tecnico Hewlett Packard Enterprise. Nel materiale fornito con una parte di ricambio CSR, Hewlett Packard Enterprise specifica se il cliente deve restituire dei componenti. Qualora sia richiesta la resa ad Hewlett Packard Enterprise del componente difettoso, lo si deve

spedire ad Hewlett Packard Enterprise entro un determinato periodo di tempo, generalmente cinque (5) giorni lavorativi. Il componente difettoso deve essere restituito con la documentazione associata nell'imballo di spedizione fornito. La mancata restituzione del componente può comportare la fatturazione del ricambio da parte di Hewlett Packard Enterprise. Nel caso di riparazione da parte del cliente, Hewlett Packard Enterprise sostiene tutte le spese di spedizione e resa e sceglie il corriere/vettore da utilizzare.

Per ulteriori informazioni sul programma CSR di Hewlett Packard Enterprise, contattare il centro di assistenza di zona. Per il programma in Nord America fare riferimento [al sito Web](#).

### **Servizio di garanzia per i soli componenti**

La garanzia limitata Hewlett Packard Enterprise può includere un servizio di garanzia per i soli componenti. Nei termini di garanzia del servizio per i soli componenti, Hewlett Packard Enterprise fornirà gratuitamente le parti di ricambio.

Per il servizio di garanzia per i soli componenti è obbligatoria la formula CSR che prevede la riparazione da parte del cliente. Se il cliente invece richiede la sostituzione ad Hewlett Packard Enterprise dovrà sostenere le spese di spedizione e di manodopera per il servizio.

### **Customer Self Repair**

Hewlett Packard Enterprise Produkte enthalten viele CSR-Teile (Customer Self Repair), um Reparaturzeiten zu minimieren und höhere Flexibilität beim Austausch defekter Bauteile zu ermöglichen. Wenn Hewlett Packard Enterprise (oder ein Hewlett Packard Enterprise Servicepartner) bei der Diagnose feststellt, dass das Produkt mithilfe eines CSR-Teils repariert werden kann, sendet Ihnen Hewlett Packard Enterprise dieses Bauteil zum Austausch direkt zu. CSR-Teile werden in zwei Kategorien unterteilt:

- **Zwingend**—Teile, für die das Customer Self Repair-Verfahren zwingend vorgegeben ist. Wenn Sie den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen, werden Ihnen die Anfahrt- und Arbeitskosten für diesen Service berechnet.
- **Optional**—Teile, für die das Customer Self Repair-Verfahren optional ist. Diese Teile sind auch für Customer Self Repair ausgelegt. Wenn Sie jedoch den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen möchten, können bei diesem Service je nach den für Ihr Produkt vorgesehenen Garantiebedingungen zusätzliche Kosten anfallen.

**HINWEIS:** Einige Hewlett Packard Enterprise Teile sind nicht für Customer Self Repair ausgelegt. Um den Garantieanspruch des Kunden zu erfüllen, muss das Teil von einem Hewlett Packard Enterprise Servicepartner ersetzt werden. Im illustrierten Teilekatalog sind diese Teile mit „No“ bzw. „Nein“ gekennzeichnet.

CSR-Teile werden abhängig von der Verfügbarkeit und vom Lieferziel am folgenden Geschäftstag geliefert. Für bestimmte Standorte ist eine Lieferung am selben Tag oder innerhalb von vier Stunden gegen einen Aufpreis verfügbar. Wenn Sie Hilfe benötigen, können Sie das Hewlett Packard Enterprise Support Center anrufen und sich von einem Mitarbeiter per Telefon helfen lassen. Den Materialien von Hewlett Packard Enterprise, die mit einem CSR-Ersatzteil geliefert werden, können Sie entnehmen, ob das defekte Teil an Hewlett Packard Enterprise zurückgeschickt werden muss. Wenn es erforderlich ist, das defekte Teil an Hewlett Packard Enterprise zurückzuschicken, müssen Sie dies innerhalb eines vorgegebenen Zeitraums tun, in der Regel innerhalb von fünf (5) Geschäftstagen. Das defekte Teil muss mit der zugehörigen Dokumentation in der Verpackung zurückgeschickt werden, die im Lieferumfang enthalten ist. Wenn Sie das defekte Teil nicht zurückschicken, kann Hewlett Packard Enterprise Ihnen das Ersatzteil in Rechnung stellen. Im Falle von Customer Self Repair kommt Hewlett Packard Enterprise für alle Kosten für die Lieferung und Rücksendung auf und bestimmt den Kurier-/Frachtdienst.

Weitere Informationen über das Hewlett Packard Enterprise Customer Self Repair Programm erhalten Sie von Ihrem Servicepartner vor Ort. Informationen über das CSR-Programm in Nordamerika finden Sie auf der [Hewlett Packard Enterprise Website unter](#).

### **Parts-only Warranty Service (Garantieservice ausschließlich für Teile)**

Ihre Hewlett Packard Enterprise Garantie umfasst möglicherweise einen Parts-only Warranty Service (Garantieservice ausschließlich für Teile). Gemäß den Bestimmungen des Parts-only Warranty Service stellt Hewlett Packard Enterprise Ersatzteile kostenlos zur Verfügung.

Für den Parts-only Warranty Service ist das CSR-Verfahren zwingend vorgegeben. Wenn Sie den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen, werden Ihnen die Anfahrt- und Arbeitskosten für diesen Service berechnet.

### **Reparaciones del propio cliente**

Los productos de Hewlett Packard Enterprise incluyen muchos componentes que el propio usuario puede reemplazar (Customer Self Repair, CSR) para minimizar el tiempo de reparación y ofrecer una mayor flexibilidad a la hora de realizar sustituciones de componentes defectuosos. Si, durante la fase de diagnóstico, Hewlett Packard Enterprise (o los proveedores o socios de servicio de Hewlett Packard Enterprise) identifica que una reparación puede llevarse a cabo mediante el uso de un componente CSR, Hewlett Packard Enterprise le enviará dicho componente directamente para que realice su sustitución. Los componentes CSR se clasifican en dos categorías:

- **Obligatorio**—Componentes cuya reparación por parte del usuario es obligatoria. Si solicita a Hewlett Packard Enterprise que realice la sustitución de estos componentes, tendrá que hacerse cargo de los gastos de desplazamiento y de mano de obra de dicho servicio.
- **Opcional**—Componentes cuya reparación por parte del usuario es opcional. Estos componentes también están diseñados para que puedan ser reparados por el usuario. Sin embargo, si precisa que Hewlett Packard Enterprise realice su sustitución, puede o no conllevar costes adicionales, dependiendo del tipo de servicio de garantía correspondiente al producto.

**NOTA:** Algunos componentes de Hewlett Packard Enterprise no están diseñados para que puedan ser reparados por el usuario. Para que el usuario haga valer su garantía, Hewlett Packard Enterprise pone como condición que un proveedor de servicios autorizado realice la sustitución de estos componentes. Dichos componentes se identifican con la palabra "No" en el catálogo ilustrado de componentes.

Según la disponibilidad y la situación geográfica, los componentes CSR se enviarán para que lleguen a su destino al siguiente día laborable. Si la situación geográfica lo permite, se puede solicitar la entrega en el mismo día o en cuatro horas con un coste adicional. Si precisa asistencia técnica, puede llamar al Centro de asistencia técnica de Hewlett Packard Enterprise y recibirá ayuda telefónica por parte de un técnico. Con el envío de materiales para la sustitución de componentes CSR, Hewlett Packard Enterprise especificará si los componentes defectuosos deberán devolverse a Hewlett Packard Enterprise. En aquellos casos en los que sea necesario devolver algún componente a Hewlett Packard Enterprise, deberá hacerlo en el periodo de tiempo especificado, normalmente cinco días laborables. Los componentes defectuosos deberán devolverse con toda la documentación relacionada y con el embalaje de envío. Si no envia el componente defectuoso requerido, Hewlett Packard Enterprise podrá cobrarle por el de sustitución. En el caso de todas sustituciones que lleve a cabo el cliente, Hewlett Packard Enterprise se hará cargo de todos los gastos de envío y devolución de componentes y escogerá la empresa de transporte que se utilice para dicho servicio.

Para obtener más información acerca del programa de Reparaciones del propio cliente de Hewlett Packard Enterprise, póngase en contacto con su proveedor de servicios local. Si está interesado en el programa para Norteamérica, visite [la página web de Hewlett Packard Enterprise CSR](#).

### **Servicio de garantía exclusivo de componentes**

La garantía limitada de Hewlett Packard Enterprise puede que incluya un servicio de garantía exclusivo de componentes. Según las condiciones de este servicio exclusivo de componentes, Hewlett Packard Enterprise le facilitará los componentes de repuesto sin cargo adicional alguno.

Para este servicio de garantía exclusivo de componentes, es obligatoria la sustitución de componentes por parte del usuario (CSR). Si solicita a Hewlett Packard Enterprise que realice la sustitución de estos componentes, tendrá que hacerse cargo de los gastos de desplazamiento y de mano de obra de dicho servicio.

### **Customer Self Repair**

Veel onderdelen in Hewlett Packard Enterprise producten zijn door de klant zelf te repareren, waardoor de reparatieduur tot een minimum beperkt kan blijven en de flexibiliteit in het vervangen van defecte onderdelen groter is. Deze onderdelen worden CSR-onderdelen (Customer Self Repair) genoemd. Als Hewlett Packard Enterprise (of een Hewlett Packard Enterprise Service Partner) bij de diagnose vaststelt dat de reparatie kan worden uitgevoerd met een CSR-

onderdeel, verzendt Hewlett Packard Enterprise dat onderdeel rechtstreeks naar u, zodat u het defecte onderdeel daarmee kunt vervangen. Er zijn twee categorieën CSR-onderdelen:

- **Verplicht**—Onderdelen waarvoor reparatie door de klant verplicht is. Als u Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, worden u voor deze service reiskosten en arbeidsloon in rekening gebracht.
- **Optioneel**—Onderdelen waarvoor reparatie door de klant optioneel is. Ook deze onderdelen zijn ontworpen voor reparatie door de klant. Als u echter Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, kunnen daarvoor extra kosten in rekening worden gebracht, afhankelijk van het type garantieservice voor het product.

**OPMERKING:** Sommige Hewlett Packard Enterprise onderdelen zijn niet ontwikkeld voor reparatie door de klant. In verband met de garantievoorwaarden moet het onderdeel door een geautoriseerde Service Partner worden vervangen. Deze onderdelen worden in de geïllustreerde onderdelencatalogus aangemerkt met "Nee".

Afhankelijk van de leverbaarheid en de locatie worden CSR-onderdelen verzonden voor levering op de eerstvolgende werkdag. Levering op dezelfde dag of binnen vier uur kan tegen meerkosten worden aangeboden, indien dit mogelijk is gezien de locatie. Indien assistentie is gewenst, belt u het Hewlett Packard Enterprise Support Center om via de telefoon ondersteuning van een technicus te ontvangen. Hewlett Packard Enterprise vermeldt in de documentatie bij het vervangende CSR-onderdeel of het defecte onderdeel aan Hewlett Packard Enterprise moet worden geretourneerd. Als het defecte onderdeel aan Hewlett Packard Enterprise moet worden teruggezonden, moet u het defecte onderdeel binnen een bepaalde periode, gewoonlijk vijf (5) werkdagen, retourneren aan Hewlett Packard Enterprise. Het defecte onderdeel moet met de bijbehorende documentatie worden geretourneerd in het meegeleverde verpakkingsmateriaal. Als u het defecte onderdeel niet terugzendt, kan Hewlett Packard Enterprise u voor het vervangende onderdeel kosten in rekening brengen. Bij reparatie door de klant betaalt Hewlett Packard Enterprise alle verzendkosten voor het vervangende en geretourneerde onderdeel en kiest Hewlett Packard Enterprise zelf welke koerier/transportonderneming hiervoor wordt gebruikt.

Neem contact op met een Service Partner voor meer informatie over het Customer Self Repair programma van Hewlett Packard Enterprise. Informatie over Service Partners vindt u op de **Hewlett Packard Enterprise website**.

### **Garantieservice "Parts Only"**

Het is mogelijk dat de Hewlett Packard Enterprise garantie alleen de garantieservice "Parts Only" omvat. Volgens de bepalingen van de Parts Only garantieservice zal Hewlett Packard Enterprise kosteloos vervangende onderdelen ter beschikking stellen.

Voor de Parts Only garantieservice is vervanging door CSR-onderdelen verplicht. Als u Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, worden u voor deze service reiskosten en arbeidsloon in rekening gebracht

### **Reparo feito pelo cliente**

Os produtos da Hewlett Packard Enterprise são projetados com muitas peças para reparo feito pelo cliente (CSR) de modo a minimizar o tempo de reparo e permitir maior flexibilidade na substituição de peças com defeito. Se, durante o período de diagnóstico, a Hewlett Packard Enterprise (ou fornecedores/parceiros da Hewlett Packard Enterprise) concluir que o reparo pode ser efetuado pelo uso de uma peça CSR, a Hewlett Packard Enterprise enviará a peça diretamente ao cliente. Há duas categorias de peças CSR:

- **Obrigatória**—Peças cujo reparo feito pelo cliente é obrigatório. Se desejar que a Hewlett Packard Enterprise substitua essas peças, serão cobradas as despesas de transporte e mão-de-obra do serviço.
- **Opcional**—Peças cujo reparo feito pelo cliente é opcional. Essas peças também são projetadas para o reparo feito pelo cliente. No entanto, se desejar que a Hewlett Packard Enterprise as substitua, pode haver ou não a cobrança de taxa adicional, dependendo do tipo de serviço de garantia destinado ao produto.

**OBSERVAÇÃO:** Algumas peças da Hewlett Packard Enterprise não são projetadas para o reparo feito pelo cliente. A fim de cumprir a garantia do cliente, a Hewlett Packard Enterprise exige que um técnico autorizado substitua a peça. Essas peças estão identificadas com a marca "No" (Não), no catálogo de peças ilustrado.

Conforme a disponibilidade e o local geográfico, as peças CSR serão enviadas no primeiro dia útil após o pedido. Onde as condições geográficas permitirem, a entrega no mesmo dia ou em quatro horas pode ser feita mediante uma taxa adicional. Se precisar de auxílio, entre em contato com o Centro de suporte técnico da Hewlett Packard Enterprise para que um técnico o ajude por telefone. A Hewlett Packard Enterprise especifica nos materiais fornecidos com a peça CSR de reposição se a peça com defeito deve ser devolvida à Hewlett Packard Enterprise. Nos casos em que isso for necessário, é preciso enviar a peça com defeito à Hewlett Packard Enterprise, você deverá enviar a peça com defeito de volta para a Hewlett Packard Enterprise dentro do período de tempo definido, normalmente em 5 (cinco) dias úteis. A peça com defeito deve ser enviada com a documentação correspondente no material de transporte fornecido. Caso não o faça, a Hewlett Packard Enterprise poderá cobrar a reposição. Para as peças de reparo feito pelo cliente, a Hewlett Packard Enterprise paga todas as despesas de transporte e de devolução da peça e determina a transportadora/serviço postal a ser utilizado.

Para obter mais informações sobre o programa de reparo feito pelo cliente da Hewlett Packard Enterprise, entre em contato com o fornecedor de serviços local. Para o programa norte-americano, [\*\*visite o site da Hewlett Packard Enterprise\*\*](#).

#### **Serviço de garantia apenas para peças**

A garantia limitada da Hewlett Packard Enterprise pode incluir um serviço de garantia apenas para peças. Segundo os termos do serviço de garantia apenas para peças, a Hewlett Packard Enterprise fornece as peças de reposição sem cobrar nenhuma taxa.

No caso desse serviço, a substituição de peças CSR é obrigatória. Se desejar que a Hewlett Packard Enterprise substitua essas peças, serão cobradas as despesas de transporte e mão-de-obra do serviço.

## **カスタマーセルフリペア**

修理時間を短縮し、故障部品の交換における高い柔軟性を確保するために、Hewlett Packard Enterprise製品には多数のカスタマーセルフリペア（CSR）部品があります。診断の際に、CSR部品を使用すれば修理ができるとHewlett Packard Enterprise（Hewlett Packard EnterpriseまたはHewlett Packard Enterprise正規保守代理店）が判断した場合、Hewlett Packard Enterpriseはその部品を直接、お客様に発送し、お客様に交換していただけます。CSR部品には以下の2種類があります。

- 必須 - カスタマーセルフリペアが必須の部品。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、その修理サービスに関する交通費および人件費がお客様に請求されます。
- 任意 - カスタマーセルフリペアが任意である部品。この部品もカスタマーセルフリペア用です。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、お買い上げの製品に適用される保証サービス内容の範囲内においては、別途費用を負担していただくことなく保証サービスを受けることができます。

注：Hewlett Packard Enterprise製品の一部の部品は、カスタマーセルフリペアの対象外です。製品の保証を継続するためには、Hewlett Packard EnterpriseまたはHewlett Packard Enterprise正規保守代理店による交換作業が必須となります。部品カタログには、当該部品がカスタマーセルフリペア除外品である旨が記載されています。

部品供給が可能な場合、地域によっては、CSR部品を翌営業日に届くように発送します。また、地域によっては、追加費用を負担いただくことにより同日または4時間以内に届くように発送することも可能な場合があります。サポートが必要なときは、Hewlett Packard Enterpriseサポートセンターに電話していただければ、技術者が電話でアドバイスします。交換用のCSR部品または同梱物には、故障部品をHewlett Packard Enterpriseに返送する必要があるかどうかが表示されています。故障部品をHewlett Packard Enterpriseに返送する必要がある場合は、指定期限内（通常は5営業日以内）に故障部品をHewlett Packard Enterpriseに返送してください。故障部品を返送する場合は、届いた時の梱包箱に関連書類とともに入れてください。故障部品を返送しない場合、Hewlett Packard Enterpriseから部品費用が請求されます。カスタマーセルフリペアの際には、Hewlett Packard Enterpriseは送料および部品返送費を全額負担し、使用する宅配便会社や運送会社を指定します。

## **部品のみ保証サービス**

Hewlett Packard Enterprise保証サービスには、部品のみ保証サービスが適用される場合があります。このサービスでは、交換部品は無償で提供されます。

部品のみ保証サービスにおいては、CSR部品をお客様により交換作業していただくことが必須になります。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、その修理サービスに関する交通費および人件費がお客様のご負担となります。

## 客户自行维修

Hewlett Packard Enterprise 产品提供许多客户自行维修 (CSR) 部件，以尽可能缩短维修时间和在更换缺陷部件方面提供更大的灵活性。如果在诊断期间 Hewlett Packard Enterprise (或Hewlett Packard Enterprise 服务提供商或服务合作伙伴) 确定可以通过使用 CSR 部件完成维修，Hewlett Packard Enterprise 将直接把该部件发送给您进行更换。有两类 CSR 部件：

- 强制性的 — 要求客户必须自行维修的部件。如果您请求 Hewlett Packard Enterprise 更换这些部件，则必须为该服务支付差旅费和人工费用。
- 可选的 — 客户可以选择是否自行维修的部件。这些部件也是为客户自行维修设计的。不过，如果您要求 Hewlett Packard Enterprise 为您更换这些部件，则根据为您的产品指定的保修服务类型，Hewlett Packard Enterprise 可能收取或不再收取任何附加费用。

注：某些 Hewlett Packard Enterprise 部件的设计并未考虑客户自行维修。为了满足客户保修的需要，Hewlett Packard Enterprise 要求授权服务提供商更换相关部件。这些部件在部件图解目录中标记为“否”。

CSR 部件将在下一个工作日发运（取决于备货情况和允许的地理范围）。在允许的地理范围内，可在当天或四小时内发运，但要收取额外费用。如果需要帮助，您可以致电 Hewlett Packard Enterprise 技术支持中心，将会有技术人员通过电话为您提供帮助。Hewlett Packard Enterprise 会在随更换的 CSR 部件发运的材料中指明是否必须将有缺陷的部件返还给 Hewlett Packard Enterprise。如果要求您将有缺陷的部件返还给 Hewlett Packard Enterprise，那么您必须在规定的期限内（通常是五 (5) 个工作日）将缺陷部件发给 Hewlett Packard Enterprise。有缺陷的部件必须随所提供的发运材料中的相关文件一起返还。如果未能送还有缺陷的部件，Hewlett Packard Enterprise 可能会要求您支付更换费用。客户自行维修时，Hewlett Packard Enterprise 将承担所有相关运输和部件返回费用，并指定快递商/承运商。

有关 Hewlett Packard Enterprise 客户自行维修计划的详细信息，请与您当地的服务提供商联系。有关北美地区的计划，请访问 Hewlett Packard Enterprise 网站 (<http://www.hpe.com/support/selfrepair>)。

## 仅部件保修服务

您的 Hewlett Packard Enterprise 有限保修服务可能涉及仅部件保修服务。根据仅部件保修服务条款的规定，Hewlett Packard Enterprise 将免费提供更换的部件。

仅部件保修服务要求进行 CSR 部件更换。如果您请求 Hewlett Packard Enterprise 更换这些部件，则必须为该服务支付差旅费和人工费用。

# 客戶自行維修

Hewlett Packard Enterprise 產品設計了許多「客戶自行維修」(CSR) 的零件以減少維修時間，並且使得更換瑕疵零件時能有更大的彈性。如果在診斷期間，Hewlett Packard Enterprise (或 Hewlett Packard Enterprise 服務供應商或維修夥伴) 辨認出此項維修工作可以藉由使用 CSR 零件來完成，則 Hewlett Packard Enterprise 將直接寄送該零件給您作更換。CSR 零件分為兩種類別：

- **強制的** — 客戶自行維修所使用的零件是強制性的。如果您要求 Hewlett Packard Enterprise 更換這些零件，Hewlett Packard Enterprise 將會向您收取此服務所需的外出費用與勞動成本。
- **選購的** — 客戶自行維修所使用的零件是選購的。這些零件也設計用於客戶自行維修之用。不過，如果您要求 Hewlett Packard Enterprise 為您更換，則可能需要也可能不需要負擔額外的費用，端視針對此產品指定的保固服務類型而定。

**備註：**某些 Hewlett Packard Enterprise 零件沒有消費者可自行維修的設計。為符合客戶保固，Hewlett Packard Enterprise 需要授權的服務供應商更換零件。這些零件在圖示的零件目錄中，被標示為「否」。

基於材料取得及環境允許的情況下，CSR 零件將於下一個工作日以快遞寄送。在環境的允許下當天或四小時內送達，則可能需要額外的費用。若您需要協助，可致電 Hewlett Packard Enterprise 支援中心，會有一位技術人員透過電話來協助您。不論損壞的零件是否必須退回，Hewlett Packard Enterprise 皆會在與 CSR 替換零件一起運送的材料中註明。若要將損壞的零件退回 Hewlett Packard Enterprise，您必須在指定的一段時間內 (通常為五 (5) 個工作天)，將損壞的零件寄回 Hewlett Packard Enterprise。損壞的零件必須與寄送資料中隨附的相關技術文件一併退還。如果無法退還損壞的零件，Hewlett Packard Enterprise 可能要向您收取替換費用。針對客戶自行維修情形，Hewlett Packard Enterprise 將負責所有運費及零件退還費用，並指定使用何家快遞/貨運公司。

如需 Hewlett Packard Enterprise 的 CSR 方案詳細資訊，請連絡您當地的服務供應商。至於北美方案，請參閱 Hewlett Packard Enterprise 的 CSR 網站 [selfrepair](http://www.hpe.com/support/selfrepair)。

## 僅限零件的保固服務

您的「Hewlett Packard Enterprise 有限保固」可能包含僅限零件的保固服務。在僅限零件的保固服務情況下，Hewlett Packard Enterprise 將免費提供替換零件。

針對僅限零件的保固服務，CSR 零件替換是強制性的。如果您要求 Hewlett Packard Enterprise 更換這些零件，Hewlett Packard Enterprise 將會向您收取此服務所需的外出費用與勞動成本。

## 고객 셀프 수리

Hewlett Packard Enterprise 제품은 수리 시간을 최소화하고 결함이 있는 부품 교체 시 더욱 융통성을 발휘할 수 있도록 하기 위해 고객 셀프 수리(CSR) 부품을 다량 사용하여 설계되었습니다. 전단 기간 동안 Hewlett Packard Enterprise(또는 Hewlett Packard Enterprise 서비스 공급업체 또는 서비스 협력업체)에서 CSR 부품을 사용하여 수리가 가능하다고 판단되면 Hewlett Packard Enterprise는 해당 부품을 바로 사용자에게 보내어 사용자가 교체할 수 있도록 합니다. CSR 부품에는 두 가지 종류가 있습니다.

