6 Fan Module

NOTICE

- A switch must use fan modules with the same airflow direction.
- A switch must use fan modules of the same series.
- Fan modules support 3+1 backup. If a fan module needs to be replaced, complete the replacement within 3 minutes.

6.1 FAN-023A Series Fan Modules
6.2 FAN-031A Series Fan Modules
6.3 FAN-180C Series Fan Modules
6.4 FAN-023B-B (FAN-023B-B Fan Module)
6.5 FAN-023B-F (FAN-023B-F Fan Module)
6.6 FAN-031B-B (FAN-031B-B Fan Module)
6.7 FAN-031B-F (FAN-031B-F Fan Module)
6.8 FAN-40HA Series Fan Modules
6.9 FAN-060A Series Fan Modules
6.10 FAN-180A Series Fan Modules
6.11 FAN-180E-B (FAN-180E-B Fan Module)
6.12 FAN-180E-F (FAN-180E-F Fan Module)

6.1 FAN-023A Series Fan Modules

Version Mapping

The FAN-023A series fan modules are classified into two types depending on the airflow designs: FAN-023A-B (B: back-to-front airflow, air exhaust on fan module panel) and FAN-023A-F (F: front-to-back airflow, air intake on fan module panel).

 Copyright © Huawei Technologies Co., Ltd.

Table 6-1 describes the mapping between switch models and FAN-023A series fan modules.

Table 6-1 Version mapping

Switch Model	FAN-023A-B	FAN-023A-F
CE5855E-48T 4S2Q	Supported in V200R020C10 and later versions	Supported in V200R020C10 and later versions
CE5855F-48T 4S2Q	Supported in V200R021C00 and later versions	Supported in V200R021C00 and later versions
Other models	Not supported	Not supported

Appearance

Figure 6-1 shows the appearance of the FAN-023A-B fan module, and Figure 6-2 shows the appearance of the FAN-023A-F fan module.

NOTE

Each FAN-023A fan module contains only one fan and is hot swappable.

Figure 6-1 FAN-023A-B fan module



Copyright © Huawei Technologies Co., Ltd.

Figure 6-2 FAN-023A-F fan module



Function

A FAN-023A-B fan module has one only fan and is hot swappable, and a fan FAN-023A-B and FAN-023A-F fan modules use different airflow designs but have the same functions. **Table 6-2** describes the functions of them.

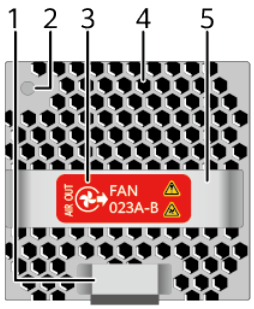
Table 6-2 Functions of a FAN-023A fan module

Function	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	• FAN-023A-B: back-to-front airflow • FAN-023A-F: front-to-back airflow

Panel

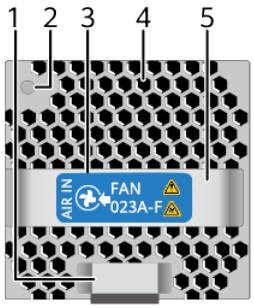
Figure 6-3 and **Figure 6-4** show the panels of FAN-031A series fan modules.

Figure 6-3 FAN-023A-B panel



Copyright © Huawei Technologies Co., Ltd.

Figure 6-4 FAN-023A-F panel



1. Lock	2. Indicator	3: Airflow flag	4. Fan air vent	5. Handle
		•  : back-to-front airflow •  : front-to-back airflow		

Table 6-3 describes the indicator on a FAN-023A fan module.

 Copyright © Huawei Technologies Co., Ltd.

Table 6-3 Indicator description

Indicator	Color	Description
STAT: running status indicator	-	Off: The fan module is not running.
	Green	• Slow blinking: The fan module is working properly and communicating normally with the system. • Fast blinking: The fan module is working properly but has not established communication with the system.
	Red	• Steady on: The fan module has a hardware fault and must be replaced. • Blinking: An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include short circuits, fan blades blocked, and fault of the fan module.

Specifications

Table 6-4 lists technical specifications of FAN-023A series fan modules.

Table 6-4 Technical specifications

Item	FAN-023A-B	FAN-023A-F
Dimensions (H x W x D)	40.0 mm x 40.0 mm x 100.3 mm (1.57 in. x 1.57 in. x 3.95 in.)	
Number of fans	1	
Weight	0.1 kg (0.22 lb)	
Maximum power consumption	7.2 W	
Maximum fan speed	18500±10% revolutions per minute (RPM)	
Maximum wind rate	23 cubic feet per minute (CFM)	
Part number	02312DKW	02313EYA

6.2 FAN-031A Series Fan Modules

Copyright © Huawei Technologies Co., Ltd.

Version Mapping

The FAN-031A series fan modules are classified into two types depending on the airflow designs: FAN-031A-B (B: back-to-front airflow, air exhaust on fan module panel) and FAN-031A-F (F: front-to-back airflow, air intake on fan module panel).

Table 6-5 describes the mapping between switch models and FAN-031A series fan modules.

Table 6-5 Version mapping

Switch Model	FAN-031A-B	FAN-031A-F
CE6857-48S6CQ-EI	Supported in V200R005C10 and later versions	Supported in V200R005C10 and later versions
CE6881-48S6CQ CE6863-48S6CQ CE6820-48S6CQ	Supported in V200R005C20 and later versions	Supported in V200R005C20 and later versions
CE6881-48S6CQ-K CE6863-48S6CQ-K CE6881E-48S6CQ	Supported in V200R019C10 and later versions	Supported in V200R019C10 and later versions
CE6881-48T6CQ CE6881-48T6CQ-K CE5881-48T6CQ	Supported in V200R020C00 and later versions	Supported in V200R020C00 and later versions
CE6857E-48S6CQ CE6857E-48T6CQ	Supported in V200R020C10 and later versions	Supported in V200R020C10 and later versions
CE6857F-48S6CQ CE6857F-48T6CQ CE6863E-48S6CQ CE6865E-48S8CQ	Supported in V200R021C00 and later versions	Supported in V200R021C00 and later versions

Copyright © Huawei Technologies Co., Ltd.