- 필수 - 고객 셀프 수리가 의무 사항인 필수 부품. 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 이 서비스에 대한 출장비 및 작업비가 청구됩니다.
- 선택 사항 - 고객 셀프 수리가 선택 사항인 부품. 이 부품들도 고객 셀프 수리가 가능하도록 설계되었습니다. 하지만 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 사용자가 구입한 제품에 해당하는 보증 서비스 유형에 따라 추가 비용 없이 교체가 가능할 수 있습니다.

참고: 일부 Hewlett Packard Enterprise 부품은 고객 셀프 수리가 불가능하도록 설계되었습니다. Hewlett Packard Enterprise는 만족스러운 고객 보증을 위해 공인 서비스 제공업체를 통해 부품을 교체하도록 하고 있습니다. 이러한 부품들은 Illustrated Parts Catalog에 "No"라고 표시되어 있습니다.

CSR 부품은 재고 상태와 지리적 조건이 허용하는 경우 다음 영업일 날짜에 가능하도록 배송이 이루어집니다. 지리적 조건이 허용하는 경우 추가 비용이 청구되는 조건으로 당일 또는 4시간 배송이 가능할 수도 있습니다. 도움이 필요하시면 Hewlett Packard Enterprise Support Center로 전화하십시오. 전문 기술자가 전화로 도움을 줄 것입니다. Hewlett Packard Enterprise는 결함이 발생한 부품을 Hewlett Packard Enterprise로 반환해야 하는지 여부를 CSR 교체 부품과 함께 배송된 자료에 지정합니다. 결함이 발생한 부품을 Hewlett Packard Enterprise로 반환해야 하는 경우에는 지정된 기간 내(통상 영업일 기준 5일)에 Hewlett Packard Enterprise로 반환해야 합니다. 이때 결함이 발생한 부품은 제공된 포장 재료에 넣어 관련 설명서와 함께 반환해야 합니다. 결함이 발생한 부품을 반환하지 않는 경우 Hewlett Packard Enterprise가 교체 부품에 대해 비용을 청구할 수 있습니다. 고객 셀프 수리의 경우, Hewlett Packard Enterprise는 모든 운송 및 부품 반환 비용을 부담하며 이용할 운송업체 및 택배 서비스를 결정합니다.

Hewlett Packard Enterprise CSR 프로그램에 대한 자세한 내용은 가까운 서비스 제공업체에 문의하십시오. 북미 지역의 프로그램에 대해서는 Hewlett Packard Enterprise CSR 웹사이트(<http://www.hpe.com/support/selfrepair>)를 참조하십시오.

## 부품 제공 보증 서비스

Hewlett Packard Enterprise 제한 보증에는 부품 제공 보증 서비스가 포함될 수 있습니다. 이러한 경우 Hewlett Packard Enterprise는 부품 제공 보증 서비스의 조건에 따라 교체 부품만을 무료로 제공합니다.

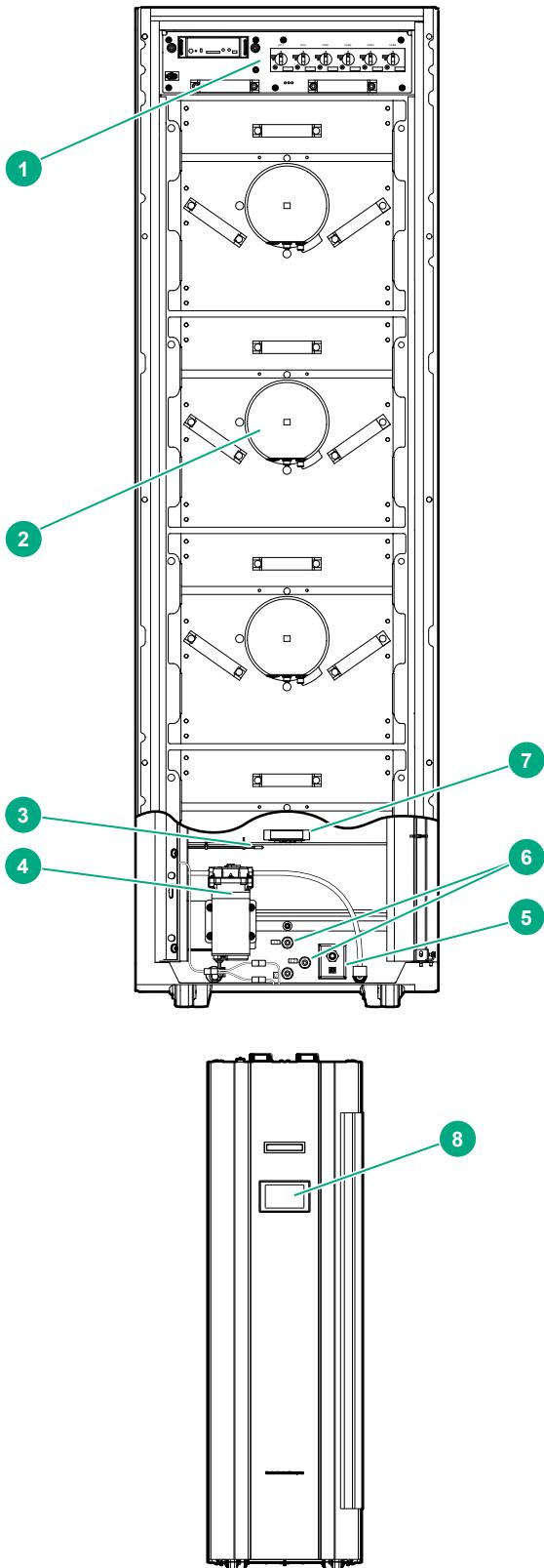
부품 제공 보증 서비스 제공 시 CSR 부품 교체는 의무 사항입니다. 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 이 서비스에 대한 출장비 및 작업비가 청구됩니다.

# Illustrated parts catalog

## Mechanical components

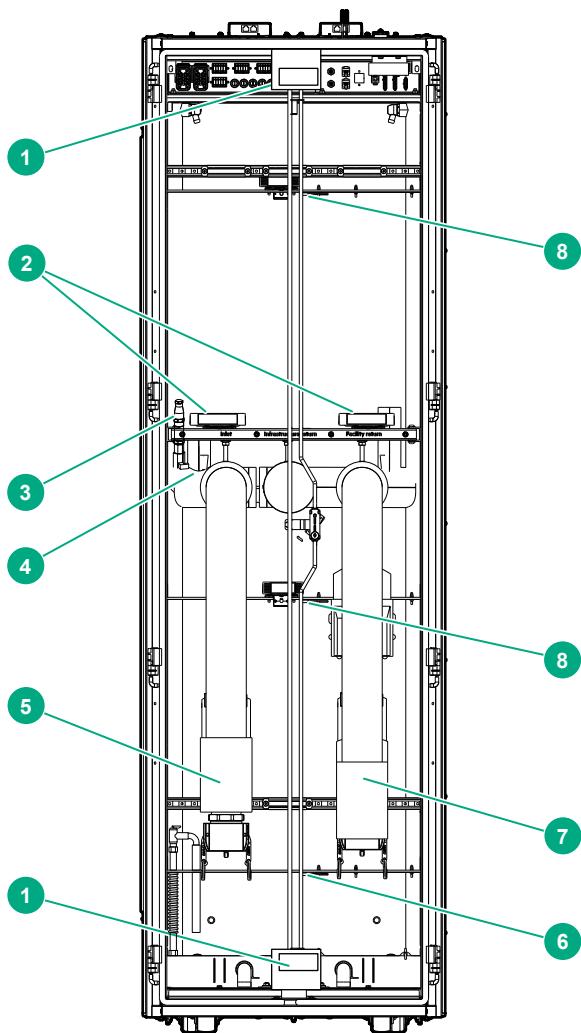
Hewlett Packard Enterprise continually improves and changes product parts. For complete and current supported parts information, see the Hewlett Packard Enterprise PartSurfer website (<http://www.hpe.com/info/partssurfer>).

**Unit front view**



| Item | Description   |
|------|---|
| 1    | <a href="#">TS7A AC transfer switch spare part</a> on page 18 |
| 2    | <a href="#">Fan spare part</a> on page 18 (4)                 |
| 3    | <a href="#">Air temperature sensor spare part</a> on page 18  |
| 4    | <a href="#">Condensation pump spare part</a> on page 18       |
| 5    | <a href="#">Float switch spare part</a> on page 19            |
| 6    | <a href="#">Leak sensor spare part</a> on page 19             |
| 7    | <a href="#">Modbus sensor spare part</a> on page 19           |
| 8    | <a href="#">Operator display spare part</a> on page 19        |

#### Unit rear view

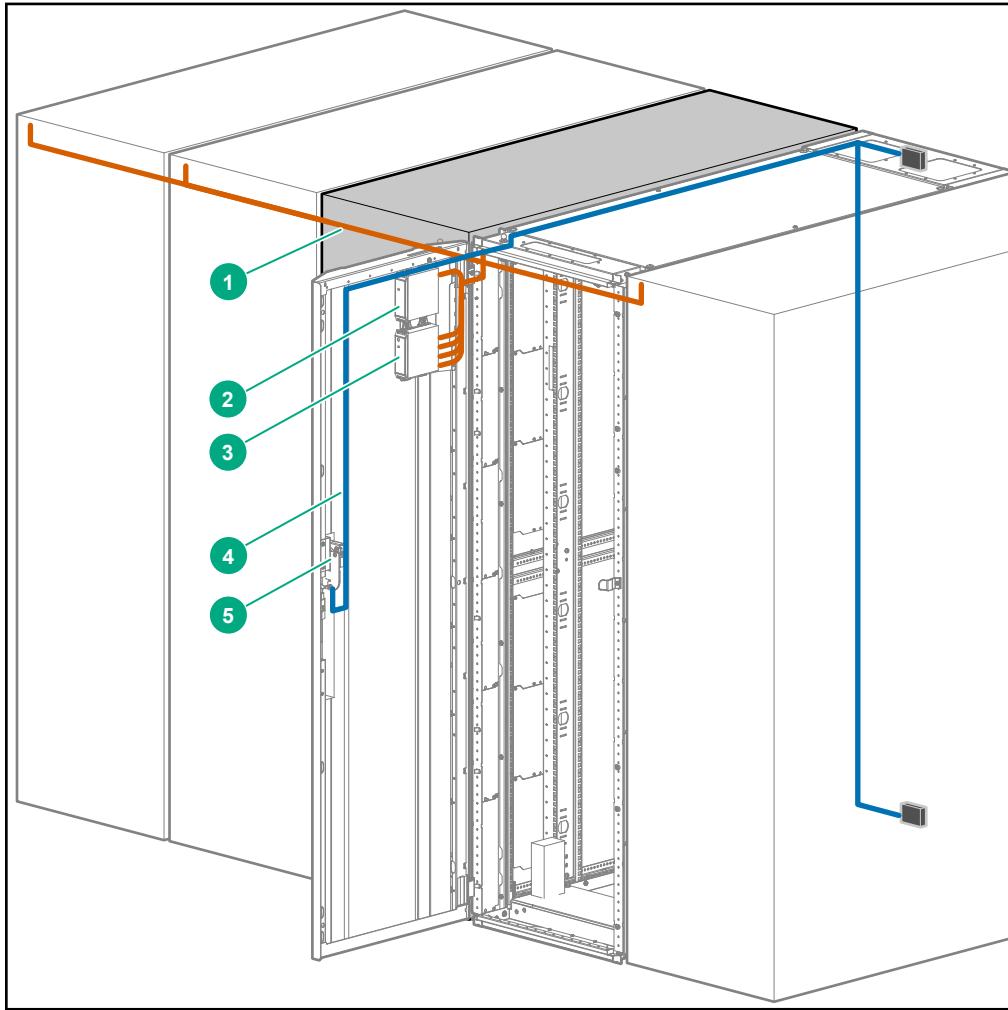


| Item | Description  |
|------|--|
| 1    | <a href="#">Rear door latch spare part</a> on page 19          |
| 2    | <a href="#">CMC III universal sensor spare part</a> on page 19 |

Table Continued

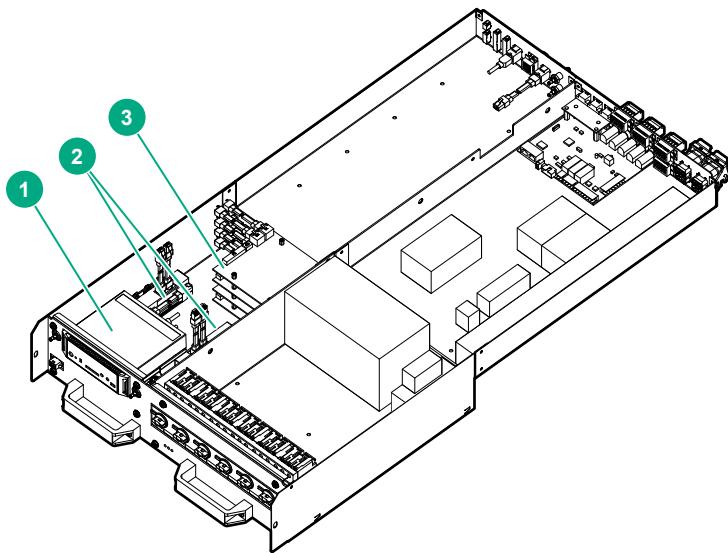
| Item | Description  |
|------|--|
| 3    | <a href="#">Electronic pressure transducer spare part</a> on page 19     |
| 4    | <a href="#">Pipe contact temperature sensors spare part</a> on page 20   |
| 5    | <a href="#">Water group supply with insulation spare part</a> on page 20 |
| 6    | <a href="#">Air temperature sensor spare part</a> on page 18             |
| 7    | <a href="#">Water group return with insulation spare part</a> on page 20 |
| 8    | <a href="#">Humidity sensor spare part</a> on page 20                    |

#### Unit cabling view



| Item | Description   |
|------|---|
| 1    | <a href="#">I/O module cable spare part</a> on page 20        |
| 2    | <a href="#">24-volt power supply spare part</a> on page 20    |
| 3    | <a href="#">CMC III I/O module spare part</a> on page 20      |
| 4    | <a href="#">Auto door cable harness spare part</a> on page 21 |
| 5    | <a href="#">Front door latch spare part</a> on page 21        |

## Transfer switch view



| Item | Description  |
|------|--|
| 1    | <a href="#">Management module spare part</a> on page 21  |
| 2    | <a href="#">Air pressure sensor spare part</a> on page 21  |
| 3    | <a href="#">Fan control board spare part</a> on page 21; <a href="#">Water control board spare part</a> on page 21 |

For more information, see [Removal and replacement procedures](#).

## TS7A AC transfer switch spare part

[Customer self repair](#) on page 5: **optional**

| Description             | Spare Part Number |
|-------------------------|-------------------|
| TS7A AC transfer switch | 879606-001        |

## Fan spare part

[Customer self repair](#) on page 5: **mandatory**

| Description | Spare Part Number |
|-------------|-------------------|
| Fan         | 879602-001        |

## Air temperature sensor spare part

[Customer self repair](#) on page 5: **mandatory**

| Description            | Spare Part Number |
|------------------------|-------------------|
| Air temperature sensor | 879607-001        |

## Condensation pump spare part

[Customer self repair](#) on page 5: **optional**

| Description       | Spare Part Number |
|-------------------|-------------------|
| Condensation pump | 879603-001        |

## Float switch spare part

**Customer self repair** on page 5: **mandatory**

| Description  | Spare Part Number |
|--------------|-------------------|
| Float switch | P01876-001        |

## Leak sensor spare part

**Customer self repair** on page 5: **mandatory**

| Description | Spare Part Number |
|-------------|-------------------|
| Leak sensor | 879615-001        |

## Modbus sensor spare part

**Customer self repair** on page 5: **mandatory**

| Description   | Spare Part Number |
|---------------|-------------------|
| Modbus sensor | 879616-001        |

## Operator display spare part

**Customer self repair** on page 5: **mandatory**

| Description      | Spare Part Number |
|------------------|-------------------|
| Operator display | 879605-001        |

## Rear door latch spare part

**Customer self repair** on page 5: **optional**

| Description     | Spare Part Number |
|-----------------|-------------------|
| Rear door latch | P06852-001        |

## CMC III universal sensor spare part

**Customer self repair** on page 5: **mandatory**

| Description              | Spare Part Number |
|--------------------------|-------------------|
| CMC III universal sensor | 879609-001        |

## Electronic pressure transducer spare part

**Customer self repair** on page 5: **mandatory**

| Description                               | Spare Part Number |
|---|-------------------|
| Electronic pressure transducer spare part | 879611-001        |

## Pipe contact temperature sensors spare part

Customer self repair on page 5: **mandatory**

| Description                      | Spare Part Number |
|----------------------------------|-------------------|
| Pipe contact temperature sensors | 879610-001        |

## Water group supply with insulation spare part

Customer self repair on page 5: **optional**

| Description                        | Spare Part Number |
|------------------------------------|-------------------|
| Water group supply with insulation | 879612-001        |

## Water group return with insulation spare part

Customer self repair on page 5: **optional**

| Description                        | Spare Part Number |
|------------------------------------|-------------------|
| Water group return with insulation | 879614-001        |

## Humidity sensor spare part

Customer self repair on page 5: **mandatory**

| Description     | Spare Part Number |
|-----------------|-------------------|
| Humidity sensor | 750893-001        |

## I/O module cable spare part

Customer self repair on page 5: **optional**

| Description      | Spare Part Number |
|------------------|-------------------|
| I/O module cable | P06850-001        |

## 24-volt power supply spare part

Customer self repair on page 5: **optional**

| Description          | Spare Part Number |
|----------------------|-------------------|
| 24-volt power supply | P06848-001        |

## CMC III I/O module spare part

Customer self repair on page 5: **optional**

| Description        | Spare Part Number |
|--------------------|-------------------|
| CMC III I/O module | P06849-001        |

## Auto door cable harness spare part

Customer self repair on page 5: optional

| Description             | Spare Part Number |
|-------------------------|-------------------|
| Auto door cable harness | P06853-001        |

## Front door latch spare part

Customer self repair on page 5: optional

| Description      | Spare Part Number |
|------------------|-------------------|
| Front door latch | P06851-001        |

## Management module spare part

Customer self repair on page 5: mandatory

| Description       | Spare Part Number |
|-------------------|-------------------|
| Management module | 879604-001        |

## Air pressure sensor spare part

Customer self repair on page 5: mandatory

| Description         | Spare Part Number |
|---------------------|-------------------|
| Air pressure sensor | 879608-001        |

## Fan control board spare part

Customer self repair on page 5: mandatory

| Description | Spare Part Number |
|-------------|-------------------|
| Fan control | 750890-001        |

## Water control board spare part

Customer self repair on page 5: optional

| Description   | Spare Part Number |
|---------------|-------------------|
| Water control | 750889-001        |

## Flow pipe VFS 20-400 FKM spare part

Customer self repair on page 5: no

| Description              | Spare Part Number |
|--------------------------|-------------------|
| Flow pipe VFS 20-400 FKM | 879613-001        |

# Removal and replacement procedures

## Required tools

You need the following items for some procedures:

- Flat blade screwdriver
- #2 Phillips screwdriver
- Adjustable wrench
- 5.5 mm wrench
- T-40 Torx screwdriver
- Torx screwdriver set
- Allen wrench set
- Socket set
- Bubble level
- (Optional) 5 mm square head key for hex drain

## Safety considerations

Before performing service procedures, review all the safety information.

### Preventing electrostatic discharge

To prevent damaging the system, be aware of the precautions you must follow when setting up the system or handling parts. A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

#### Procedure

- Avoid hand contact by transporting and storing products in static-safe containers.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.
- Place parts on a grounded surface before removing them from their containers.
- Avoid touching pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive component or assembly.

### Symbols on equipment

The following symbols may be placed on equipment to indicate the presence of potentially hazardous conditions.



This symbol indicates the presence of hazardous energy circuits or electric shock hazards. Refer all servicing to qualified personnel.

**WARNING:** To reduce the risk of injury from electric shock hazards, do not open this enclosure. Refer all maintenance, upgrades, and servicing to qualified personnel.



This symbol indicates the presence of electric shock hazards. The area contains no user or field serviceable parts. Do not open for any reason.

**WARNING:** To reduce the risk of injury from electric shock hazards, do not open this enclosure.



This symbol on an RJ-45 receptacle indicates a network interface connection.

**WARNING:** To reduce the risk of electric shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle.



This symbol indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists.

**WARNING:** To reduce the risk of injury from a hot component, allow the surface to cool before touching.



This symbol indicates that the component exceeds the recommended weight for one individual to handle safely.

645 kg

**WARNING:** To reduce the risk of personal injury or damage to the equipment, observe local occupational health and safety requirements and guidelines for manual material handling.

1,423 lb



These symbols, on power supplies or systems, indicate that the equipment is supplied by multiple sources of power.

**WARNING:** To reduce the risk of injury from electric shock, remove all power cords to disconnect power from the system completely.

## HPE Adaptive Rack Cooling System warnings and cautions



**WARNING:** This HPE Adaptive Rack Cooling System is heavy. To reduce the risk of personal injury or damage to the equipment:

- Observe local occupational health and safety requirements and guidelines for manual material handling.
- Get help to lift and stabilize the product during installation or removal, especially when the product is not fastened to the rails. Hewlett Packard Enterprise recommends that a minimum of two people are required for all HPE Adaptive Rack Cooling System installations.



**WARNING:** To reduce the risk of personal injury from hot surfaces, allow the internal system components to cool before touching them.



**WARNING:** To reduce the risk of personal injury, electric shock, or damage to the equipment, remove the power cord to remove power from the HPE Adaptive Rack Cooling System. The power button does not completely shut off system power. Portions of the power supply and some internal circuitry remain active until AC/DC power is removed.

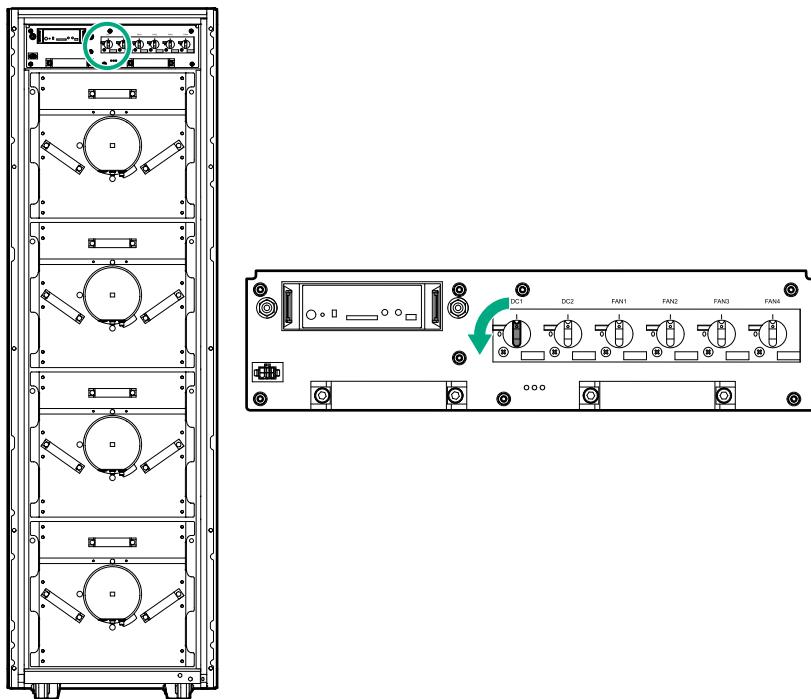
- 
- △ CAUTION:** Protect the HPE Adaptive Rack Cooling System from power fluctuations and temporary interruptions with a regulating uninterruptible power supply. This device protects the hardware from damage caused by power surges and voltage spikes and keeps the system in operation during a power failure.
- 
- △ CAUTION:** Do not operate the HPE Adaptive Rack Cooling System for long periods with the access panel open or removed. Operating the HPE Adaptive Rack Cooling System in this manner results in improper airflow and improper cooling that can lead to thermal damage.
- 

## Powering down the HPE Adaptive Rack Cooling System

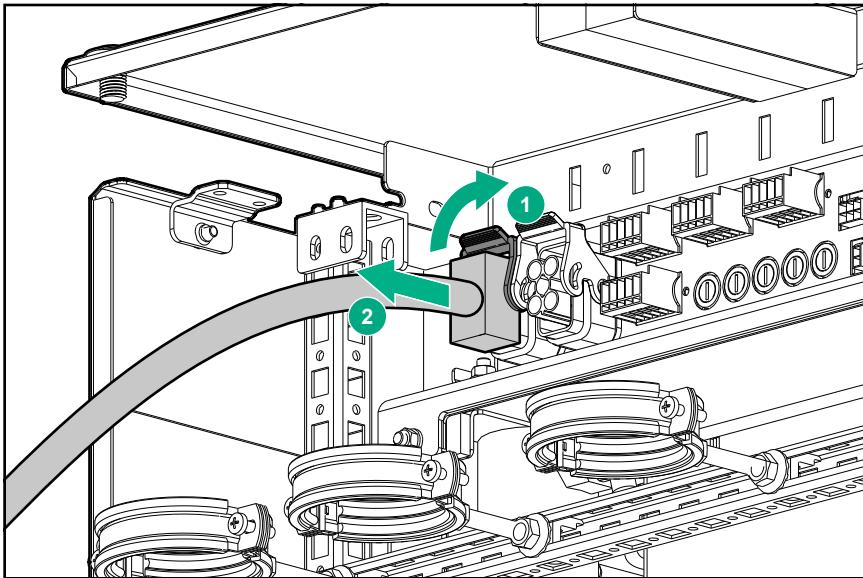
Before beginning any removal/replacement procedure, you must power down the HPE Adaptive Rack Cooling System completely to avoid damage to components or electric shock.

### Procedure

1. On the front of the HPE Adaptive Rack Cooling System, move DC1 and DC2 to the Off position to shut off power to the sensors, modules, and other smaller components.



2. Turn off power to the fan breakers.
3. On the rear of the HPE Adaptive Rack Cooling System, lift the latch and unplug the primary power cord from the power connector on the left at the power distribution. If you are using a secondary power cord, unplug it from the power connector on the right.



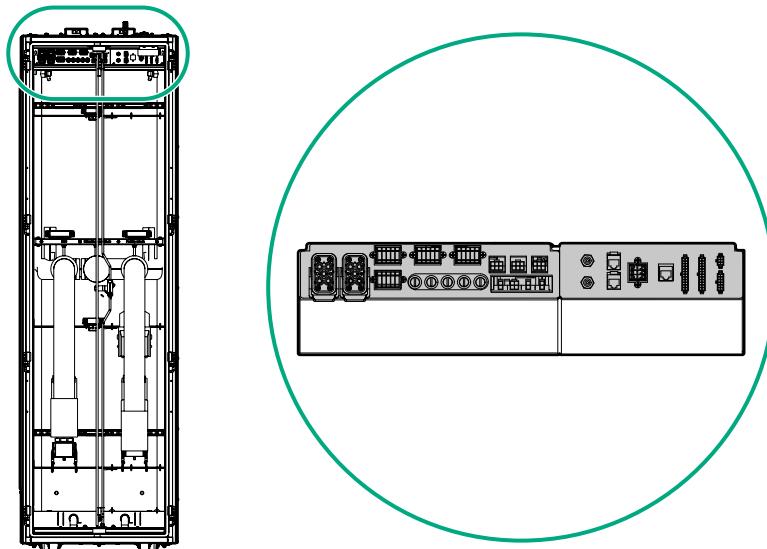
## Removing and replacing the TS7A AC transfer switch

### Prerequisites

Before beginning the procedure, **power down the HPE Adaptive Rack Cooling System**.

### Procedure

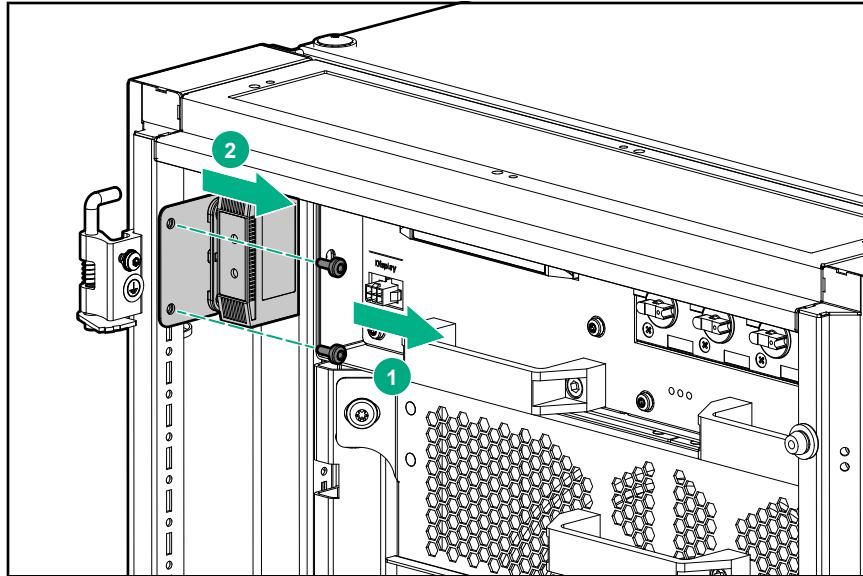
- From the rear of the HPE Adaptive Rack Cooling System, disconnect all power cables, fans, and sensors that are plugged into the transfer switch.



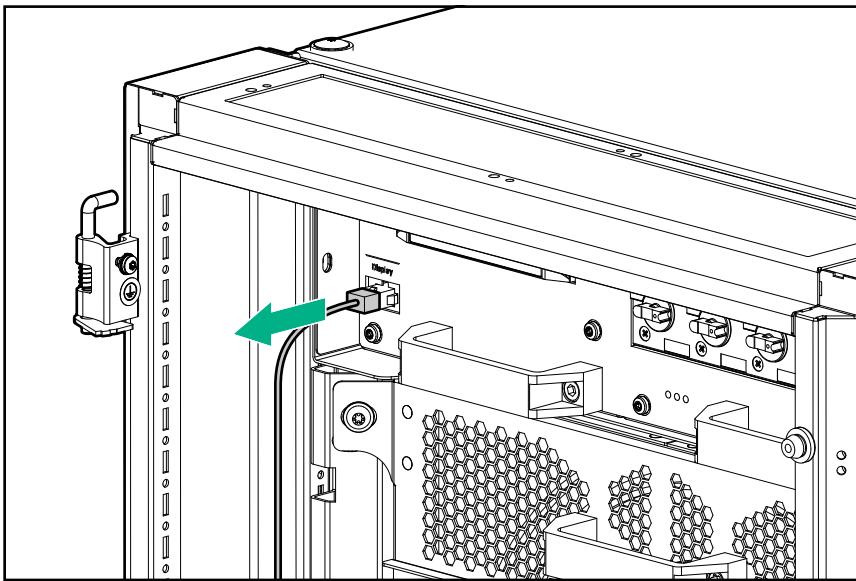
**NOTE:** There is a harness connector on the right side of the transfer switch. There is not much slack in the cables connected to this harness.

- Move to the front of the HPE Adaptive Rack Cooling System and remove the front door access sensor.

- Use a T-25 Torx screwdriver to remove the two screws.



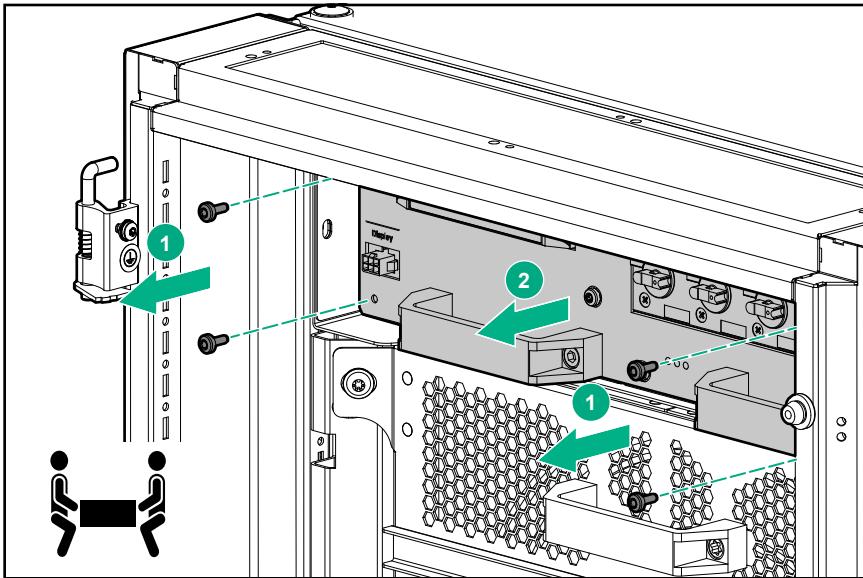
- b.** Disconnect the two RJ-45 connectors on the front of the rear door access sensor.
- 3.** Disconnect the display connector from the front of the transfer switch.



- 4.** Disconnect the air pressure tubes from the transfer switch.
- 5.** Remove the four screws on the front corners of the transfer switch, then use the handles to slide the transfer switch out of the HPE Adaptive Rack Cooling System.

**⚠️ WARNING:** To prevent injury or damage to the HPE Adaptive Rack Cooling System, use a minimum of two people to manually move the transfer switch. Hewlett Packard Enterprise recommends using a server lift to remove the transfer switch from the HPE Adaptive Rack Cooling System.

**NOTE:** The transfer switch has a drop when it is about 16 inches out of the HPE Adaptive Rack Cooling System.



To replace the component, reverse the removal procedure.

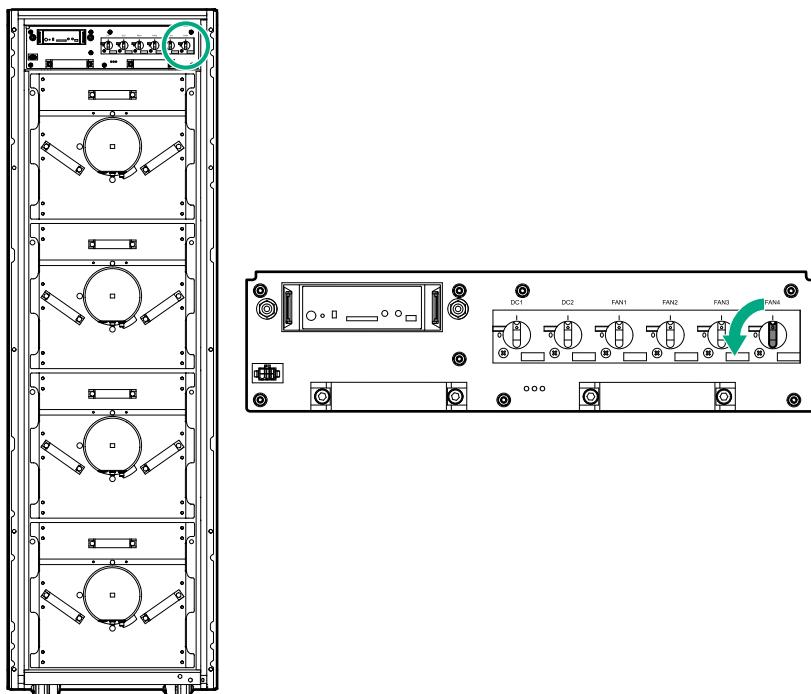
## Removing and replacing a fan

### Prerequisites

Before beginning the procedure, [power down the HPE Adaptive Rack Cooling System](#).

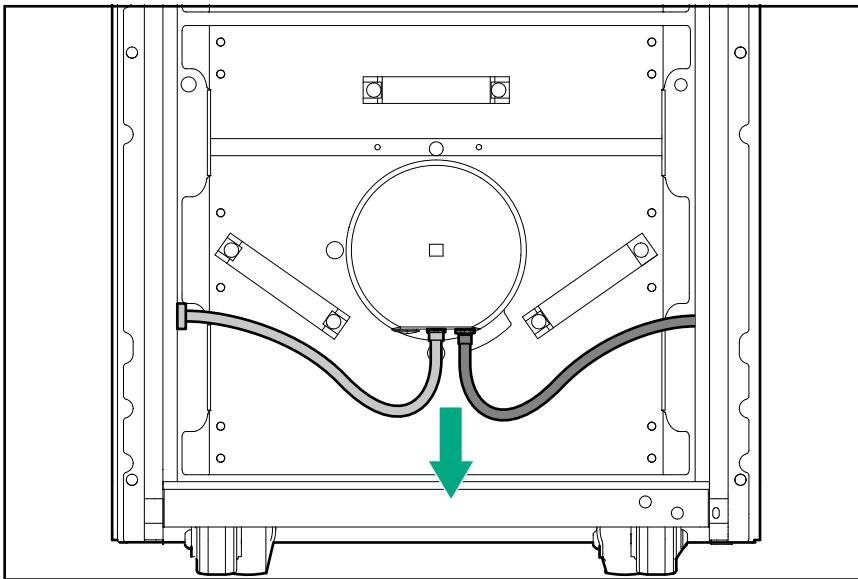
### Procedure

1. Turn the switch for the fan you are removing to the **Off** position.



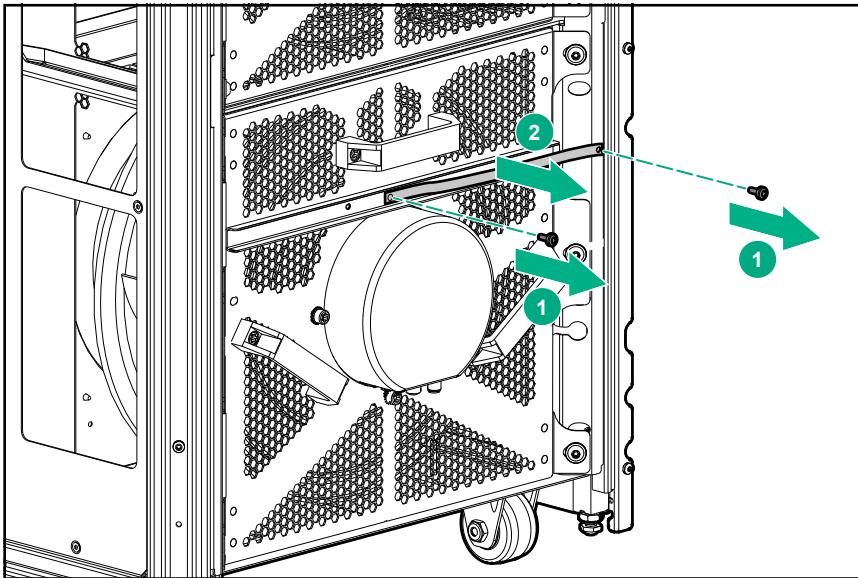
**CAUTION:** After replacing a fan, be sure that there are no loose zip ties or other debris inside the HPE Adaptive Rack Cooling System before turning fan power on. Loose debris could get sucked into the fan or the HPE Adaptive Rack Cooling System, causing severe damage.

2. Unscrew the two nuts on the front of the fan, and disconnect the two connectors from the fan motor housing, allowing them to hang from the sides of the HPE Adaptive Rack Cooling System.



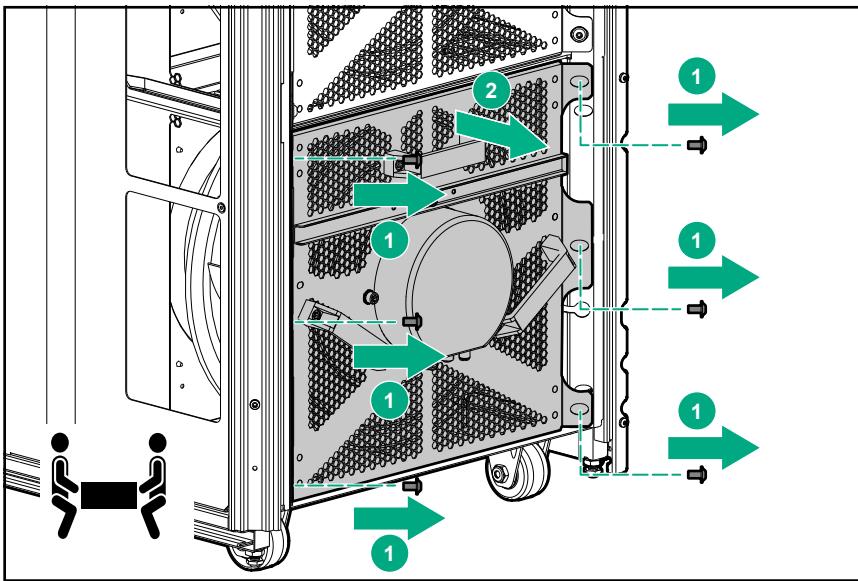
**CAUTION:** The connector is keyed. When replacing the fan, be sure to align it correctly to prevent damage to the connector.