Switch Model	FAN-031A-B	FAN-031A-F
CE8850E-32CQ-EI	Supported in V200R021C10 and later versions	Supported in V200R021C10 and later versions
CE6870-48S6CQ-EI-A	Supported in V200R022C00 and later versions	Supported in V200R022C00 and later versions
Other models	Not supported	Not supported

Appearance

Figure 6-5 shows the appearance of the FAN-031A-B fan module, and Figure 6-6 shows the appearance of the FAN-031A-F fan module.

NOTE

Each FAN-031A fan module contains only one fan.

Figure 6-5 FAN-031A-B fan module



Copyright © Huawei Technologies Co., Ltd.

Figure 6-6 FAN-031A-F fan module



Function

A FAN-031A fan module consists of a fan tray, and a fan. FAN-031A-B and FAN-031A-F fan modules use different airflow designs but have the same functions. **Table 6-6** describes the functions of them.

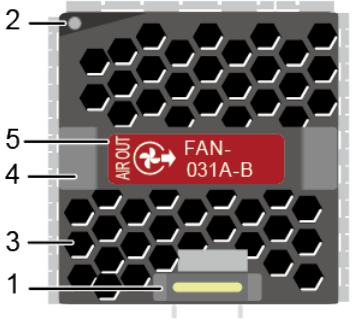
Table 6-6 Functions of a FAN-031A fan module

Function	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	• FAN-031A-B: back-to-front airflow • FAN-031A-F: front-to-back airflow

Panel

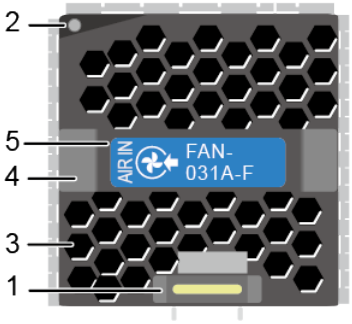
Figure 6-7 and **Figure 6-8** show the panels of FAN-031A series fan modules.

Figure 6-7 FAN-031A-B panel



Copyright © Huawei Technologies Co., Ltd.

Figure 6-8 FAN-031A-F panel



1. Lock	2. Indicator	3. Fan air vent
4. Handle	5. Airflow flag • : back-to-front airflow • : front-to-back airflow	-

Table 6-7 describes the indicator on a FAN-031A fan module.

 Copyright © Huawei Technologies Co., Ltd.

Table 6-7 Indicator description

Indicator	Color	Description
STAT: running status indicator	-	Off: The fan module is not running.
	Green	• Slow blinking: The fan module is working properly and communicating normally with the system. • Fast blinking: The fan module is working properly but has not established communication with the system.
	Red	• Steady on: The fan module has a hardware fault and must be replaced. • Blinking: An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include short circuits, fan blades blocked, and fault of the fan module.

Specifications

Table 6-8 lists technical specifications of FAN-031A series fan modules.

Table 6-8 Technical specifications

Item	FAN-031A-B	FAN-031A-F
Dimensions (H x W x D)	40.0 mm x 40.0 mm x 100.3 mm (1.57 in. x 1.57 in. x 3.95 in.)	
Number of fans	1	
Weight	0.1 kg (0.22 lb)	
Maximum power consumption	21.6 W	
Maximum fan speed	26950±10% revolutions per minute (RPM)	
Maximum wind rate	31 cubic feet per minute (CFM)	
Part number	02352CAB	02352CAA

6.3 FAN-180C Series Fan Modules

Copyright © Huawei Technologies Co., Ltd.

Version Mapping

The FAN-180C series fan modules are classified into two types depending on the airflow designs: FAN-180C-B (B: back-to-front airflow, air exhaust on fan module panel) and FAN-180A-F (F: front-to-back airflow, air intake on fan module panel).

Table 6-9 describes the mapping between switch models and FAN-180C series fan modules.

Table 6-9 Version mapping

Switch Model	FAN-180C-B
CE9860-4C-EI	Supported in V200R020C00 and later versions
Other models	Not supported

Appearance

Figure 6-9 shows the appearance of a FAN-180C-B fan module.

NOTE

The FAN-180C adopts a single-fan design, which includes one counter-rotating fan with two fan blades.

Figure 6-9 FAN-180C-B fan module



Copyright © Huawei Technologies Co., Ltd.

Function

A FAN-180C fan module consists of a fan tray, a fan, and a fan monitoring unit. Table 6-10 describes the functions of FAN-180C-B.

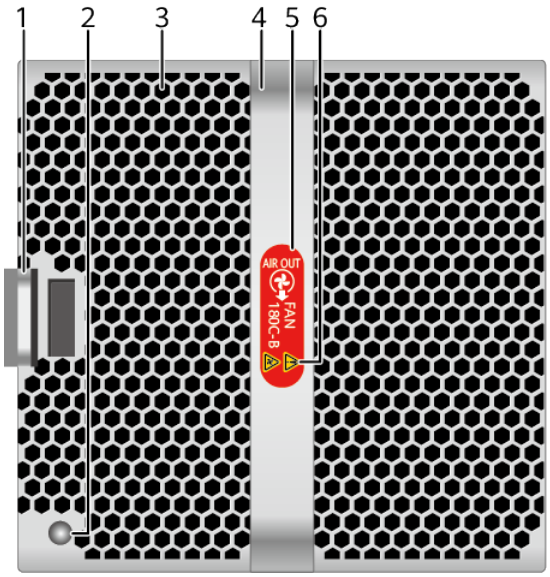
Table 6-10 Functions of a FAN-180C fan module

Function	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	FAN-180C-B: back-to-front airflow

Panel

Figure 6-10 shows the panels of FAN-180C series fan module.

Figure 6-10 FAN-180C-B panel



1. Lock	2. Indicator	3. Fan air vent

Copyright © Huawei Technologies Co., Ltd.

4. Handle	5. Airflow flag  : back-to-front airflow	6. Warning label **CAUTION** When you remove a running fan module from a switch, its fans will continue running. Do not touch the running fans.

Table 6-11 describes the indicator on a FAN-180C fan module.

Table 6-11 Indicator description

Indicator	Color	Description
STAT: running status indicator	-	Off: The fan module is not running.
	Green	Blinking: The fan module is working properly.
	Red	• Steady on: The fan module has a hardware fault and must be replaced. • Blinking: An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include short circuits, fan blades blocked, and fault of the fan module.

Specifications

Table 6-12 lists technical specifications of FAN-180C series fan modules.