3. Use a T-25 Torx screwdriver to remove the grounding strap.



4. Use a T-40 Torx screwdriver to remove the six screws holding the fan in place, and then use the two lower handles to slide the fan toward you. When it is close to the edge, use one lower handle and the upper handle to remove the fan from the HPE Adaptive Rack Cooling System.

**⚠️ WARNING:** To prevent injury or damage to the HPE Adaptive Rack Cooling System, use a minimum of two people to manually move the fan. Hewlett Packard Enterprise recommends using a server lift to remove the fan from the HPE Adaptive Rack Cooling System.

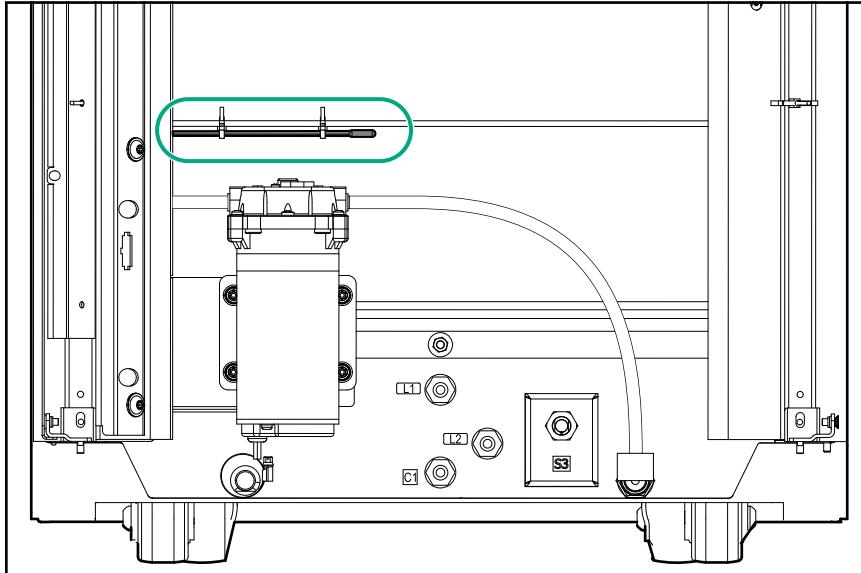


To replace the component, reverse the removal procedure.

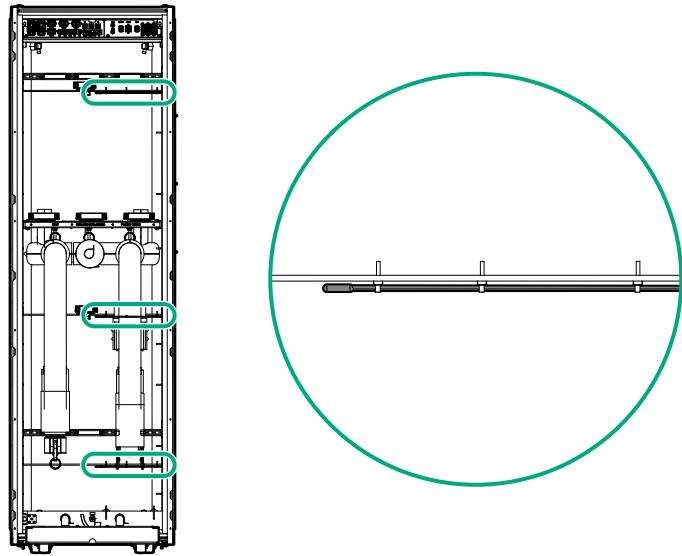
## Removing and replacing an air temperature sensor

There are six air temperature sensors located in the front of the HPE Adaptive Rack Cooling System and three located in the rear.

### Front air temperature sensors



### Rear air temperature sensors

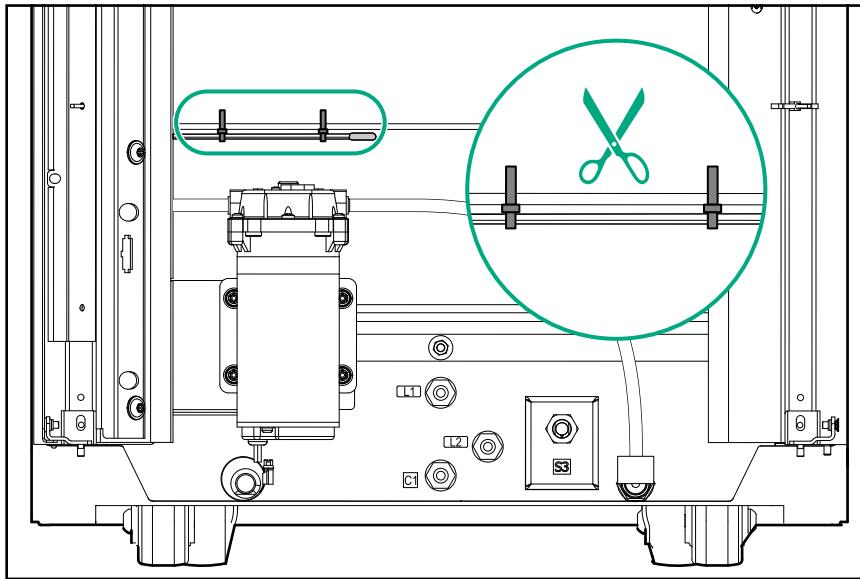


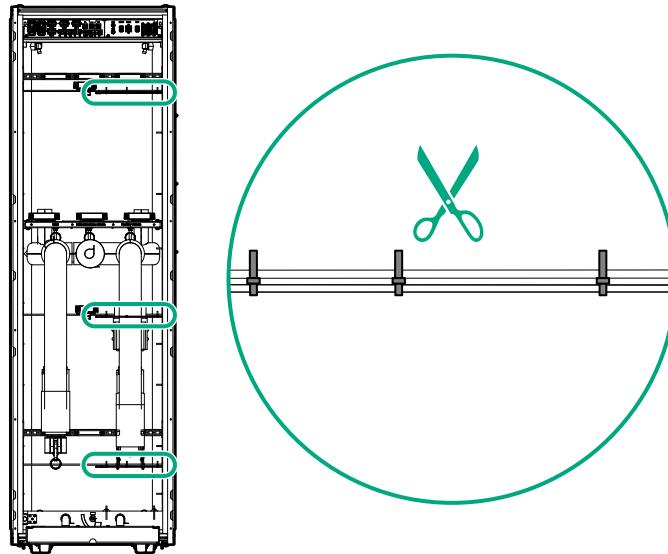
## Prerequisites

Before beginning the procedure, **power down the HPE Adaptive Rack Cooling System**.

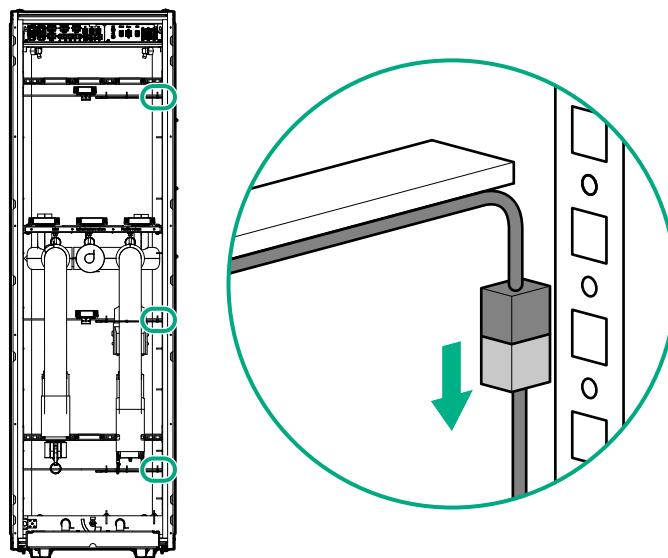
## Procedure

1. If a fan is installed in front of the air temperature sensor you plan to replace, **remove the appropriate fan**.
2. Unclip the fastener that attaches the air temperature sensor to the bar. Alternately, if a cable tie is used as a fastener, carefully cut the cable tie.





3. Disconnect the air temperature sensor from the main harness.




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**NOTE:** When installing the replacement air temperature sensors, wrap the cable tie around the bar to fasten it securely.

---

To replace the component, reverse the removal procedure.

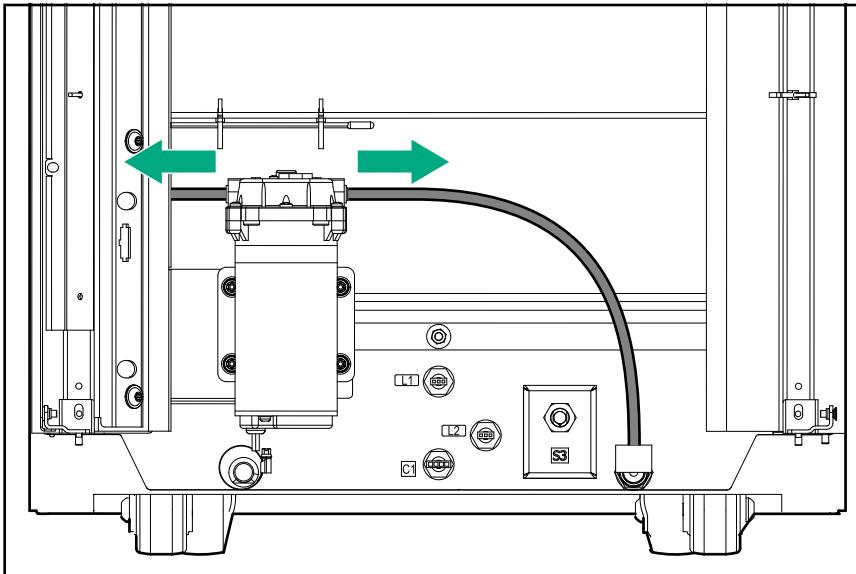
## Removing and replacing the condensation pump

### Prerequisites

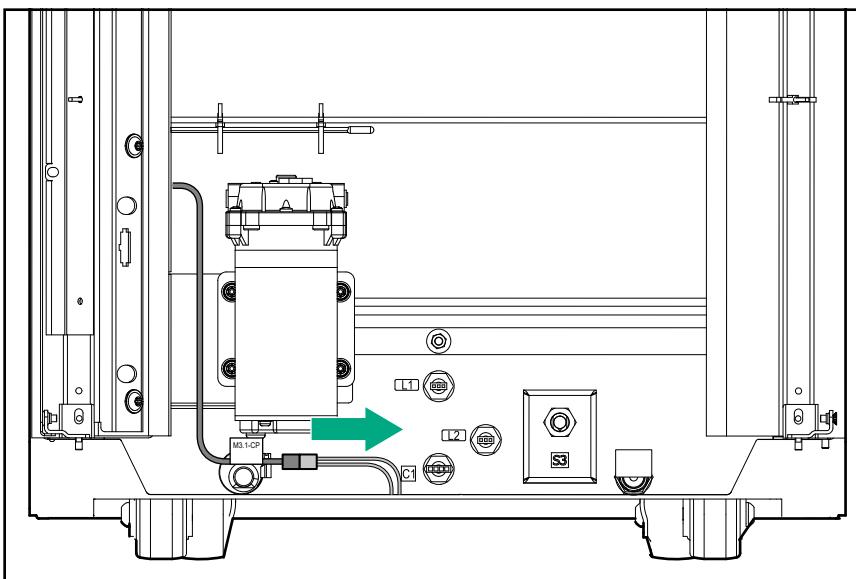
Before beginning the procedure, [\*\*power down the HPE Adaptive Rack Cooling System\*\*](#).

### Procedure

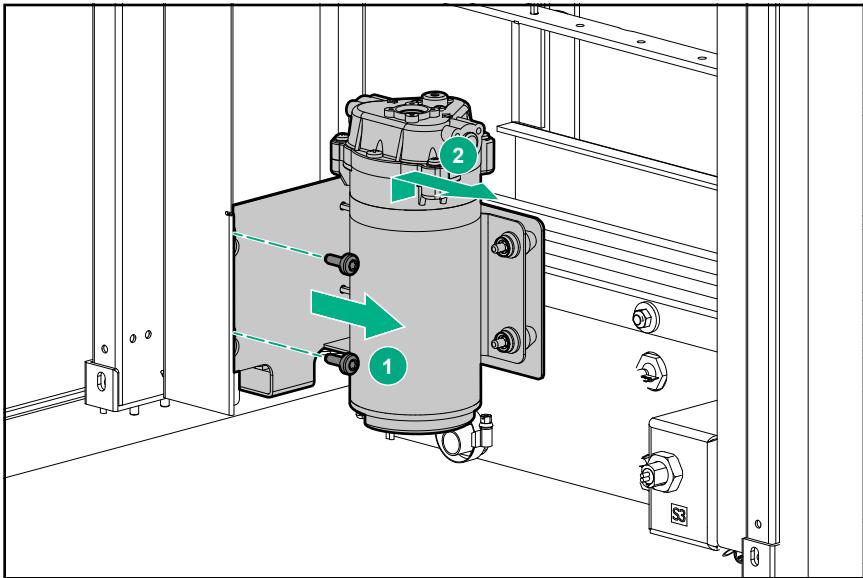
1. **Remove the bottom fan.**
2. To disconnect the hoses from the left and right side of the pump, push the gray button on the connection hoses.



3. Disconnect the connector labeled M 3.1-CP.



4. Use a T-25 Torx screwdriver to remove the two screws in the bracket on the left.



5. Remove the condensation pump from the HPE Adaptive Rack Cooling System.

To replace the component, reverse the removal procedure.

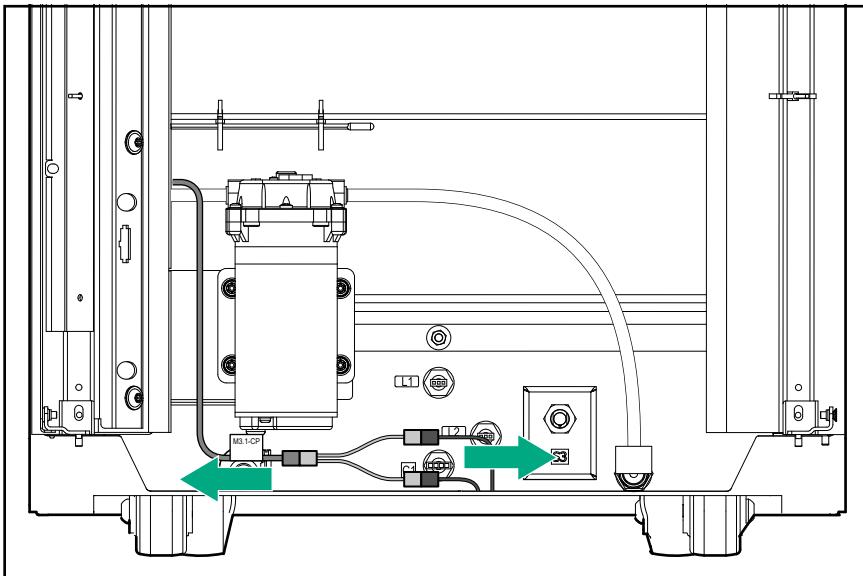
## Removing and replacing the float switch

### Prerequisites

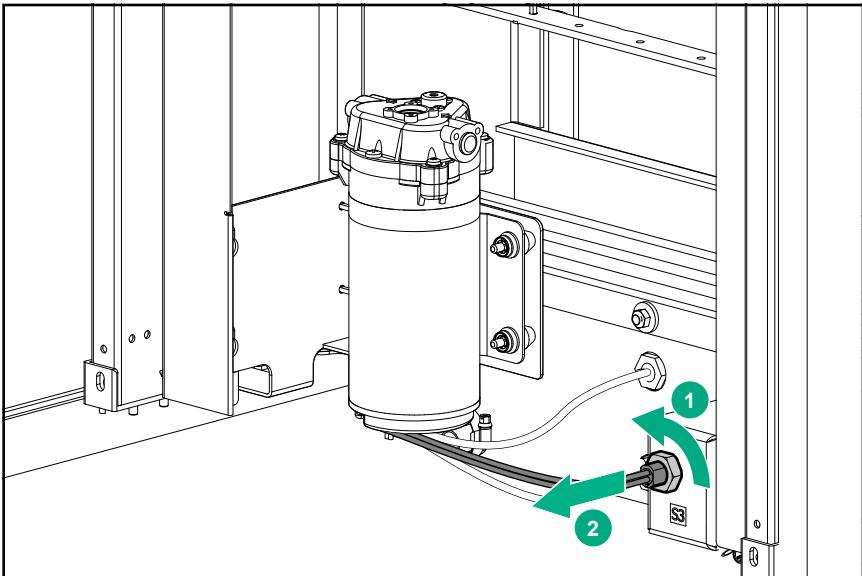
Before beginning the procedure, **power down the HPE Adaptive Rack Cooling System**.

### Procedure

1. Disconnect the two connectors that y off the M 3.1-CP connector.



2. Unscrew the nut that holds the float switch in place, and then pull the float switch out of the HPE Adaptive Rack Cooling System.



To replace the component, reverse the removal procedure.

## Removing and replacing a leak sensor or condensation sensor

### Prerequisites

Before beginning the procedure, [\*\*power down the HPE Adaptive Rack Cooling System\*\*](#).

### Procedure

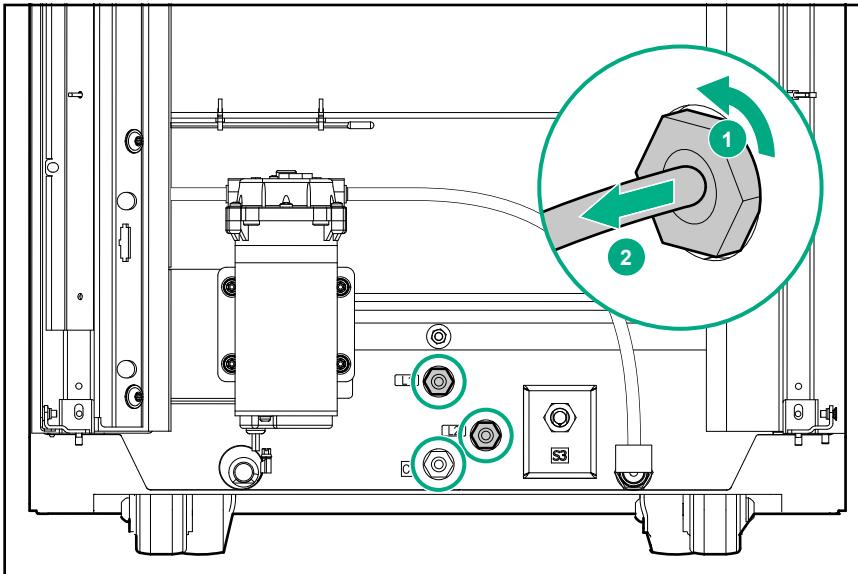
1. If you are replacing a front leak sensor or the condensation sensor, [\*\*remove the bottom fan\*\*](#).
2. Unscrew the nut and pull the sensor from the HPE Adaptive Rack Cooling System.

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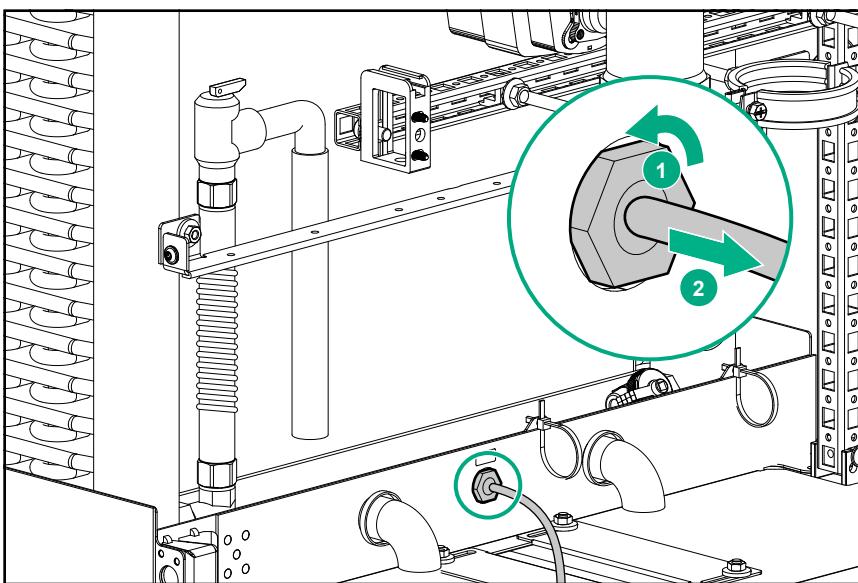
**NOTE:** There are two leak sensors (L1 and L2) and a condensation sensor (C1) located in the front of the HPE Adaptive Rack Cooling System. There is an additional leak sensor (L3) located in the rear of the HPE Adaptive Rack Cooling System.

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### Front



**Rear**



To replace the component, reverse the removal procedure.