Table 6-12 Technical specifications

Item	FAN-180C-B
Dimensions (W x D x H)	85.0 mm x 169.5 mm x 82.1 mm (3.35 in. x 6.67 in. x 3.23 in.)
Fans	One counter-rotating fan, which has a pair of blades
Weight	0.917 kg (2.02 lb)
Maximum power consumption	86 W
Maximum fan speed	12000 revolutions per minute (RPM)
Maximum wind rate	180 cubic feet per minute (CFM)

 Copyright © Huawei Technologies Co., Ltd.

Item	FAN-180C-B
Part number	02352HPS

6.4 FAN-023B-B (FAN-023B-B Fan Module)

Overview

Table 6-13 Basic information about the FAN-023B-B

Item	Details
Description	FAN-023B-B Fan Module
Part Number	03033XPY
Model	FAN-023B-B

Appearance

Figure 6-11 Appearance of the FAN-023B-B



Copyright © Huawei Technologies Co., Ltd.

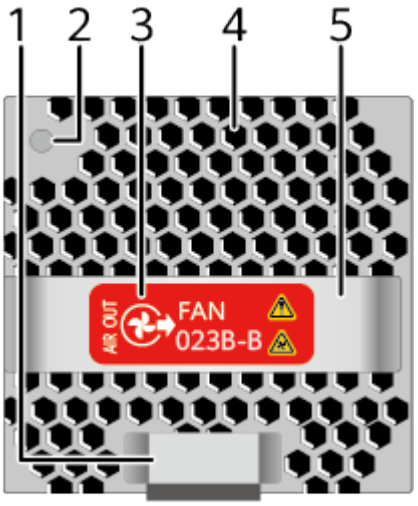
Version Mapping

Table 6-14 Mappings between FAN-023B-B and product models

Product	Product Model	First Supported Version	Limitations
CloudEngine 5800	CE5855F-48T4S2Q (02354HPQ)	V200R021C00	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPQ-001)	V200R021C10SPC600	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPR-001)	V200R021C10SPC600	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPS)	V200R021C00	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPR)	V200R021C00	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPS-001)	V200R021C10SPC600	-

Panel

Figure 6-12 Panel of the FAN-023B-B



Copyright © Huawei Technologies Co., Ltd.

1. Lock	2. Indicator	3. Airflow flag • : back-to-front airflow • : front-to-back airflow
4. Fan air vent	5. Handle	-

Table 6-15 Indicators on the FAN-023B-B

Silkscreen	Name	Color	Status	Description
-	Running status indicator	-	Off	The fan module is not running.
		Green	Slow Blinking	The fan module is working properly and communicating normally with the system.
		Green	Fast Blinking	The fan module is working properly but has not established communication with the system.
		Red	Steady on	The fan module has a hardware fault and must be replaced.

 Copyright © Huawei Technologies Co., Ltd.

Silkscreen	Name	Color	Status	Description
		Red	Slow Blinking	An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include errors of dual in-line package (DIP) switches, short circuits, fan blades blocked, and fault of the fan module.

Functions and Features

Table 6-16 Functions and features of the FAN-023B-B

Functions and Features	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	Back-to-front airflow
Electronic tagging	Supported

Technical Specifications

Table 6-17 Technical specifications of the FAN-023B-B

Item	Specification
Dimensions without packaging (H x W x D) [mm (in.)]	40 mm x 40 mm x 100.3 mm (1.57 in. x 1.57 in. x 3.95 in.)
Weight without packaging [kg (lb)]	0.1 kg (lb)
Number of fans	1

Copyright © Huawei Technologies Co., Ltd.

Item	Specification
Maximum power consumption [W]	8.64 W
Operating voltage range [V]	7 V to 15 V
Maximum fan speed [RPM]	18500±10%
Maximum airflow [CFM]	23 CFM
Airflow direction	FAN panel side exhaust

6.5 FAN-023B-F (FAN-023B-F Fan Module)

Overview

Table 6-18 Basic information about the FAN-023B-F

Item	Details
Description	FAN-023B-F Fan Module
Part Number	03033XQD
Model	FAN-023B-F

Appearance

Figure 6-13 Appearance of the FAN-023B-F



Copyright © Huawei Technologies Co., Ltd.

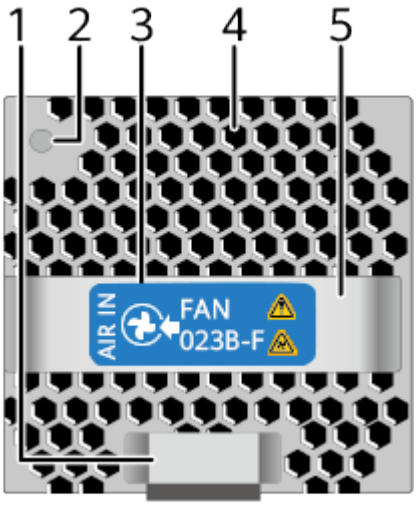
Version Mapping

Table 6-19 Mappings between FAN-023B-F and product models

Product	Product Model	First Supported Version	Limitations
CloudEngine 5800	CE5855F-48T4S2Q (02354HPQ)	V200R021C00	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPQ-001)	V200R021C10SPC600	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPR-001)	V200R021C10SPC600	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPS)	V200R021C00	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPR)	V200R021C00	-
CloudEngine 5800	CE5855F-48T4S2Q (02354HPS-001)	V200R021C10SPC600	-

Panel

Figure 6-14 Panel of the FAN-023B-F



Copyright © Huawei Technologies Co., Ltd.

1. Lock	2. Indicator	3. Airflow flag • : back-to-front airflow • : front-to-back airflow
4. Fan air vent	5. Handle	-

Table 6-20 Indicators on the FAN-023B-F

Silkscreen	Name	Color	Status	Description
-	Running status indicator	-	Off	The fan module is not running.
		Green	Slow Blinking	The fan module is working properly and communicating normally with the system.
		Green	Fast Blinking	The fan module is working properly but has not established communication with the system.
		Red	Steady on	The fan module has a hardware fault and must be replaced.

Copyright © Huawei Technologies Co., Ltd.

Silkscreen	Name	Color	Status	Description
		Red	Slow Blinking	An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include errors of dual in-line package (DIP) switches, short circuits, fan blades blocked, and fault of the fan module.