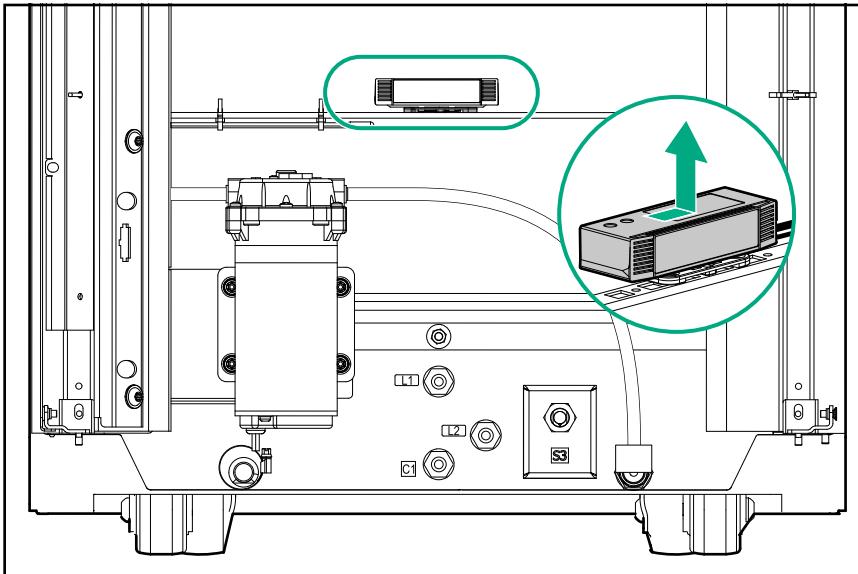
## Removing and replacing the Modbus sensor

### Prerequisites

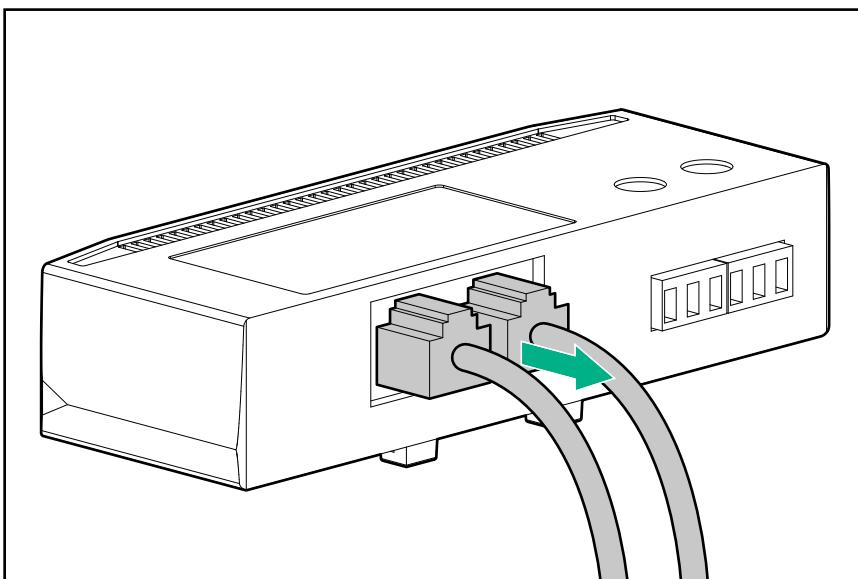
Before beginning the procedure, **power down the HPE Adaptive Rack Cooling System**.

### Procedure

1. **Remove the appropriate fan.**
2. To unlatch the Modbus sensor from the base, grasp it firmly and slide it to the right, then pull it off the base.



3. Note which RJ-45 connector plugs into which port.
4. Unplug the RJ-45 connectors.



To replace the component, reverse the removal procedure.

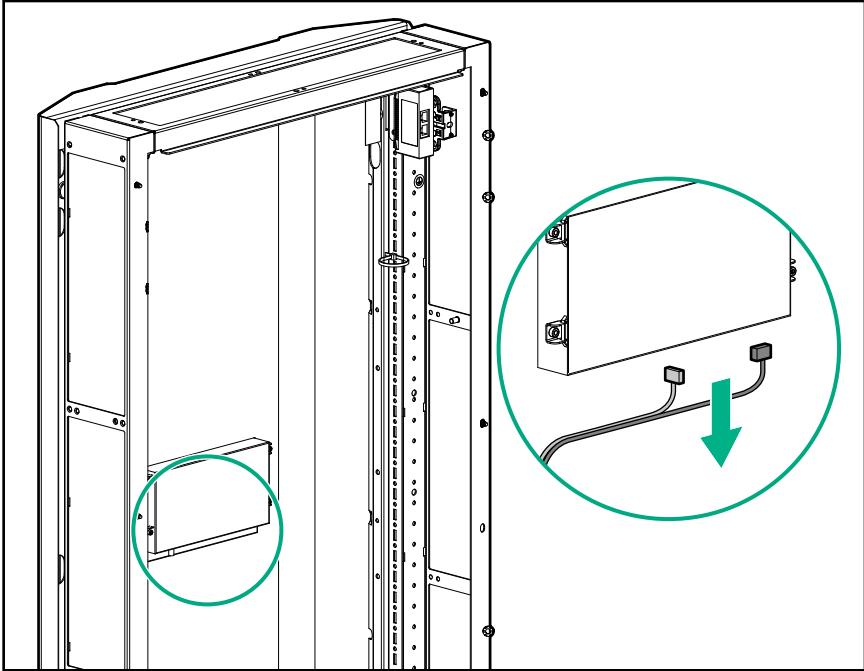
## Removing and replacing the operator display

### Prerequisites

Before beginning the procedure, [\*\*power down the HPE Adaptive Rack Cooling System\*\*](#).

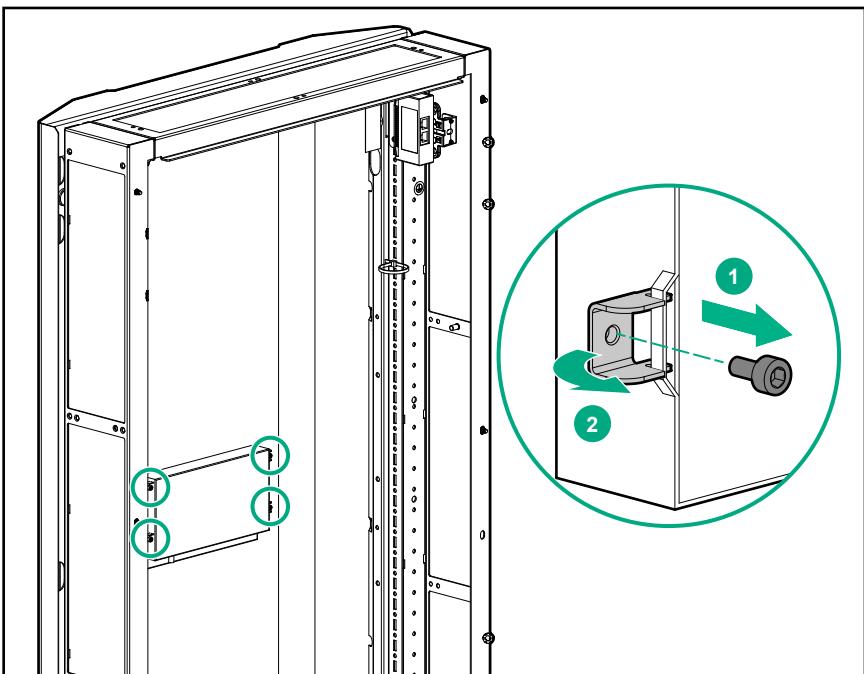
### Procedure

1. On the inside of the HPE Adaptive Rack Cooling System front door, disconnect the power and communications connectors.

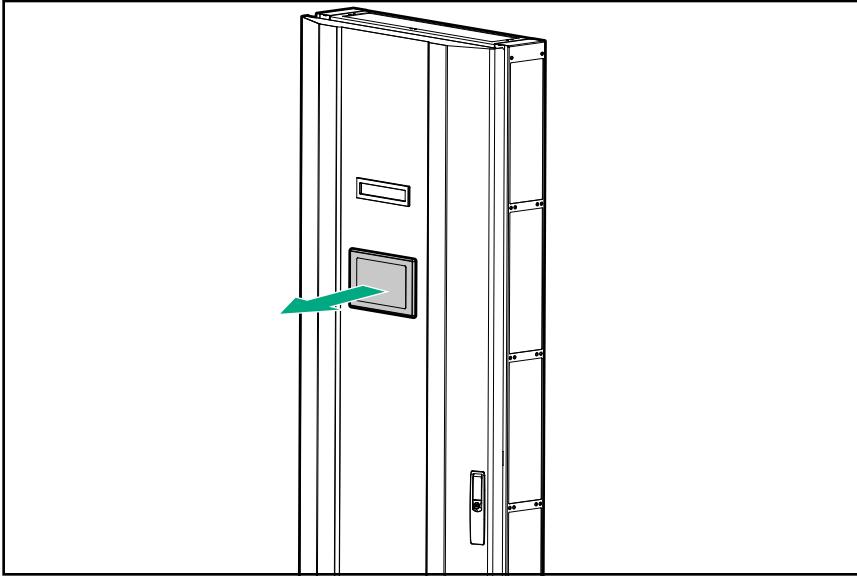


2. Use an Allen wrench to loosen the four bracket screws, and then slide off the brackets.

**CAUTION:** To prevent breaking the screen, ensure that the operator display screen does not fall forward.



3. Pull the operator display from the front of the door.



To replace the component, reverse the removal procedure.

## Removing and replacing the rear door latch

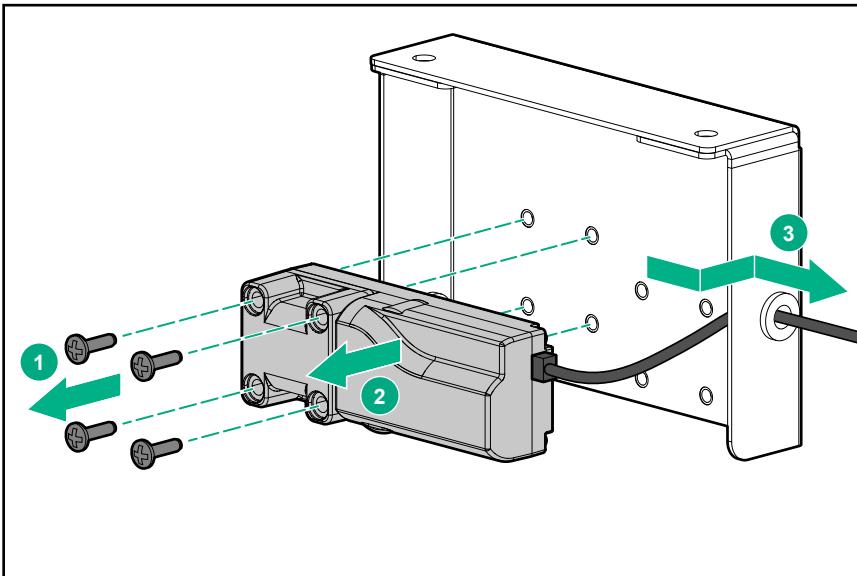
### Prerequisites

Before beginning the procedure, [\*\*power down the HPE Adaptive Rack Cooling System\*\*](#).

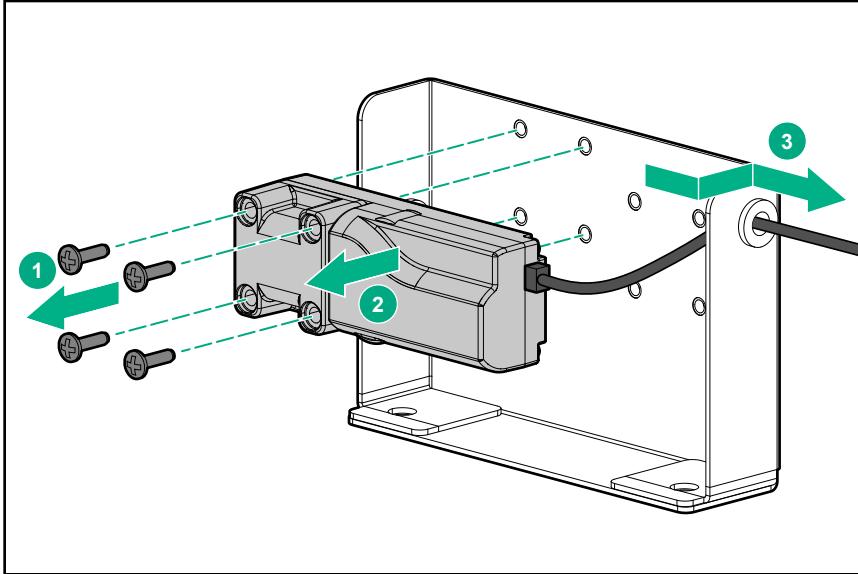
### Procedure

1. Disconnect the auto harness cable from the rear door latch.
2. Remove the four screws, and pull the latch from the rear door of the HPE Adaptive Rack Cooling System.

### Lower rear door latch assembly



### Upper rear door latch assembly



**NOTE:** When installing the rear door latch, apply the tape that was provided with the kit to the cable connection to prevent electrostatic discharge damage when the door is opened.

To replace the component, reverse the removal procedure.

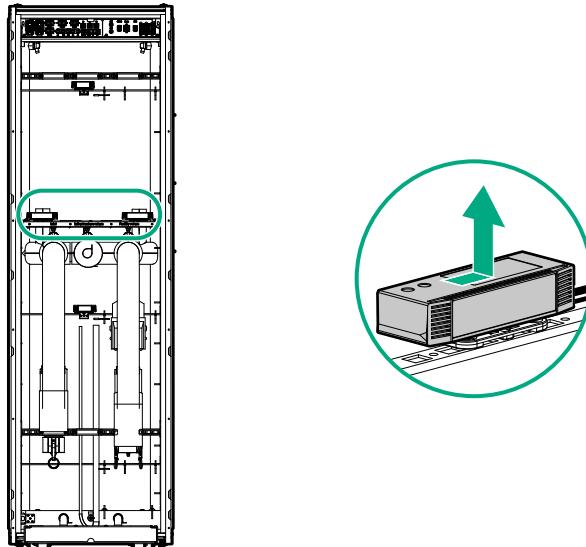
## Removing and replacing the CMC III universal sensor

### Prerequisites

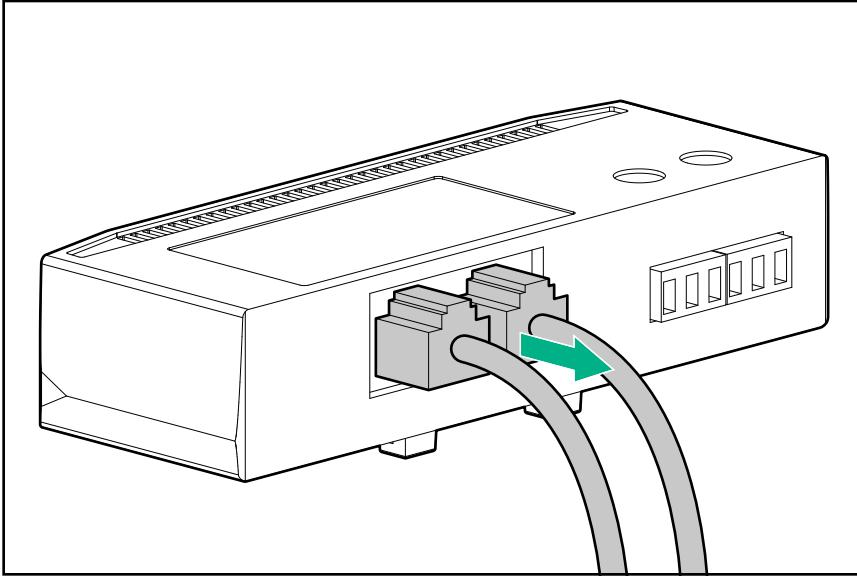
Before beginning the procedure, [\*\*power down the HPE Adaptive Rack Cooling System\*\*](#).

### Procedure

1. To unlatch the CMC III universal sensor from the base, grasp it firmly and slide it to the right, then pull it off the base.



2. Note which RJ-45 connector plugs into which port.
3. Unplug the RJ-45 connectors.



To replace the component, reverse the removal procedure.

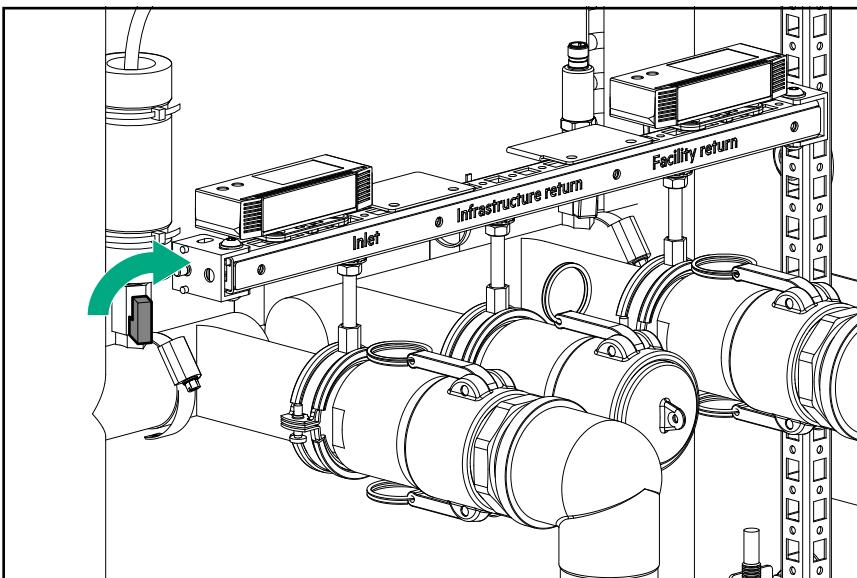
## Removing and replacing the electronic pressure transducer

### Prerequisites

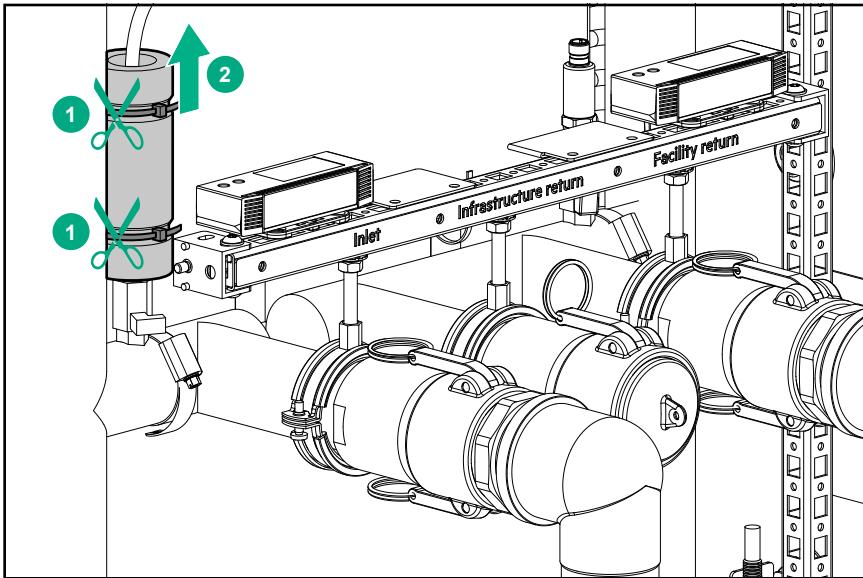
Before beginning the procedure, [power down the HPE Adaptive Rack Cooling System](#).

### Procedure

1. For easier access, [remove the CMC III universal sensor](#).
2. To close the valve, turn the handle 90 degrees to the right.



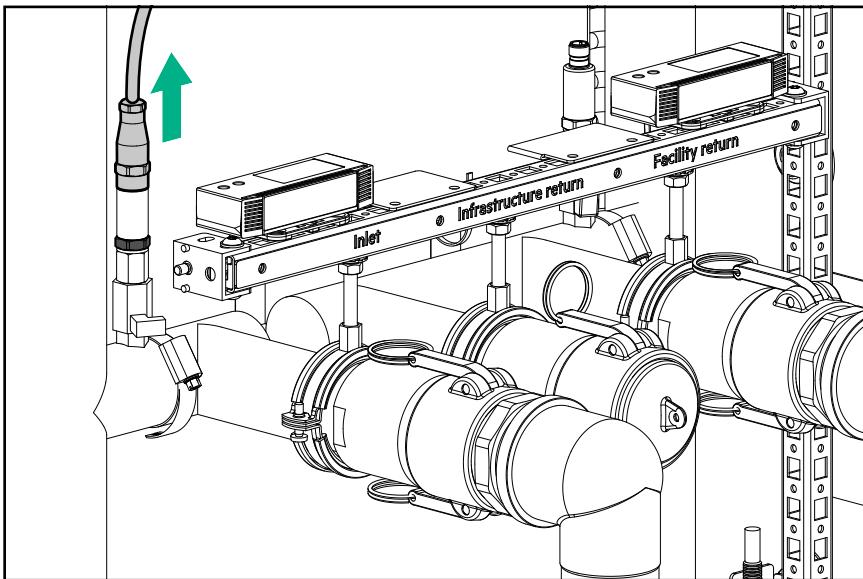
3. Carefully remove the insulation from the electronic pressure transducer.



4. Remove the wiring harness from the top of the electronic pressure transducer.
5. Supporting the bottom nut with a wrench to keep the fitting secure, turn a crescent wrench counterclockwise to remove the electronic pressure transducer.

**NOTE:** Not much force is necessary to turn the nut.

It is normal for there to be a small amount of residual water present when removing the electronic pressure transducer.



**NOTE:** The electronic pressure transducer is keyed. Be sure to align the slots properly before installing the new pressure transducer.

To replace the component, reverse the removal procedure.

# Removing and replacing the pipe contact temperature sensors

There are two pipe contact temperature sensors. The one on the left is for water supply. The one on the right is for water return.