Functions and Features

Table 6-21 Functions and features of the FAN-023B-F

Functions and Features	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	Front-to-back airflow
Electronic tagging	Supported

Technical Specifications

Table 6-22 Technical specifications of the FAN-023B-F

Item	Specification
Dimensions without packaging (H x W x D) [mm (in.)]	40 mm x 40 mm x 100.3 mm (1.57 in. x 1.57 in. x 3.95 in.)
Weight without packaging [kg (lb)]	0.1 kg (lb)
Number of fans	1

Copyright © Huawei Technologies Co., Ltd.

Item	Specification
Maximum power consumption [W]	8.64 W
Operating voltage range [V]	7 V to 15 V
Maximum fan speed [RPM]	18500±10%
Maximum airflow [CFM]	23 CFM
Airflow direction	FAN panel side intake

6.6 FAN-031B-B (FAN-031B-B Fan Module)

Overview

Table 6-23 Basic information about the FAN-031B-B

Item	Details
Description	FAN-031B-B Fan Module
Part Number	03033XQF
Model	FAN-031B-B

Appearance

Figure 6-15 Appearance of the FAN-031B-B



Copyright © Huawei Technologies Co., Ltd.

Version Mapping

Table 6-24 Mappings between FAN-031B-B and product models

Product	Product Model	First Supported Version	Limitations
CloudEngine 8800	CE8850E-32CQ-EI (02354LHV)	V200R021C10	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LHV-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LJA-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LHX-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LJA)	V200R021C10	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LHX)	V200R021C10	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPT)	V200R021C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPX)	V200R021C00	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPW)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPT-003)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCT-002)	V200R021C10SPC600	-
CloudEngine 6800	CE6857E-48S6CQ (02353VWU-001)	V200R022C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPX-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPW-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCT-004)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPX-002)	V200R021C10SPC600	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPT-006)	V200R021C10SPC600	-

Copyright © Huawei Technologies Co., Ltd.

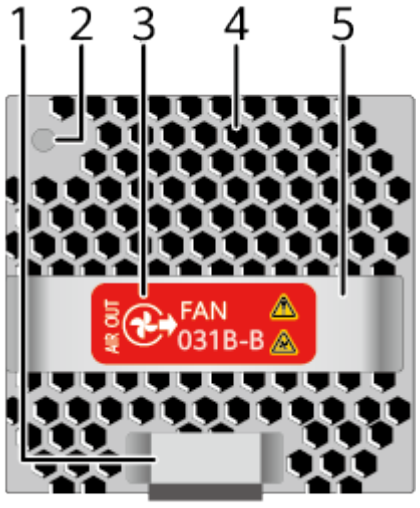
Product	Product Model	First Supported Version	Limitations
CloudEngine 6800	CE6870-48S6CQ-EI-A (02354VSK)	V200R022C00	-
CloudEngine 6800	CE6870-48S6CQ-EI-A (02354VSJ)	V200R022C00	-
CloudEngine 6800	CE6870-48S6CQ-EI-A (02354VSH)	V200R022C00	-
CloudEngine 6800	CE6857E-48S6CQ (02353VWX-001)	V200R022C00	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCW-004)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCX-004)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCX-002)	V200R021C10SPC600	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPV)	V200R021C00	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPV-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPY-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPU-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6857E-48S6CQ (02353VWW-001)	V200R022C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HQA-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPV-003)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCW-002)	V200R021C10SPC600	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPN)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPN-003)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPU)	V200R021C00	-

Copyright © Huawei Technologies Co., Ltd.

Product	Product Model	First Supported Version	Limitations
CloudEngine 6800	CE6857F-48T6CQ (02354HPV)	V200R021C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPY)	V200R021C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HQA)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPV-001)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPN-001)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPT-001)	V200R021C00	-

Panel

Figure 6-16 Panel of the FAN-031B-B



Copyright © Huawei Technologies Co., Ltd.

1. Lock	2. Indicator	3. Airflow flag • : back-to-front airflow • : front-to-back airflow
4. Fan air vent	5. Handle	-

Table 6-25 Indicators on the FAN-031B-B

Silkscreen	Name	Color	Status	Description
-	Running status indicator	-	Off	The fan module is not running.
		Green	Slow Blinking	The fan module is working properly and communicating normally with the system.
		Green	Fast Blinking	The fan module is working properly but has not established communication with the system.
		Red	Steady on	The fan module has a hardware fault and must be replaced.

 Copyright © Huawei Technologies Co., Ltd.

Silkscreen	Name	Color	Status	Description
		Red	Fast Blinking	An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include errors of dual in-line package (DIP) switches, short circuits, fan blades blocked, and fault of the fan module.

Functions and Features

Table 6-26 Functions and features of the FAN-031B-B

Functions and Features	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	back-to-front airflow
Electronic tagging	Supported

Technical Specifications

Table 6-27 Technical specifications of the FAN-031B-B

Item	Specification
Dimensions without packaging (H x W x D) [mm (in.)]	40.0mm x 100.3mm x 40.0mm (1.57 in. x 3.95 in. x 1.57 in.)
Weight without packaging [kg (lb)]	0.1 kg (0.22 lb)

Copyright © Huawei Technologies Co., Ltd.

Item	Specification
Number of fans	One counter-rotating fan, which has a pair of blades
Maximum power consumption [W]	21.6 W
Maximum fan speed [RPM]	24500±10%
Maximum airflow [CFM]	31 CFM
Airflow direction	FAN panel side exhaust

6.7 FAN-031B-F (FAN-031B-F Fan Module)

Overview

Table 6-28 Basic information about the FAN-031B-F

Item	Details
Description	FAN-031B-F Fan Module
Part Number	03033XQE
Model	FAN-031B-F

Appearance

Figure 6-17 Appearance of the FAN-031B-F



Copyright © Huawei Technologies Co., Ltd.

Version Mapping

Table 6-29 Mappings between FAN-031B-F and product models

Product	Product Model	First Supported Version	Limitations
CloudEngine 8800	CE8850E-32CQ-EI (02354LHV)	V200R021C10	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LHV-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LJA-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LHX-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LJA)	V200R021C10	-
CloudEngine 8800	CE8850E-32CQ-EI (02354LHX)	V200R021C10	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPT)	V200R021C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPX)	V200R021C00	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPW)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPT-003)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCT-002)	V200R021C10SPC600	-
CloudEngine 6800	CE6857E-48S6CQ (02353VWU-001)	V200R022C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPX-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPW-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCT-004)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPX-002)	V200R021C10SPC600	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPT-006)	V200R021C10SPC600	-

Copyright © Huawei Technologies Co., Ltd.