## Prerequisites

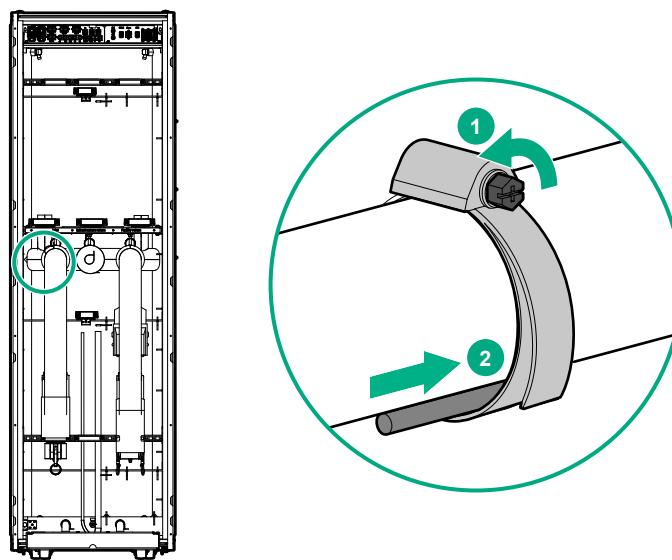
Before beginning the procedure, [power down the HPE Adaptive Rack Cooling System](#).

## Procedure

1. Carefully remove the foam from the pipes using a small blade if necessary.

**NOTE:** If humidity is high, condensation might form on the pipes during this process.

2. Disconnect the pipe contact temperature sensor from the wiring harness at the connector.
3. To loosen the clamp, use a socket or a screwdriver, and then slide out the sensor.



To replace the component, reverse the removal procedure.

# Removing and replacing the water group supply or return with insulation

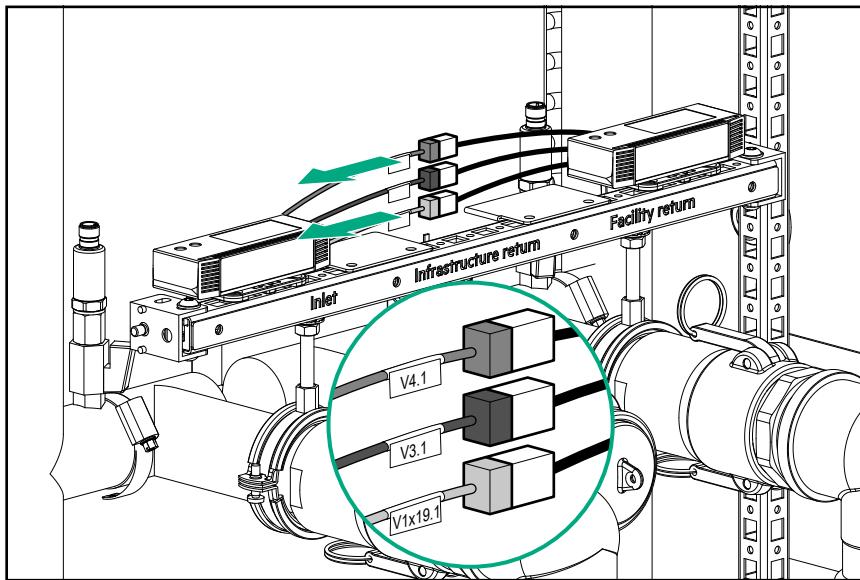
## Prerequisites

Before beginning the procedure, [power down the HPE Adaptive Rack Cooling System](#).

## Procedure

1. Disconnect the valve cables. The water supply cables are labeled as follows:
  - **Water supply:** V4.1
  - **Water return:**

- **Isolation valve:** V3.1
- **Modulating valve:** V1x19.1



2. Disconnect the water supply flow meter.
3. Close the facility supply water valve at the customer connection point, and then close the facility return water valve.

**NOTE:** These valves are separate from the three valves inside the HPE Adaptive Rack Cooling System and are part of the customer facility.

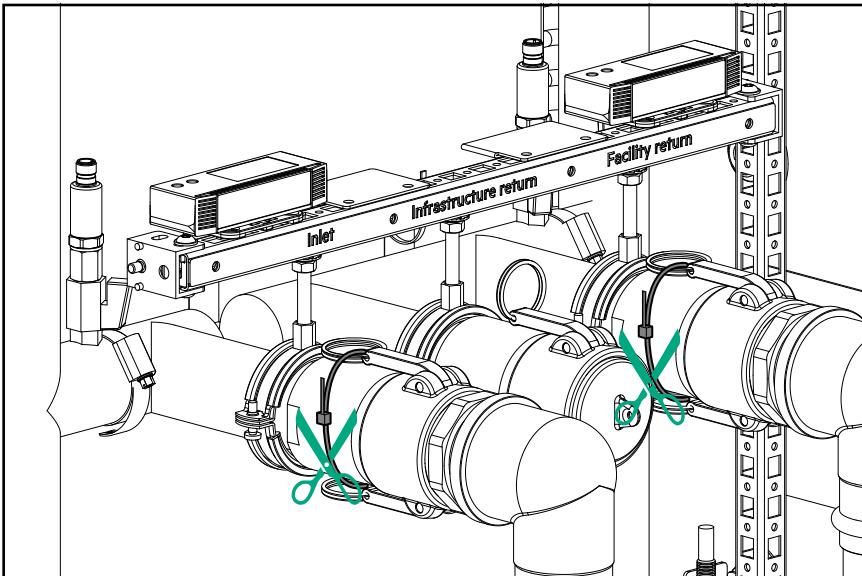
4. Drain the facility water valves and heat exchanger completely. To ensure that there is no pressure in the pipes before the cam and groove valves are removed, leave the drain or fill valves open.

**NOTE:** Contact facility management to become familiar with any facility drain procedures.

**△ CAUTION:** During installation, to prevent damage to the HPE Adaptive Rack Cooling System, once the facility water has been turned back on, be sure to refill the system and use the bleeder tool to bleed any air from the top of the heat exchanger.

5. If there are any cable ties holding the cam locks in place, cut them.

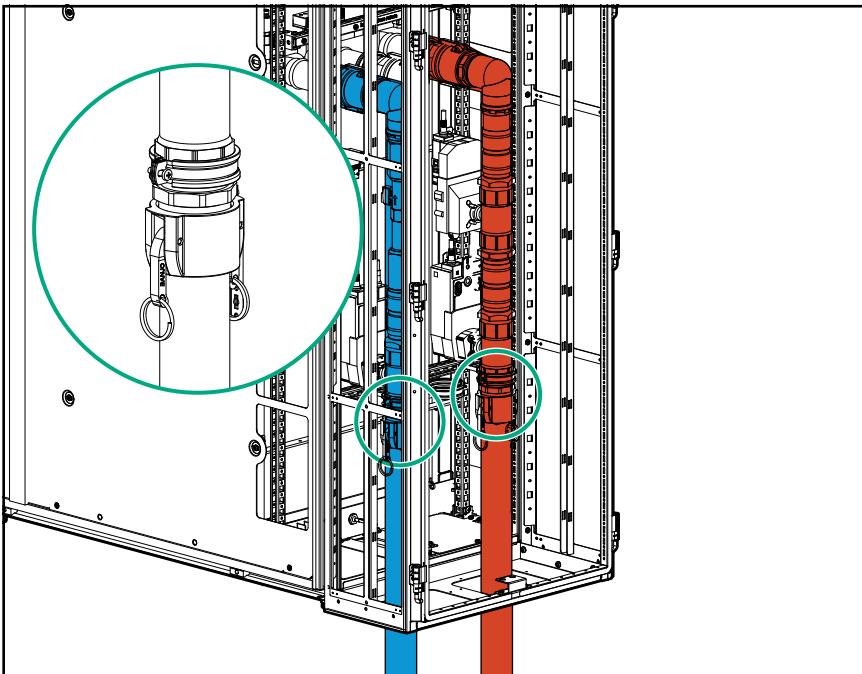
**△ CAUTION:** To prevent damage to the system, be sure to release the facility hose before releasing the heat exchanger connections.



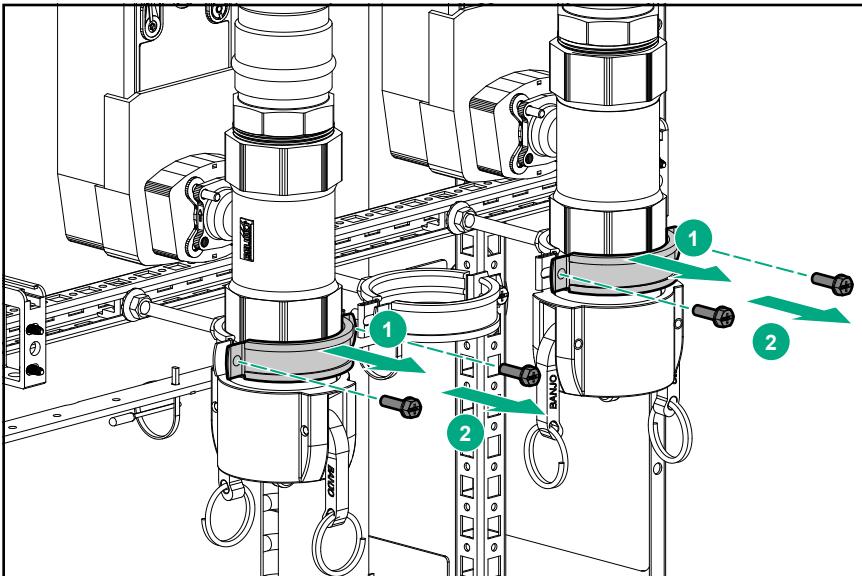
6. Holding the hose in place, slowly release the cam locks.

**CAUTION:** To prevent injury, wear eye protection and gloves while performing this step.

**NOTE:** Hewlett Packard Enterprise recommends that two people perform this step together. One person runs a shop vac to suck any excess water that might be released as the other person releases the cam locks.



7. Unscrew and remove the support bracket, disconnecting the bottom bracket first.



8. Use a shop vac to remove any water that is released.
9. Remove the water group supply or return from the HPE Adaptive Rack Cooling System.

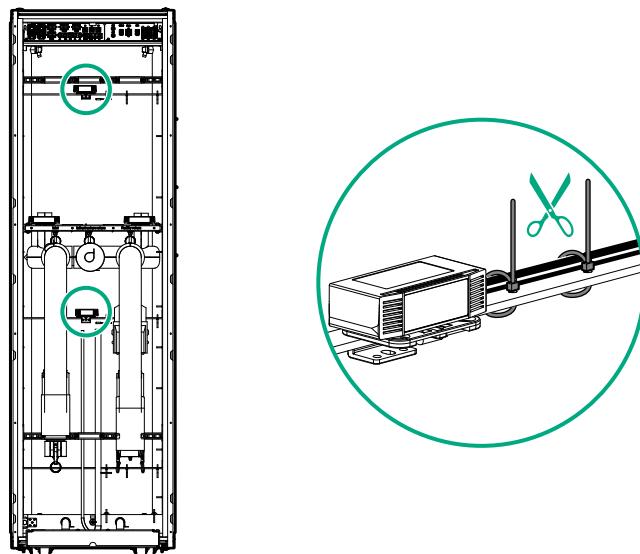
**⚠ CAUTION:** To prevent damage to any of the components in the HPE Adaptive Rack Cooling System, if there is any residual water within the assembly, be sure to clean it up immediately.

To replace the component, reverse the removal procedure.

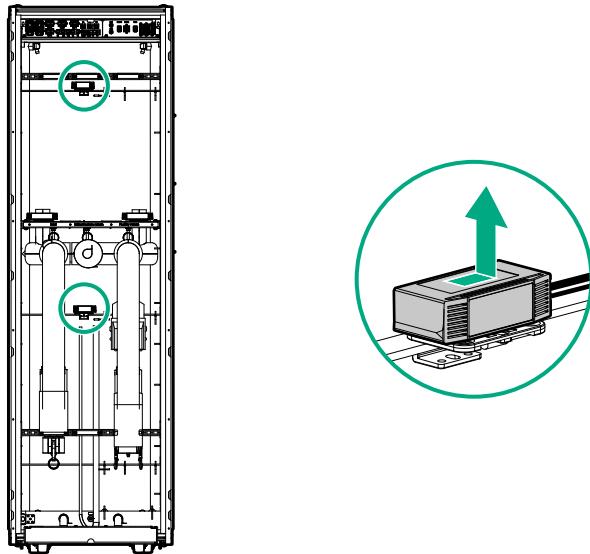
## Removing and replacing the humidity sensor

### Procedure

1. Remove any cable ties from the humidity sensor cables.



2. To unlatch the humidity sensor from the base, grasp it firmly and slide it to the right, then pull it off the base.



3. Unplug the RJ-45 connectors.

**NOTE:** Before unplugging the RJ-45 connector, note which connector plugs into which port. When replacing the humidity sensor, be sure to plug the correct connector into the correct port as noted.

To replace the component, reverse the removal procedure.

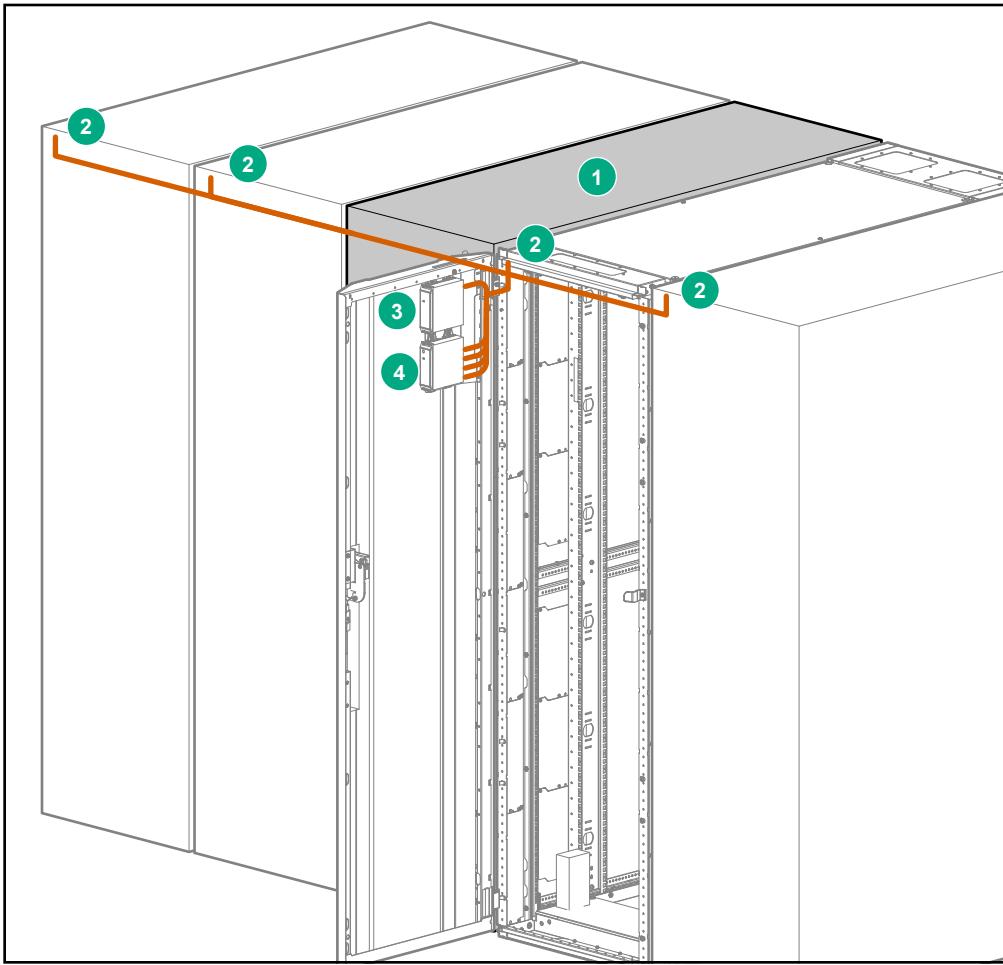
## Removing and replacing the I/O module cable

### Prerequisites

Before beginning the procedure, **power down the HPE Adaptive Rack Cooling System**.

### Procedure

1. Cut any cable ties that are securing the I/O module cable.
2. Disconnect the I/O module cable:
  - a. The I/O module cable connects to the entire HPE Adaptive Rack Cooling System.
  - b. Disconnect the I/O module cable from the IT rack(s).
  - c. Disconnect the I/O module cable from the power supply.
  - d. Disconnect the I/O module cable from the I/O module.



To replace the component, reverse the removal procedure.

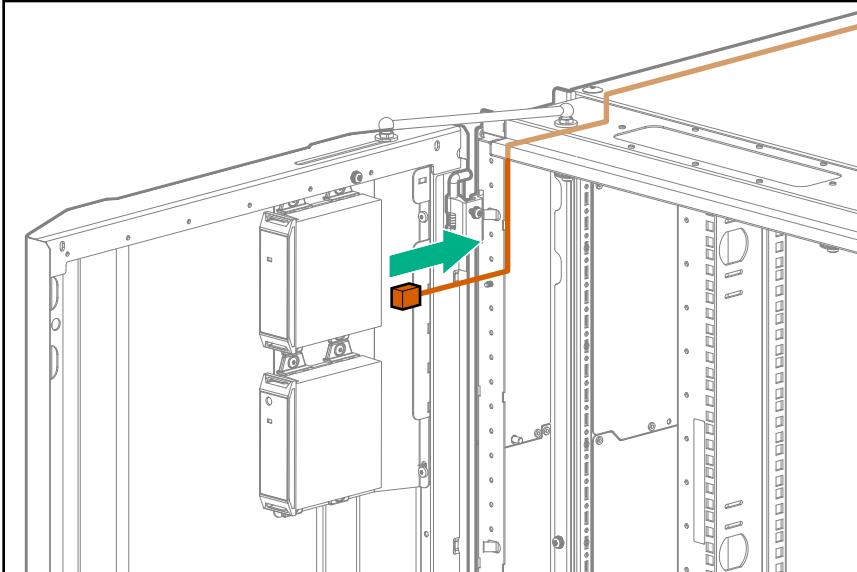
## Removing and replacing the 24-volt power supply

### Prerequisites

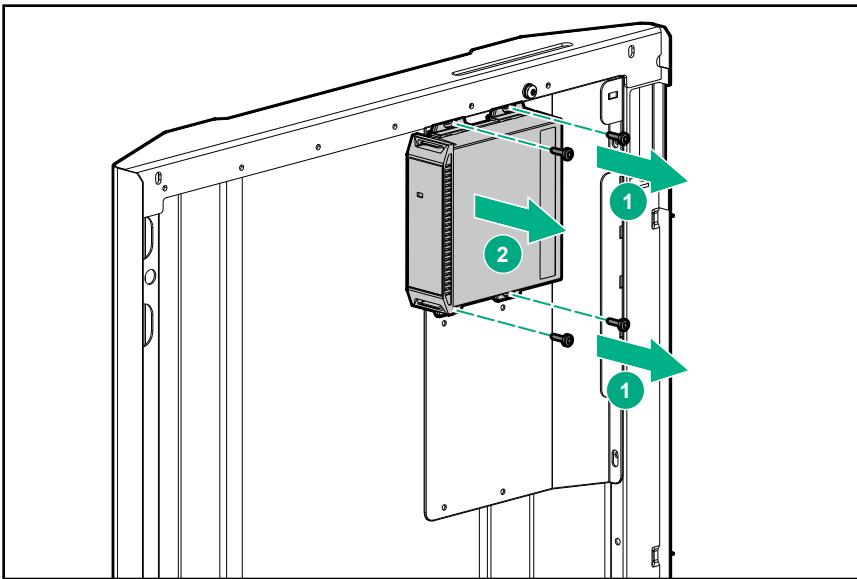
Before beginning the procedure, [\*\*power down the HPE Adaptive Rack Cooling System\*\*](#).

### Procedure

1. Disconnect the power cord from the power supply.



2. Remove the four screws from the power supply, and then remove the power supply from the mounting bracket.



To replace the component, reverse the removal procedure.

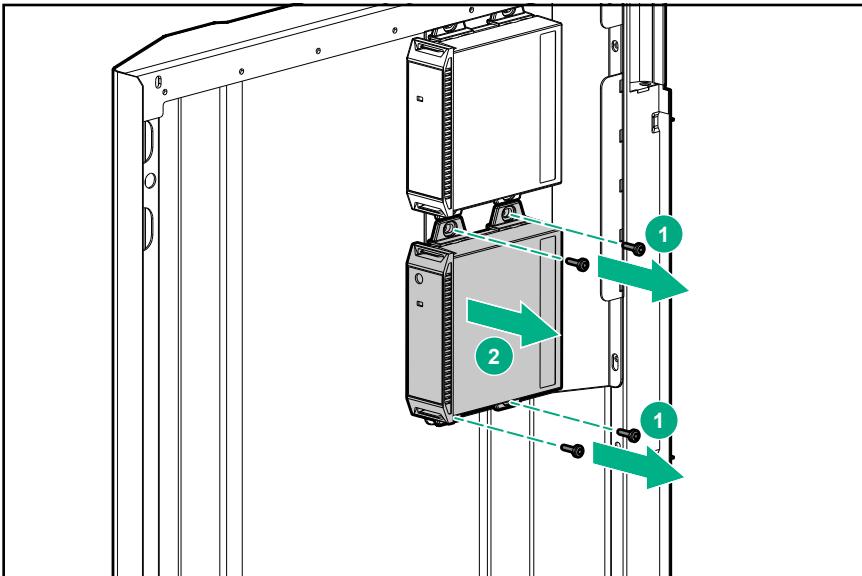
## Removing and replacing the CMC III I/O module

### Prerequisites

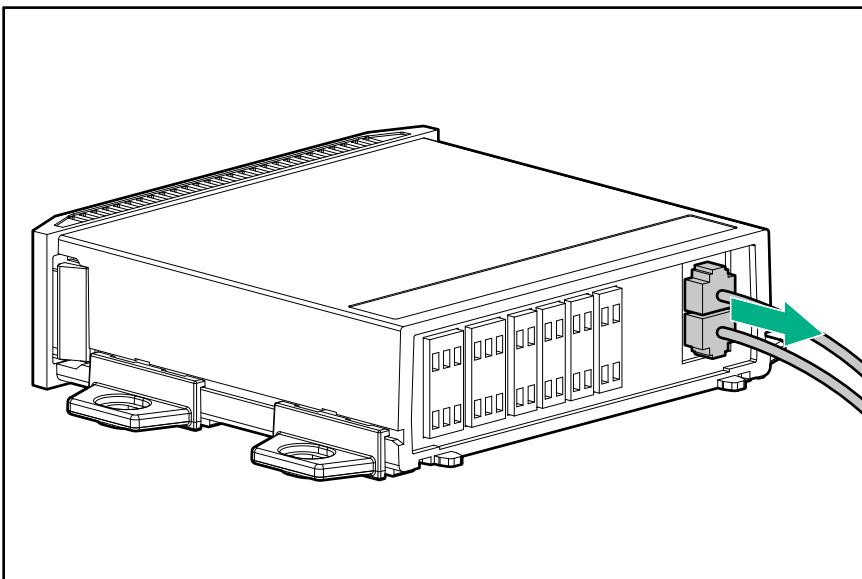
Before beginning the procedure, [power down the HPE Adaptive Rack Cooling System](#).

### Procedure

1. Remove the four screws from the CMC III I/O module, and then remove the I/O module from the mounting bracket.



2. Note which RJ-45 connector plugs into which port.
3. Unplug the RJ-45 connectors.



To replace the component, reverse the removal procedure.

## Removing and replacing the auto door cable harness

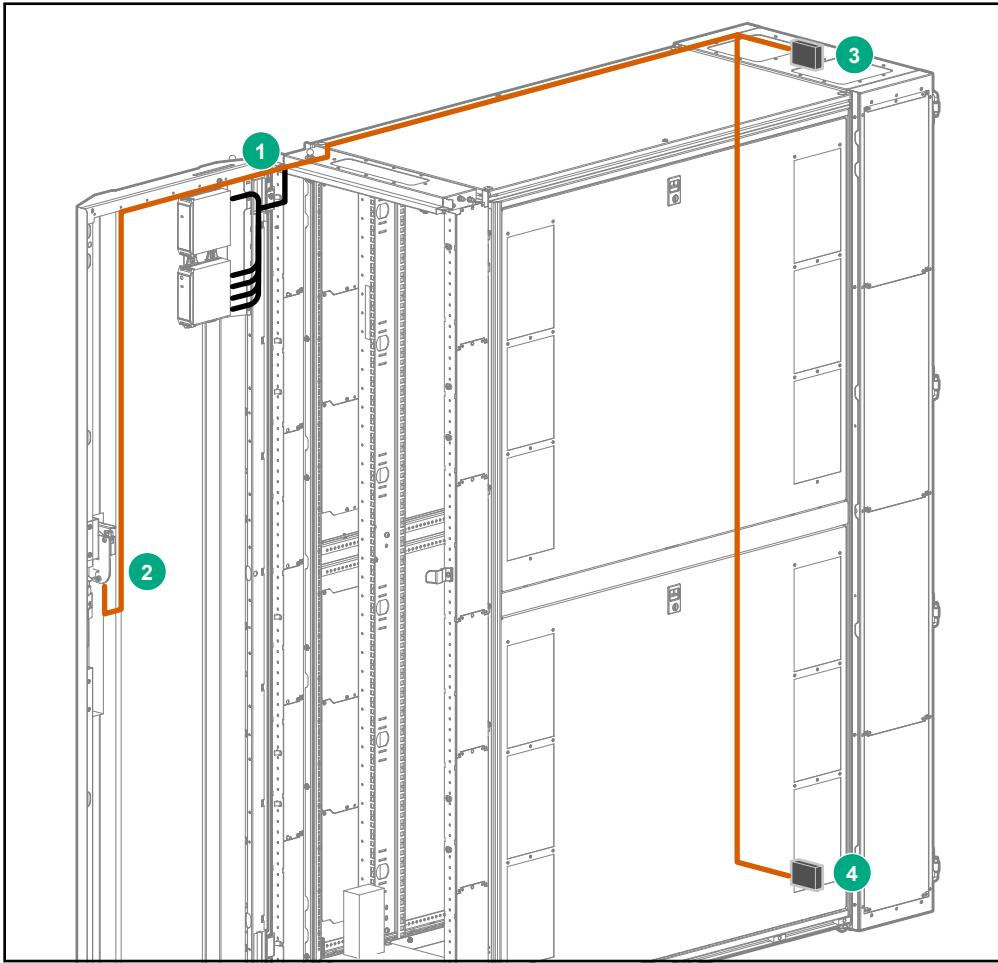
### Prerequisites

Before beginning the procedure, [power down the HPE Adaptive Rack Cooling System](#).

### Procedure

1. Cut any cable ties that are securing the auto door cable harness.
2. Disconnect the auto door cable harness:

- a. Disconnect the auto door cable harness from the IT controller.
- b. Disconnect the auto door cable harness from the front door latch assembly.
- c. Disconnect the auto door cable harness from the upper rear door latch assembly.
- d. Disconnect the auto door cable harness from the lower rear door latch assembly.



To replace the component, reverse the removal procedure.

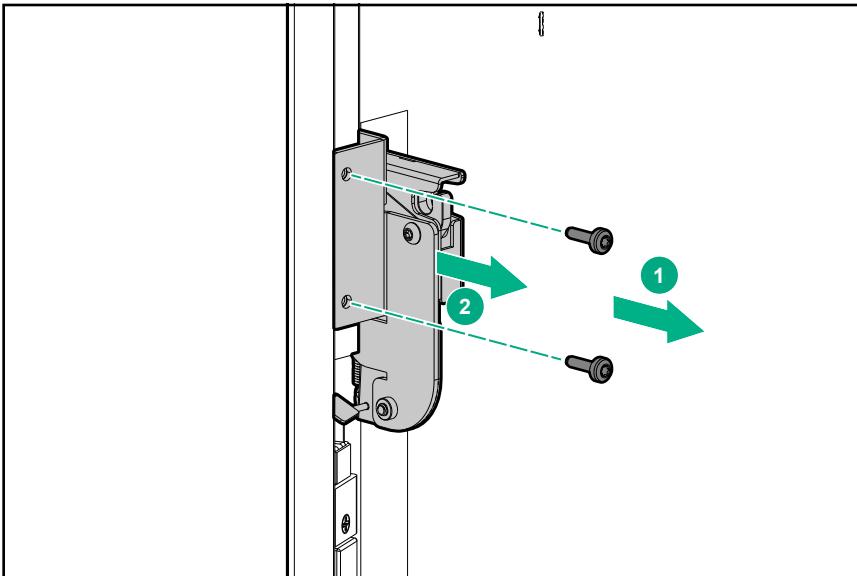
## Removing and replacing the front door latch

### Prerequisites

Before beginning the procedure, [power down the HPE Adaptive Rack Cooling System](#).

### Procedure

1. Unscrew the two 1/4-20 button head screws.
2. Pull the latch from front door of the HPE Adaptive Rack Cooling System.



**NOTE:** When installing the front door latch, ensure that the actuating pin is under the door latch.

To replace the component, reverse the removal procedure.

## Removing and replacing the management module

### Prerequisites

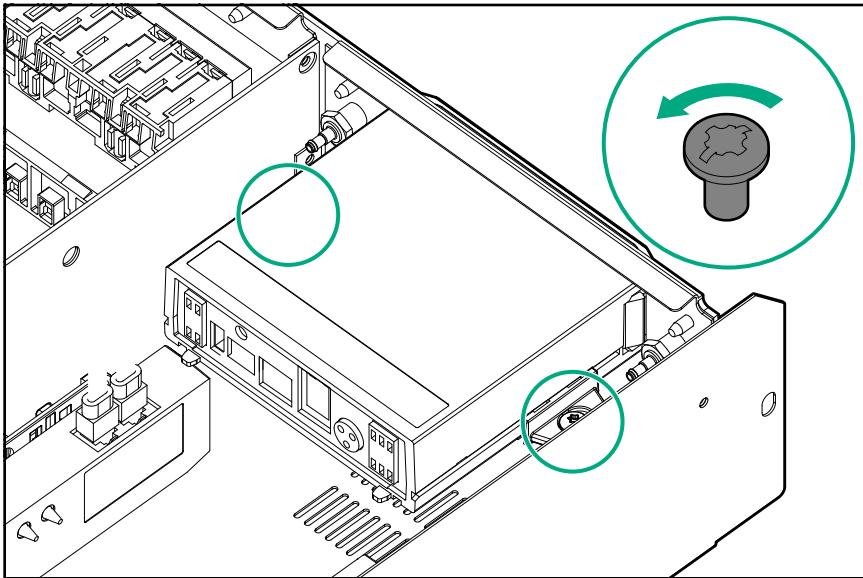
Before beginning the procedure, [\*\*power down the HPE Adaptive Rack Cooling System\*\*](#).

### Procedure

1. **Remove the transfer switch.** Alternatively, you can access the transfer switch through the top of the HPE Adaptive Rack Cooling System.

**NOTE:** If water is routed through the top of your HPE Adaptive Rack Cooling System, you must remove the transfer switch to access the management module.

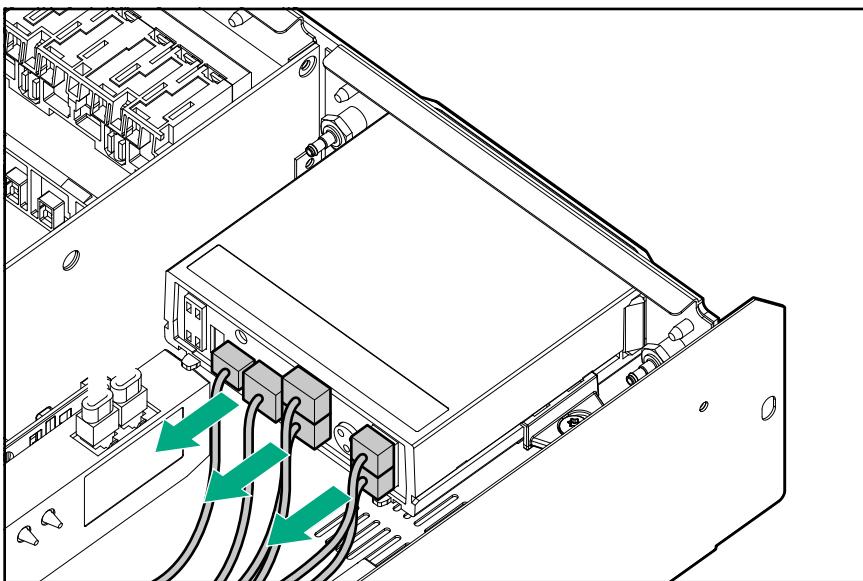
2. Using a Phillips head screwdriver, loosen the alignment tabs.



3. Make a note of where each connection goes. If necessary, label the cables.

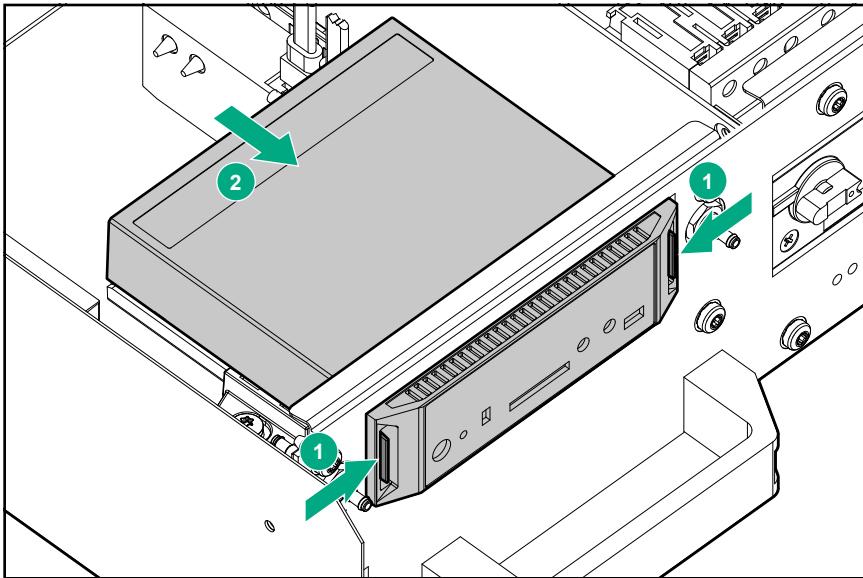
**NOTE:** The RJ-45 and Canbus connections look the same. Be sure that they get reconnected in the proper location.

4. Disconnect all connectors.



**NOTE:** The power connector is a 2-pin connector that plugs into a 3-pin receptacle.

5. Loosen the two Phillips head screws on the controller mounting bracket.
6. Squeeze the two clips on the front of the management module, and push from behind to slide out the module.



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**NOTE:** After the management module has been replaced, you might need to update the firmware.

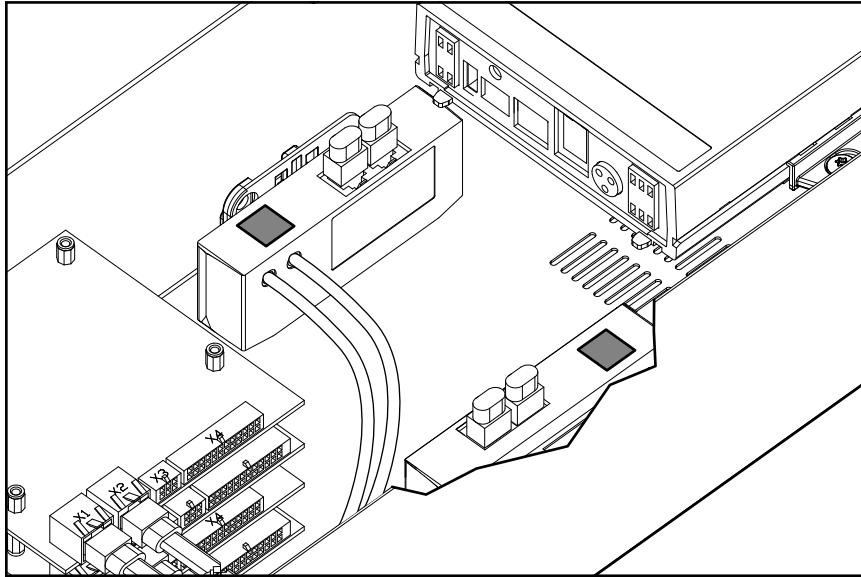
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To replace the component, reverse the removal procedure.

## Removing and replacing an air pressure sensor

The air pressure sensors are labeled as follows:

- **A11.1:** DP1, left front and rear
- **A11.2:** DP2, right front and rear



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**NOTE:** The rear DP1 and DP2 pressure sensors are connected to the same pressure pickup tube using a y-connector.

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## Prerequisites

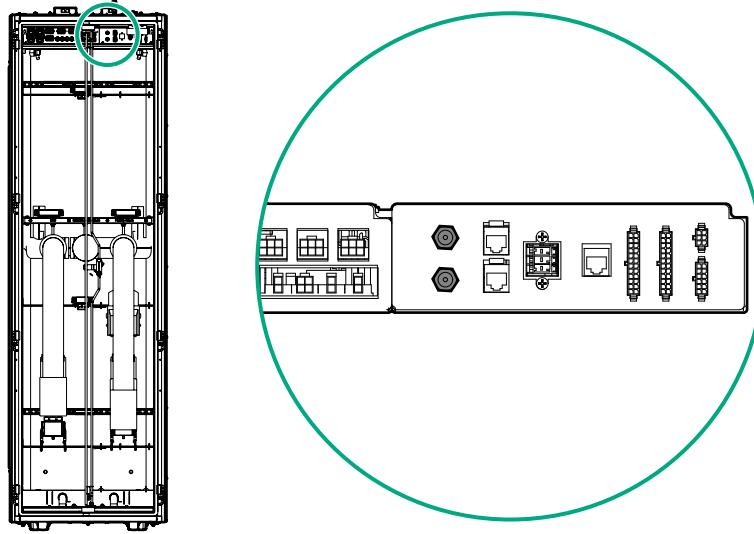
Before beginning the procedure, **power down the HPE Adaptive Rack Cooling System.**

## Procedure

1. **Remove the transfer switch.** Alternatively, you can access the transfer switch through the top of the HPE Adaptive Rack Cooling System.

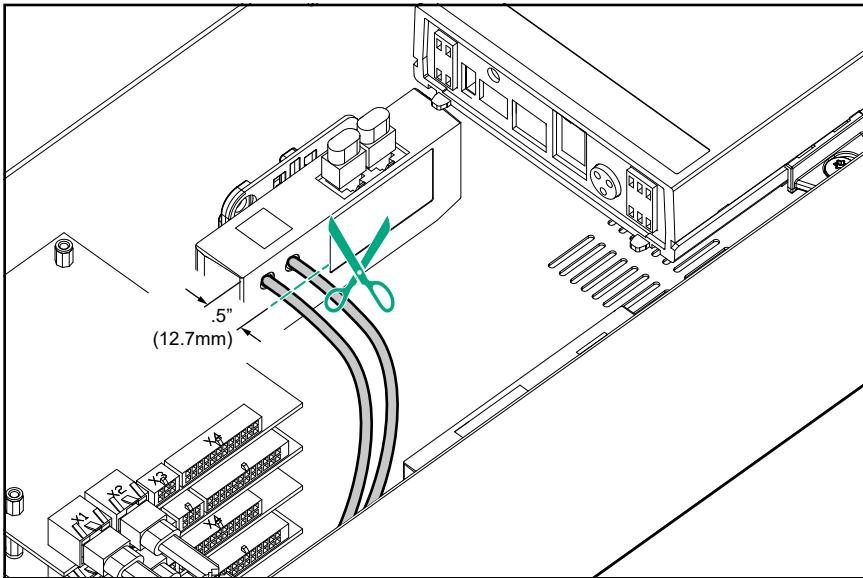
**NOTE:** If water is routed through the top of your HPE Adaptive Rack Cooling System, you must remove the transfer switch to access the transfer switch board.

2. Make a note of the Canbus connections, and then disconnect them.



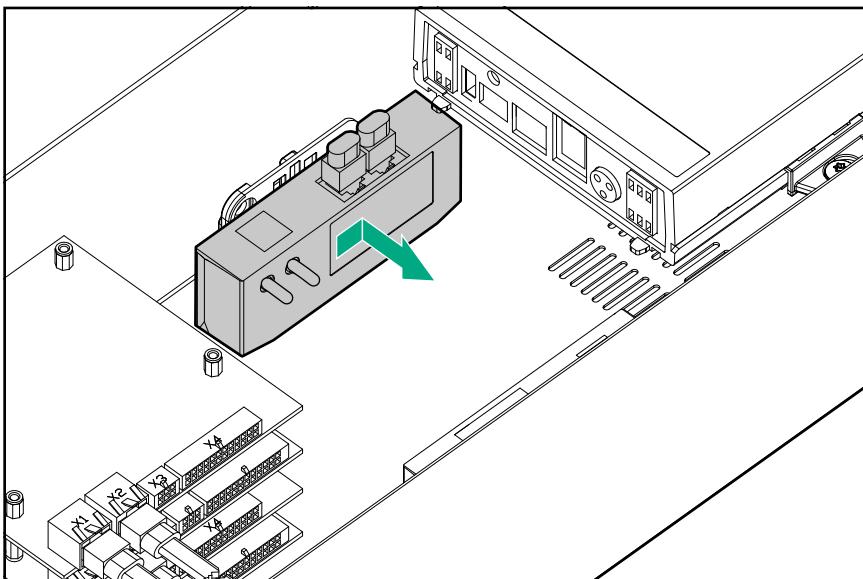
3. To remove the air tubes, use wire cutters to trim the plastic tubing about 1/2" (12.7 mm) back and perpendicular to the sensor.

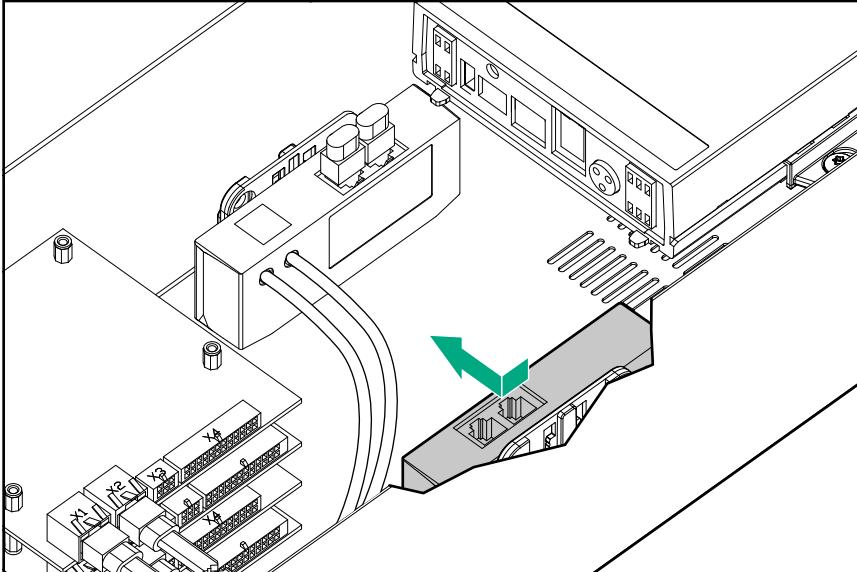
**CAUTION:** The air tubes are held in place by a hose barb. Do not attempt to pry the hose loose from the hose barb. Doing so could break the hose barb or the air pressure sensor.



**NOTE:** If the air tubes are too short after trimming, replace them when you replace the air pressure sensor. Use standard 1/4" ID flexible tubing.