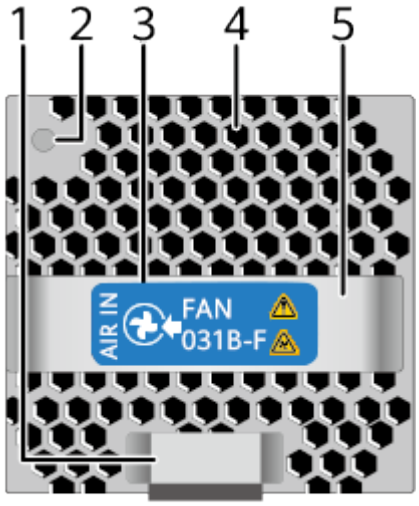
Product	Product Model	First Supported Version	Limitations
CloudEngine 6800	CE6870-48S6CQ-EI-A (02354VSK)	V200R022C00	-
CloudEngine 6800	CE6870-48S6CQ-EI-A (02354VSJ)	V200R022C00	-
CloudEngine 6800	CE6870-48S6CQ-EI-A (02354VSH)	V200R022C00	-
CloudEngine 6800	CE6857E-48S6CQ (02353VWX-001)	V200R022C00	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCW-004)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCX-004)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCX-002)	V200R021C10SPC600	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPV)	V200R021C00	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPV-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPY-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPU-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6857E-48S6CQ (02353VWW-001)	V200R022C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HQA-001)	V200R021C10SPC600	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPV-003)	V200R021C10SPC600	-
CloudEngine 6800	CE6863E-48S6CQ (02354GCW-002)	V200R021C10SPC600	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPN)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPN-003)	V200R021C10SPC600	-
CloudEngine 6800	CE6857F-48T6CQ (02354HPU)	V200R021C00	-

Copyright © Huawei Technologies Co., Ltd.

Product	Product Model	First Supported Version	Limitations
CloudEngine 6800	CE6857F-48T6CQ (02354HPV)	V200R021C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HPY)	V200R021C00	-
CloudEngine 6800	CE6857F-48S6CQ (02354HQA)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPV-001)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPN-001)	V200R021C00	-
CloudEngine 6800	CE6865E-48S8CQ (02354CPT-001)	V200R021C00	-

Panel

Figure 6-18 Panel of the FAN-031B-F



Copyright © Huawei Technologies Co., Ltd.

1. Lock	2. Indicator	3. Airflow flag • : back-to-front airflow • : front-to-back airflow
4. Fan air vent	5. Handle	-

Table 6-30 Indicators on the FAN-031B-F

Silkscreen	Name	Color	Status	Description
-	Running status indicator	-	Off	The fan module is not running.
		Green	Slow Blinking	The fan module is working properly and communicating normally with the system.
		Green	Fast Blinking	The fan module is working properly but has not established communication with the system.
		Red	Steady on	The fan module has a hardware fault and must be replaced.

 Copyright © Huawei Technologies Co., Ltd.

Silkscreen	Name	Color	Status	Description
		Red	Fast Blinking	An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include errors of dual in-line package (DIP) switches, short circuits, fan blades blocked, and fault of the fan module.

Functions and Features

Table 6-31 Functions and features of the FAN-031B-F

Functions and Features	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	front-to-back airflow
Electronic tagging	Supported

Technical Specifications

Table 6-32 Technical specifications of the FAN-031B-F

Item	Specification
Dimensions without packaging (H x W x D) [mm (in.)]	40.1 mm x 40.0 mm x 100.3 mm (1.58 in. x 1.57 in. x 3.95 in.)
Weight without packaging [kg (lb)]	0.1 kg (0.22 lb)

Copyright © Huawei Technologies Co., Ltd.

Item	Specification
Number of fans	One counter-rotating fan, which has a pair of blades
Maximum power consumption [W]	21.6 W
Maximum fan speed [RPM]	24500±10%
Maximum airflow [CFM]	31 CFM
Airflow direction	FAN panel side intake

6.8 FAN-40HA Series Fan Modules

Version Mapping

The FAN-40HA series fan modules are classified into two types depending on the airflow designs: FAN-40HA-B (B: back-to-front airflow, air exhaust on fan module panel) and FAN-40HA-F (F: front-to-back airflow, air intake on fan module panel).

Table 6-33 lists the mapping between switch models and FAN-40HA series fan modules.

Table 6-33 Version mapping

Switch Model	FAN-40HA-B	FAN-40HA-F
CE6870-48S6CQ-EI	Supported in V200R001C00 version and later versions	Supported in V200R001C00 version and later versions
CE6870-48T6CQ-EI CE8850-32CQ-EI	Supported in V200R002C50 version and later versions	Supported in V200R002C50 version and later versions
CE6865-48S8CQ-EI	Supported in V200R005C00 version and later versions	Supported in V200R005C00 version and later versions
Other models	Not supported	Not supported

Appearance

Figure 6-19 shows the appearance of a FAN-40HA-B fan module, and Figure 6-20 shows the appearance of a FAN-40HA-F fan module.

Copyright © Huawei Technologies Co., Ltd.

NOTE

A FAN-40HA fan module consists of two counter-rotating fans, and each fan has a pair of blades.

Figure 6-19 FAN-40HA-B



Figure 6-20 FAN-40HA-F



Function

A FAN-40HA fan module consists of a fan frame, two counter-rotating fans, and a fan control unit. FAN-40HA-B and FAN-40HA-F fan modules use different airflow designs but have the same functions. **Table 6-34** describes the functions of them.

Table 6-34 Functions of a FAN-40HA fan module

Function	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of fans based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	• FAN-40HA-B: back-to-front airflow • FAN-40HA-F: front-to-back airflow

Copyright © Huawei Technologies Co., Ltd.

Panel

Figure 6-21 and Figure 6-22 show the panels of the FAN-40HA fan modules.

Figure 6-21 FAN-40HA-B panel

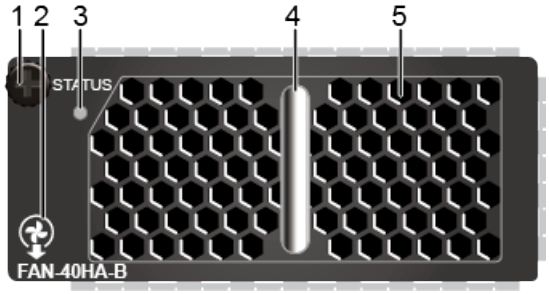
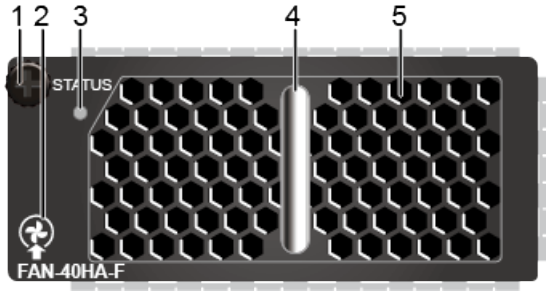


Figure 6-22 FAN-40HA-F panel



1. Captive screw	2. Airflow flag • : back-to-front airflow • : front-to-back airflow	3. Indicator
4. Handle	5. Fan air vent	-

Table 6-35 describes the indicator on the panels of the FAN-40HA fan modules.

Copyright © Huawei Technologies Co., Ltd.

Table 6-35 Indicator description

Indicator	Color	Description
STATUS: fan indicator	-	Off: The fan module is not running.
	Green	• Slow blinking: The fan module is working properly and communicating normally with the system. • Fast blinking: The fan module is working properly but has not established communication with the system.
	Red	• Steady on: The fan module has a hardware fault and must be replaced. • Blinking: An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include errors of dual in-line package (DIP) switches, short circuits, fan blades blocked, and fault of the fan module.

Specifications

Table 6-36 lists technical specifications of the FAN-40HA fan modules.

Table 6-36 Technical specifications

Item	FAN-40HA-B	FAN-40HA-F
Dimensions (W x D x H)	94.5 mm x 183.1 mm x 39.8 mm (3.72 in. x 7.21 in. x 1.57 in.)	
Number of fans	Two counter-rotating fans, each of which has a pair of blades	
Weight	0.415 kg (0.91 lb)	
Maximum power consumption	40 W	
Maximum fan speed	19000±10% revolutions per minute (RPM)	
Maximum wind rate	64 cubic feet per minute (CFM)	
Part Number	02359097	02359096

6.9 FAN-060A Series Fan Modules

Copyright © Huawei Technologies Co., Ltd.

Version Mapping

The FAN-060A series fan modules are classified into two types depending on the airflow designs: FAN-060A-B (B: back-to-front airflow, air exhaust on fan module panel) and FAN-060A-F (F: front-to-back airflow, air intake on fan module panel).

Table 6-37 describes the mapping between device models and FAN-060A series fan modules.

Table 6-37 Version mapping

Switch Model	FAN-060A-B	FAN-060A-F
CE6856-48T6Q-HI	Supported in V200R002C50 and later versions.	Supported in V200R002C50 and later versions.

Appearance

Figure 6-23 shows the appearance of a FAN-060A-B fan module, and Figure 6-24 shows the appearance of a FAN-060A-F fan module.

NOTE

Each FAN-060A fan module has two counter-rotating fans, and each fan has a pair of blades.

Figure 6-23 FAN-060A-B fan module



Figure 6-24 FAN-060A-F fan module



Copyright © Huawei Technologies Co., Ltd.

Function

A FAN-060A fan module consists of a fan tray, two counter-rotating fans, and a fan monitoring unit. FAN-060A-B and FAN-060A-F fan modules use different airflow designs but have the same functions. **Table 6-38** describes the functions of them.

Table 6-38 Functions of a FAN-060A fan module

Function	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of fans based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	• FAN-060A-B: back-to-front airflow • FAN-060A-F: front-to-back airflow

Panel

Figure 6-25 and **Figure 6-26** show the panels of FAN-060A series fan modules.

Figure 6-25 FAN-060A-B panel

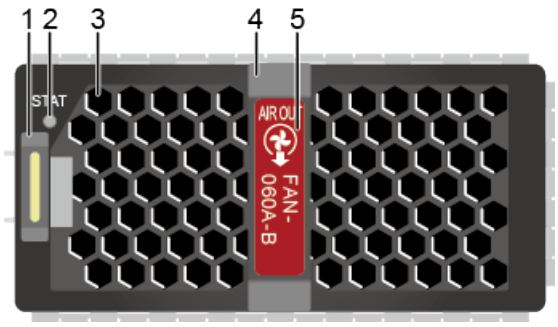
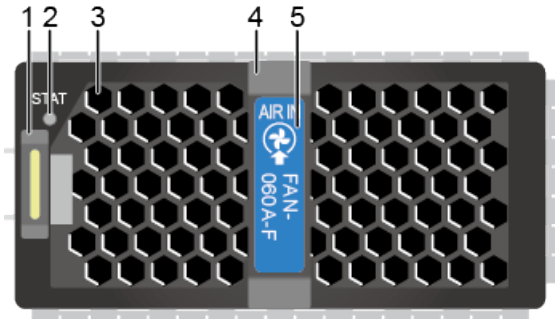


Figure 6-26 FAN-060A-F panel



1. Lock	2. Indicator	3. Fan air vent

Copyright © Huawei Technologies Co., Ltd.

4. Handle	5. Airflow flag • : back-to-front airflow • : front-to-back airflow	-

Table 6-39 describes the indicator on a FAN-060A fan module.

Table 6-39 Indicator description

Indicator	Color	Description
STAT: running status indicator	-	Off: The fan module is not running.
	Green	• Slow blinking: The fan module is working properly and communicating normally with the system. • Fast blinking: The fan module is working properly but has not established communication with the system.
	Red	• Steady on: The fan module has a hardware fault and must be replaced. • Blinking: An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include short circuits, fan blades blocked, and fault of the fan module.

Specifications

Table 6-40 lists technical specifications of the FAN-060A series fan modules.

 Copyright © Huawei Technologies Co., Ltd.

Table 6-40 Technical specifications

Item	FAN-060A-B	FAN-060A-F
Dimensions (W x D x H)	86.0 mm x 198.3 mm x 40.0 mm (3.4 in. x 7.8 in. x 1.6 in.)	
Number of fans	Two counter-rotating fans, each of which has a pair of blades	
Weight	0.478 kg (1.05 lb)	
Maximum power consumption	40 W	
Maximum fan speed	19000±10% revolutions per minute (RPM)	
Maximum wind rate	64 cubic feet per minute (CFM)	
Part Number	02359310	02359308

6.10 FAN-180A Series Fan Modules

Version Mapping

The FAN-180A series fan modules are classified into two types depending on the airflow designs: FAN-180A-B (B: back-to-front airflow, air exhaust on fan module panel) and FAN-180A-F (F: front-to-back airflow, air intake on fan module panel).