4. To remove A11.1 (DP1), slide it toward the front of the transfer switch, and pull it out. To remove A11.2 (DP2), slide it toward the rear of the transfer switch, and pull it out.





**NOTE:** When replacing the air pressure sensor, the white sticker on the new sensor indicates the connector for the high-pressure side. The high-pressure side is connected to the front (cold air) plenum side of the transfer switch. The low-pressure side is connected to the rear (hot plenum) side of the transfer switch.

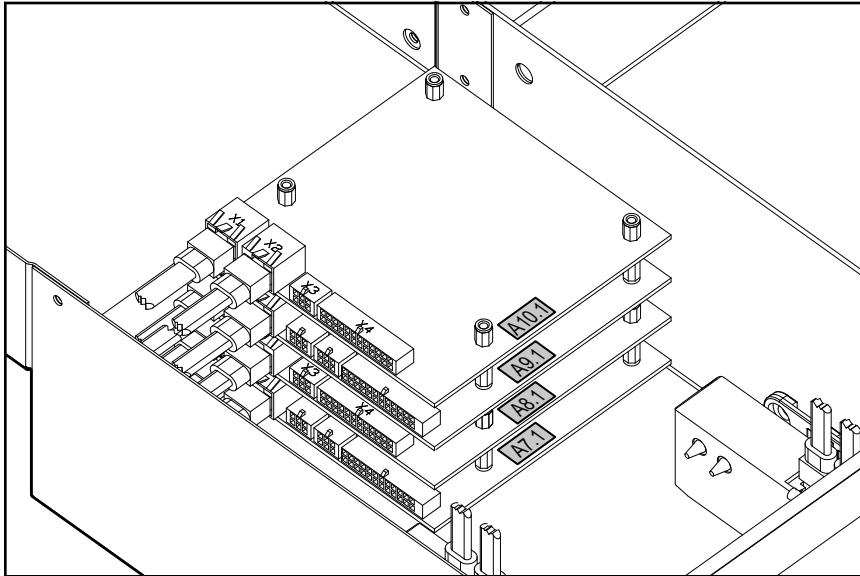
To replace the component, reverse the removal procedure.

## Removing and replacing the fan control boards or water control boards

The fan and water control boards are stacked together and labeled as follows:

- **A7.1:** Water control board 1, supply water temperature
- **A8.1:** Water control board 2, return water temperature
- **A9.1:** Fan control board 1 warm air, return
- **A10.1:** Fan control board 2 cold air, supply

**NOTE:** There is only one spare part number for the fan control boards and one spare part number for water control boards. Which board the replacement board becomes (A7.1 or A8.1 for a water control board or A9.1 or A10.1 for a fan control board) is defined by where you install the new board.



## Prerequisites

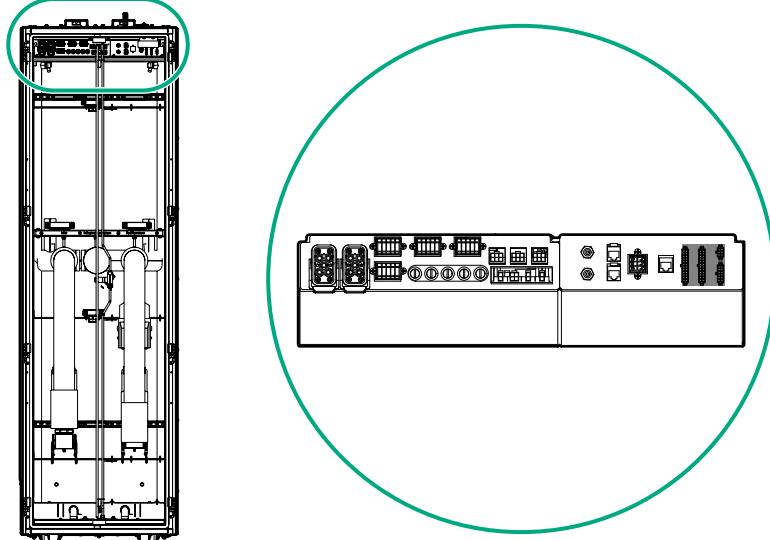
Before beginning the procedure, [\*\*power down the HPE Adaptive Rack Cooling System\*\*](#).

## Procedure

- 1. Remove the transfer switch.** Alternatively, you can access the transfer switch through the top of the HPE Adaptive Rack Cooling System.

**NOTE:** If water is routed through the top of your HPE Adaptive Rack Cooling System, you must remove the transfer switch to access the transfer switch board.

2. Make a note of the Canbus interconnects, which are daisy-chained together.
3. Prelabel all cable connections.
4. If necessary, disconnect all connections.

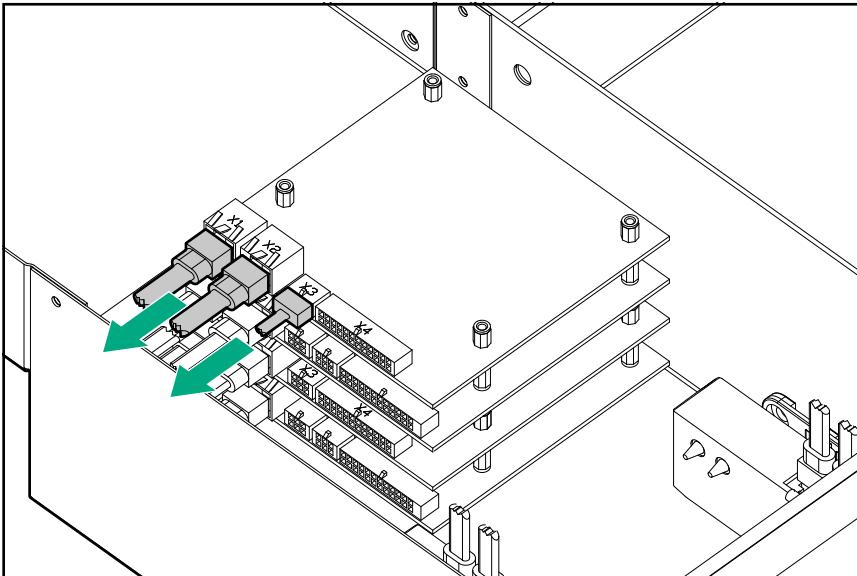


5. Use a 5.5 mm socket to unscrew the four nuts on the top control board.

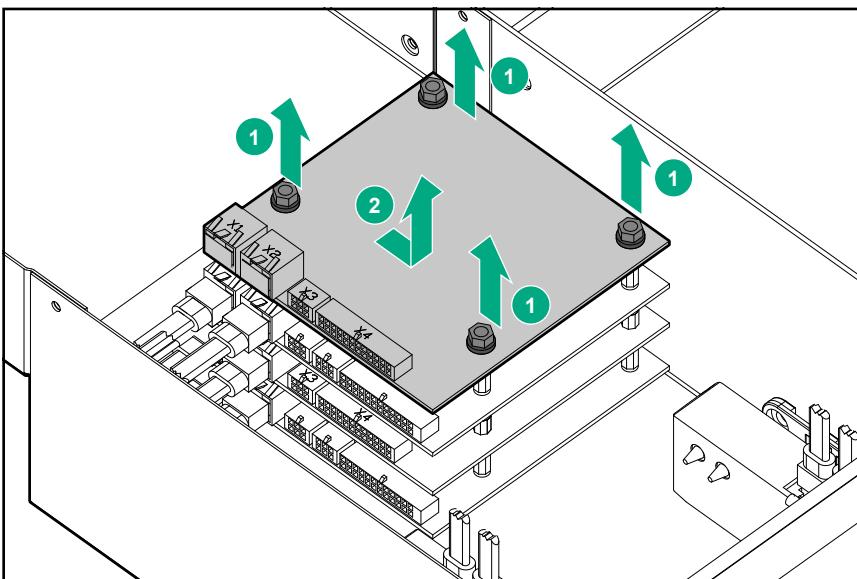
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**NOTE:** If necessary, use a 5.5 mm wrench to hold the standoffs in place to keep them from unscrewing.

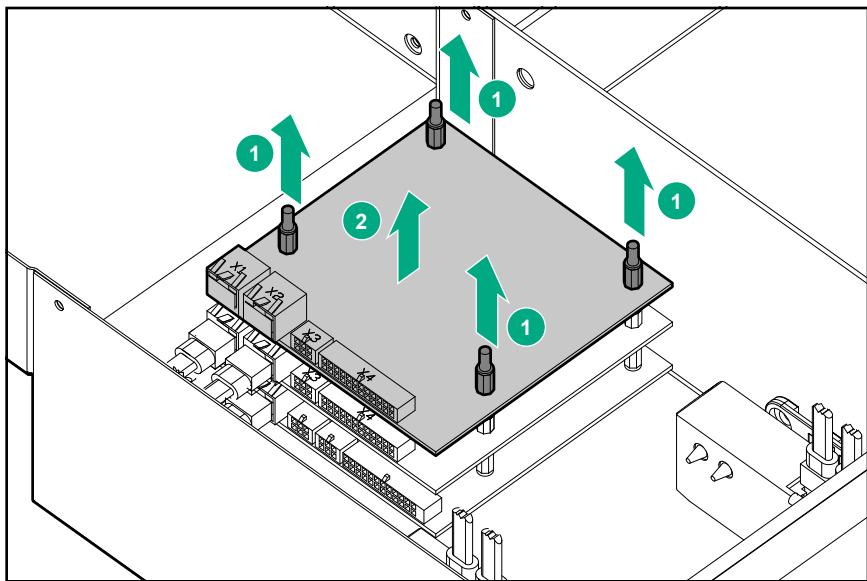
---



6. Lift the top board from the connector side and turn slightly clockwise to remove the board.



7. Manually unscrew the standoffs, and lift each board until you get to the board that must be replaced.



To replace the component, reverse the removal procedure.

# Diagnostic tools

## Product QuickSpecs

For more information about product features, specifications, options, configurations, and compatibility, see the product QuickSpecs on the [\*\*Hewlett Packard Enterprise website\*\*](#).

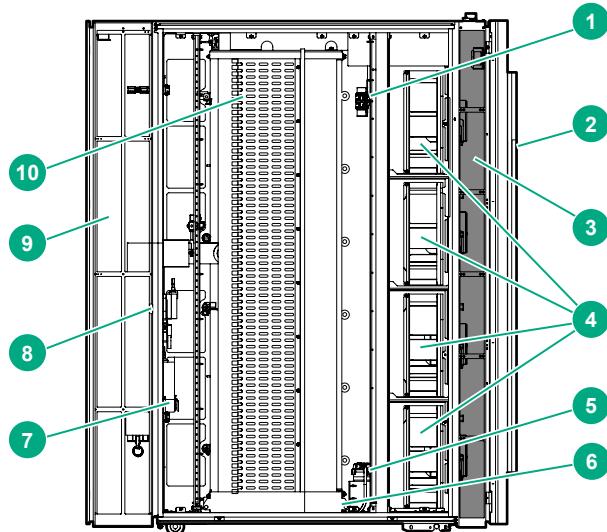
# Troubleshooting

## HPE Adaptive Rack Cooling System troubleshooting

| Issue   | Resolution   |
|---|--|
| The water flow is low or not flowing.   | For more information, see "Temperature Control settings" in the <i>HPE Adaptive Rack Cooling System Web Interface User Guide</i> .   |
| The fan speed is too low.   | For more information, see "Cooling performance parameters" in the <i>HPE Adaptive Rack Cooling System Interface User Guide</i> .     |
| The fan speed is too high.  | For more information, see "Cooling performance parameters" in the <i>HPE Adaptive Rack Cooling System Web Interface User Guide</i> . |
| The average server intake temperature (air going to the servers) is too high.   | For more information, see "Cooling performance parameters" in the <i>HPE Adaptive Rack Cooling System Web Interface User Guide</i> . |
| The average server intake temperature (air going to the servers) is too low.  | For more information, see "Cooling performance parameters" in the <i>HPE Adaptive Rack Cooling System Web Interface User Guide</i> . |
| The average exhaust temperature (air coming out of the servers) is too high.  | For more information, see "Cooling performance parameters" in the <i>HPE Adaptive Rack Cooling System Web Interface User Guide</i> . |
| The average exhaust temperature (air coming out of the servers) is too low.   | For more information, see "Cooling performance parameters" in the <i>HPE Adaptive Rack Cooling System Web Interface User Guide</i> . |
| The settings that have been modified through the web interface are not accepted, and the management module LED is flashing red, yellow, or green.                 | Press and hold the management module <b>C</b> key for five seconds to confirm these settings.  |
| The measurement readings on the management module display or web interface seem to be incorrect, and the management module LED is flashing red, yellow, or green. | Press and hold the management module <b>C</b> key for five seconds to confirm these settings.  |

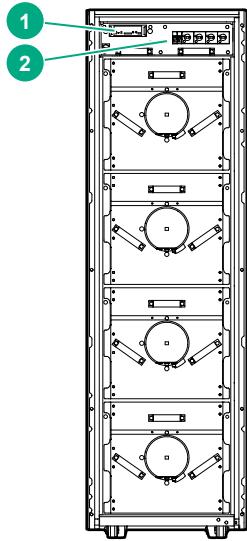
# Component identification

## Side components



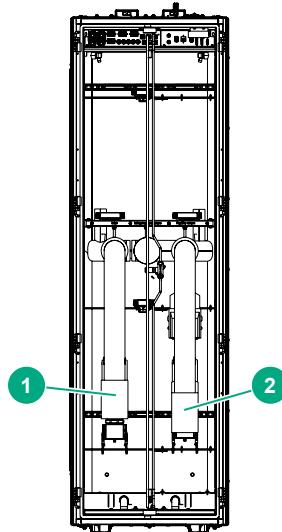
| Item | Reference           |
|------|---------------------|
| 1    | Humidity sensor     |
| 2    | Touchscreen display |
| 3    | Front air plenum    |
| 4    | Fan units (4)       |
| 5    | Condensation pump   |
| 6    | Leak sensors        |
| 7    | Isolation valves    |
| 8    | Control valve       |
| 9    | Rear air plenum     |
| 10   | Heat exchanger unit |

## Front components



| Item | Description             |
|------|-------------------------|
| 1    | CMC (management module) |
| 2    | Transfer switch         |

## Rear components



| Item | Description  |
|------|--------------|
| 1    | Water supply |
| 2    | Water return |

# Specifications

## HPE Adaptive Rack Cooling System specifications

### Physical specifications

| Item   | Specification   |
|--|---|
| Maximum height                                     | 200.7 cm (79 in)  |
| Maximum width                                      | 60 cm (23.6 in) maximum                                     |
| Maximum depth (including the rack and rack handle) | 166 cm (65.3 in) (Depth includes front and rear extensions) |
| Maximum shipping height (on skid)                  | 228.5 cm (90.0 in)  |
| Maximum shipping width (on skid)                   | 122.0 cm (48.0 in)  |
| Maximum shipping depth (on skid)                   | 182.9 cm (72.0 in)  |
| Net weight   | 645 kg (1,423 lb)   |
| Shipping Weight (gross with packaging)             | 732 kg (1,614 lb)   |

### Electrical specifications

| Item                                   | Specification  |
|--|--|
| Input voltage range                    | 380-480V, 3ph Wye (3P+N+Gnd)   |
| Effective cooling                      | 150 Kw at 270 lpm (71 US gal/min)  |
| Rated current maximum                  | 380Y/220V: 17.5A<br>400Y/230V: 16.7A<br>415Y/240V: 16.0A<br>480Y/277V: 13.8A |
| Steady state current with maximum fans | 380Y/220V: 13.0A<br>400Y/230V: 12.4A<br>415Y/240V: 11.9A<br>480Y/277V: 10.3A |

*Table Continued*

| <b>Item</b>   | <b>Specification</b>   |
|---|--|
| Cooling medium  | Air and facility water/glycol  |
| Permissible operating pressure max                      | 8 bar (116 psi)  |
| Maximum operating noise level (with IT rack doors open) | 101 dBA  |
| Power cords   | IEC 60309 32/30A 220/415V 6h/IP44 (Quantity 2)<br><br>Maximum branch circuit size: 32A<br><br>NEMA L22-20P 277/480V 4P/5W (Quantity 2)<br><br>Maximum branch circuit size: 20A |

## Thermal and air flow performance

| <b>Thermal and air flow performance parameters</b>                                   | <b>Single rack</b>   |
|--|--|
| Air temperature—Inlet to rack-mounted components                                     | User adjustable up to 40°C (104°F)   |
| Chilled water temperature  | 7°-32°C (45°-89.6°F)   |
| Total rack-mounted component air flow  | With 4 fans: up to 10,000 CFM (16,990 m <sup>3</sup> /h)<br><br>With 3 or 4 fans: 7,500 CFM (12,743 m <sup>3</sup> /h)<br><br>Operating 150 kW maximum<br><br>Performance is dependent on water temperature and air temperature set point. |
| Chilled water flow rate  | 270 l/min (71.3 US gal/min)  |
| Chilled water pressure differential at flow necessary to meet thermal specifications | 15 psid  |
| Server heat load   | 150 kW maximum<br><br>For more information, see "Determining heat load capacities" in the <i>HPE Adaptive Rack Cooling System Site Preparation Guide</i> .   |

## Environmental specifications

| Parameter                   | Value  |
|-----------------------------|--|
| Room temperature:           |  |
| Recommended minimum/maximum | 10°C (50°F)/50°C (122°F)                         |
| Humidity:                   |  |
| Recommended range           | 8% to 90% relative humidity, non-condensing      |
| Air quality                 | Standard Hewlett Packard Enterprise requirements |

The temperatures stated are for an elevation of -76.2 m (-250 ft) to 3,048 m (10,000 ft) above sea level.

## Rack specifications

### HPE ARCS 42U 600x1600mm Rack

| U Height              | Width               | Depth                                   | Weight (Empty)        |
|-----------------------|---------------------|---|-----------------------|
| 42U                   | 600 mm<br>(23.6 in) | 1,600 mm (with extensions)<br>(63.0 in) | 158.76 kg<br>(350 lb) |
| 2,004 mm<br>(78.9 in) |                     |   |                       |

### HPE ARCS 48U 600x1600mm Rack

| U Height               | Width               | Depth                                   | Weight                |
|------------------------|---------------------|---|-----------------------|
| 48U                    | 600 mm<br>(23.6 in) | 1,600 mm (with extensions)<br>(63.0 in) | 181.44 kg<br>(400 lb) |
| 2,545 mm<br>(100.2 in) |                     |   |                       |

# Support and other resources

## Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:  
**<http://www.hpe.com/assistance>**
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:  
**<http://www.hpe.com/support/hpesc>**

### Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages
- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

## Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.
- To download product updates:

### Hewlett Packard Enterprise Support Center

**[www.hpe.com/support/hpesc](http://www.hpe.com/support/hpesc)**

### Hewlett Packard Enterprise Support Center: Software downloads

**[www.hpe.com/support/downloads](http://www.hpe.com/support/downloads)**

### Software Depot

**[www.hpe.com/support/softwaredepot](http://www.hpe.com/support/softwaredepot)**

- To subscribe to eNewsletters and alerts:

**[www.hpe.com/support/e-updates](http://www.hpe.com/support/e-updates)**

- To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center **More Information on Access to Support Materials** page:

**[www.hpe.com/support/AccessToSupportMaterials](http://www.hpe.com/support/AccessToSupportMaterials)**

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- (!) **IMPORTANT:** Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.
-

## **Customer self repair**

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

**<http://www.hpe.com/support/selfrepair>**

## **Remote support**

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

If your product includes additional remote support details, use search to locate that information.

### **Remote support and Proactive Care information**

#### **HPE Get Connected**

**[www.hpe.com/services/getconnected](http://www.hpe.com/services/getconnected)**

#### **HPE Proactive Care services**

**[www.hpe.com/services/proactivecare](http://www.hpe.com/services/proactivecare)**

#### **HPE Proactive Care service: Supported products list**

**[www.hpe.com/services/proactivecaresupportedproducts](http://www.hpe.com/services/proactivecaresupportedproducts)**

#### **HPE Proactive Care advanced service: Supported products list**

**[www.hpe.com/services/proactivecareadvancedsupportedproducts](http://www.hpe.com/services/proactivecareadvancedsupportedproducts)**

### **Proactive Care customer information**

#### **Proactive Care central**

**[www.hpe.com/services/proactivecarecentral](http://www.hpe.com/services/proactivecarecentral)**

#### **Proactive Care service activation**

**[www.hpe.com/services/proactivecarecentralgetstarted](http://www.hpe.com/services/proactivecarecentralgetstarted)**

## **Warranty information**

To view the warranty information for your product, see the links provided below:

#### **HPE ProLiant and IA-32 Servers and Options**

**[www.hpe.com/support/ProLiantServers-Warranties](http://www.hpe.com/support/ProLiantServers-Warranties)**

#### **HPE Enterprise and Cloudline Servers**

**[www.hpe.com/support/EnterpriseServers-Warranties](http://www.hpe.com/support/EnterpriseServers-Warranties)**

#### **HPE Storage Products**

**[www.hpe.com/support/Storage-Warranties](http://www.hpe.com/support/Storage-Warranties)**

#### **HPE Networking Products**

**[www.hpe.com/support/Networking-Warranties](http://www.hpe.com/support/Networking-Warranties)**

## **Regulatory information**

To view the regulatory information for your product, view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products*, available at the Hewlett Packard Enterprise Support Center:

**[www.hpe.com/support/Safety-Compliance-EnterpriseProducts](http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts)**

### **Additional regulatory information**

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

**[www.hpe.com/info/reach](http://www.hpe.com/info/reach)**

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

**[www.hpe.com/info/ecodata](http://www.hpe.com/info/ecodata)**

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

**[www.hpe.com/info/environment](http://www.hpe.com/info/environment)**

## **Documentation feedback**

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback ([docsfeedback@hpe.com](mailto:docsfeedback@hpe.com)). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.