Table 6-41 describes the mapping between switch models and FAN-180A series fan modules.

Table 6-41 Version mapping

Switch Model	FAN-180A-B	FAN-180A-F
CE8850-64CQ-EI	Supported in V200R005C00 and later versions	Supported in V200R005C00 and later versions
CE8861-4C-EI CE8868-4C-EI	Supported in V200R005C10 and later versions	Supported in V200R005C10 and later versions
Other models	Not supported	Not supported

Copyright © Huawei Technologies Co., Ltd.

Appearance

Figure 6-27 shows the appearance of a FAN-180A-B fan module, and Figure 6-28 shows the appearance of a FAN-180A-F fan module.

NOTE

Each FAN-180A fan module has one counter-rotating fan, which has a pair of blades.

Figure 6-27 FAN-180A-B fan module



Figure 6-28 FAN-180A-F fan module



Function

A FAN-180A fan module consists of a fan tray, a fan, and a fan monitoring unit. FAN-180A-B and FAN-180A-F fan modules use different airflow designs but have the same functions. Table 6-42 describes the functions of them.

Copyright © Huawei Technologies Co., Ltd.

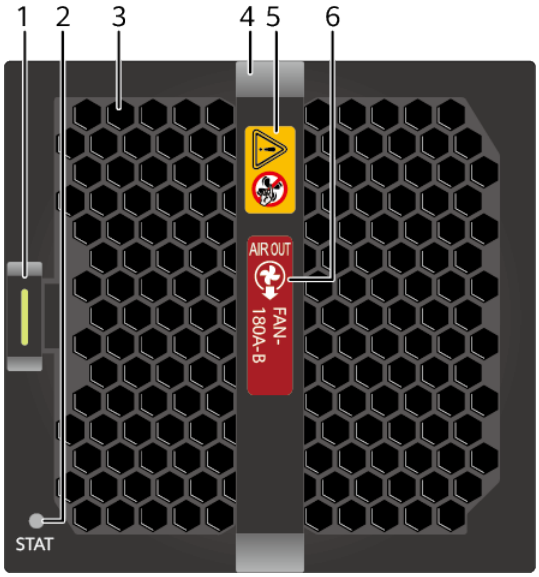
Table 6-42 Functions of a FAN-180A fan module

Function	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swap	Supported
Heat dissipation	• FAN-180A-B: back-to-front airflow • FAN-180A-F: front-to-back airflow

Panel

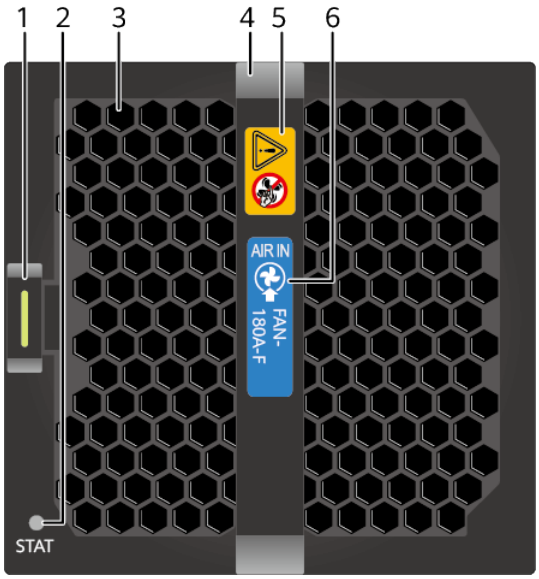
Figure 6-29 and Figure 6-30 show the panels of FAN-180A series fan modules.

Figure 6-29 FAN-180A-B panel



Copyright © Huawei Technologies Co., Ltd.

Figure 6-30 FAN-180A-F panel



1. Lock	2. Indicator	3. Fan air vent
4. Handle	5. Warning label **CAUTION** When you remove a running fan module from a switch, its fans will continue running. Do not touch the running fans.	6. Airflow flag • : back-to-front airflow • : front-to-back airflow

Table 6-43 describes the indicator on a FAN-180A fan module.

 Copyright © Huawei Technologies Co., Ltd.

Table 6-43 Indicator description

Indicator	Color	Description
STAT: running status indicator	-	Off: The fan module is not running.
	Green	Blinking: The fan module is working properly.
	Red	• Steady on: The fan module has a hardware fault and must be replaced. • Blinking: An alarm has been generated, and you need to handle it accordingly. Common causes of this alarm include short circuits, fan blades blocked, and fault of the fan module.

Specifications

Table 6-44 lists technical specifications of FAN-180A series fan modules.

Table 6-44 Technical specifications

Item	FAN-180A-B	FAN-180A-F
Dimensions (W x D x H)	85.4 mm x 178.8 mm x 82.5 mm (3.36 in. x 7.04 in. x 3.25 in.)	
Fans	One counter-rotating fan, which has a pair of blades	
Weight	0.887 kg (1.96 lb)	
Maximum power consumption	86 W	
Maximum fan speed	12000 revolutions per minute (RPM)	
Maximum wind rate	180 cubic feet per minute (CFM)	
Part number	02350KJA	02350KHY

6.11 FAN-180E-B (FAN-180E-B Fan Module)

Copyright © Huawei Technologies Co., Ltd.

Overview

Table 6-45 Basic information about the FAN-180E-B

Item	Details
Description	FAN-180E-B Fan Module
Part Number	02354KXY
Model	FAN-180E-B

Appearance

Figure 6-31 Appearance of the FAN-180E-B



Version Mapping

Table 6-46 Mappings between FAN-180E-B and product models

Product	Product Model	First Supported Version	Limitations
CloudEngine 8800	CE8850-64CQ-EI (02351RFF)	V200R021C10SPC600	-

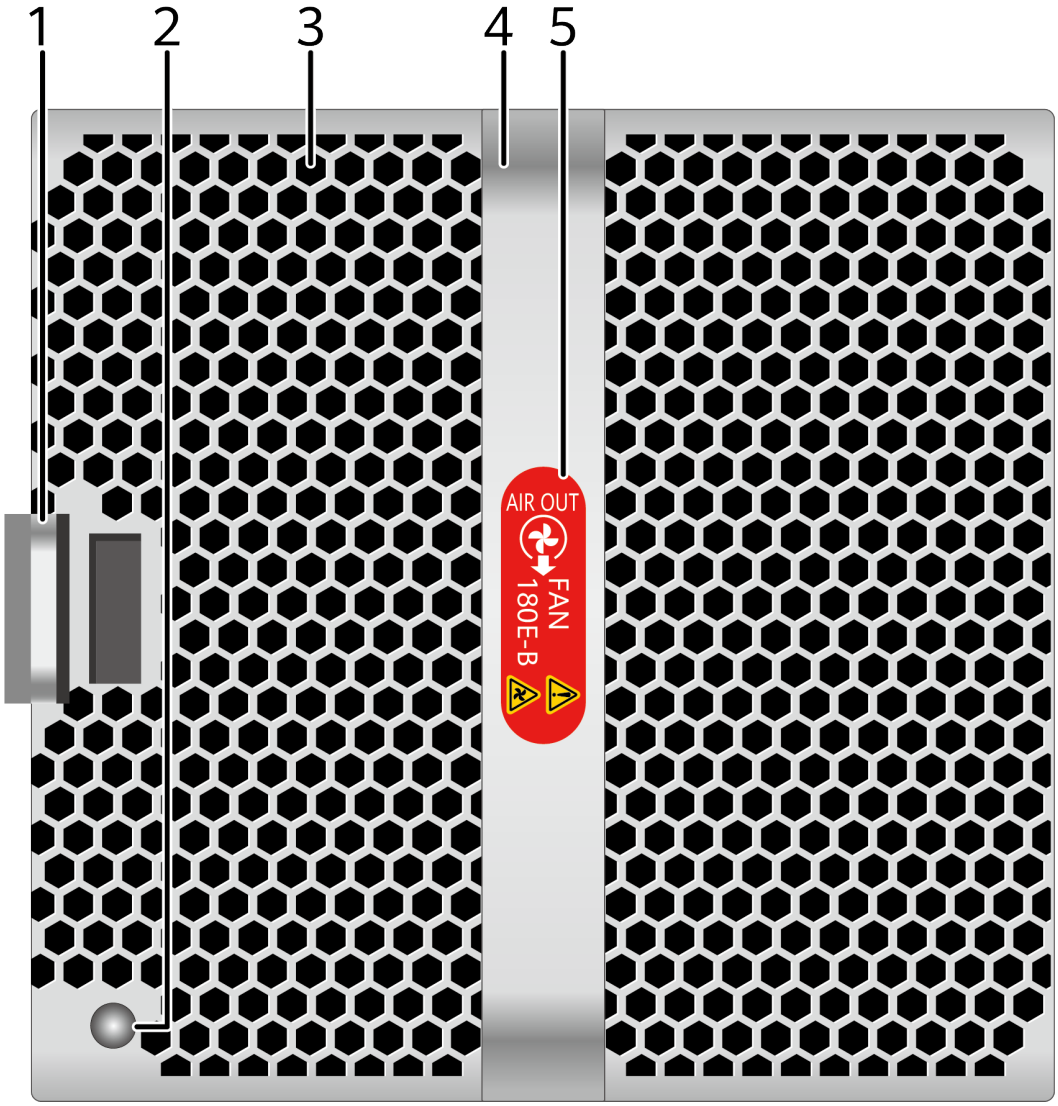
Copyright © Huawei Technologies Co., Ltd.

Product	Product Model	First Supported Version	Limitations
CloudEngine 8800	CE8850-64CQ-EI (02351RFF-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFF-004)	V200R022C00	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFJ-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFH-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFH-004)	V200R022C00	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFJ-004)	V200R022C00	-

Copyright © Huawei Technologies Co., Ltd.

Panel

Figure 6-32 Panel of the FAN-180E-B



1. Lock	2. Indicator	3. Fan air vent

Copyright © Huawei Technologies Co., Ltd.

4. Handle	5. Airflow flag • : back-to-front airflow • : front-to-back airflow	-

Table 6-47 Indicators on the FAN-180E-B

Silkscreen	Name	Color	Status	Description
-	Fan running indicator	-	Steady off	The fan module is not running.
		Green	Blinking	The fan module is working properly.
		Red	Steady on	The fan module is faulty and needs to be replaced.
		Red	Blinking	An alarm is generated and needs to be handled accordingly. Common causes of this alarm include short circuit, fan blade blocking, and fan module fault.

Copyright © Huawei Technologies Co., Ltd.

Functions and Features

Table 6-48 Functions and features of the FAN-180E-B

Functions and Features	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swapping	Supported
Heat dissipation	Back-to-front airflow
Electronic tagging	Supported. The device reads and loads electronic labels of the fan modules through I2C buses.

Technical Specifications

Table 6-49 Technical specifications of the FAN-180E-B

Item	Specification
Dimensions without packaging (H x W x D) [mm (in.)]	82.0 mm x 82.0 mm x 169.3 mm (3.23 in. x 3.23 in. x 6.67 in.)
Dimensions with packaging (H x W x D) [mm (in.)]	130.0 mm x 170.0 mm x 390.0 mm (5.12 in. x 6.69 in. x 15.35 in.)
Weight without packaging [kg (lb)]	0.846 kg (1.87 lb)
Weight with packaging [kg (lb)]	1.246 kg (2.75 lb)
Number of fans	Two counter-rotating fans with each containing two fan blades
Typical power consumption	75
Maximum power consumption [W]	86 W
Operating voltage range [V]	7 V to 15 V
Maximum fan speed [RPM]	13200RPM (Front), 11340RPM (Rear)
Maximum airflow [CFM]	180 CFM
Maximum noise level [dB(A)]	80 dB(A)
Maximum wind pressure [Pa]	1050 Pa
Airflow direction	Back-to-front airflow

Copyright © Huawei Technologies Co., Ltd.

6.12 FAN-180E-F (FAN-180E-F Fan Module)

Overview

Table 6-50 Basic information about the FAN-180E-F

Item	Details
Description	FAN-180E-F Fan Module
Part Number	02354LKY
Model	FAN-180E-F

Appearance

Figure 6-33 Appearance of the FAN-180E-F



Copyright © Huawei Technologies Co., Ltd.

Version Mapping

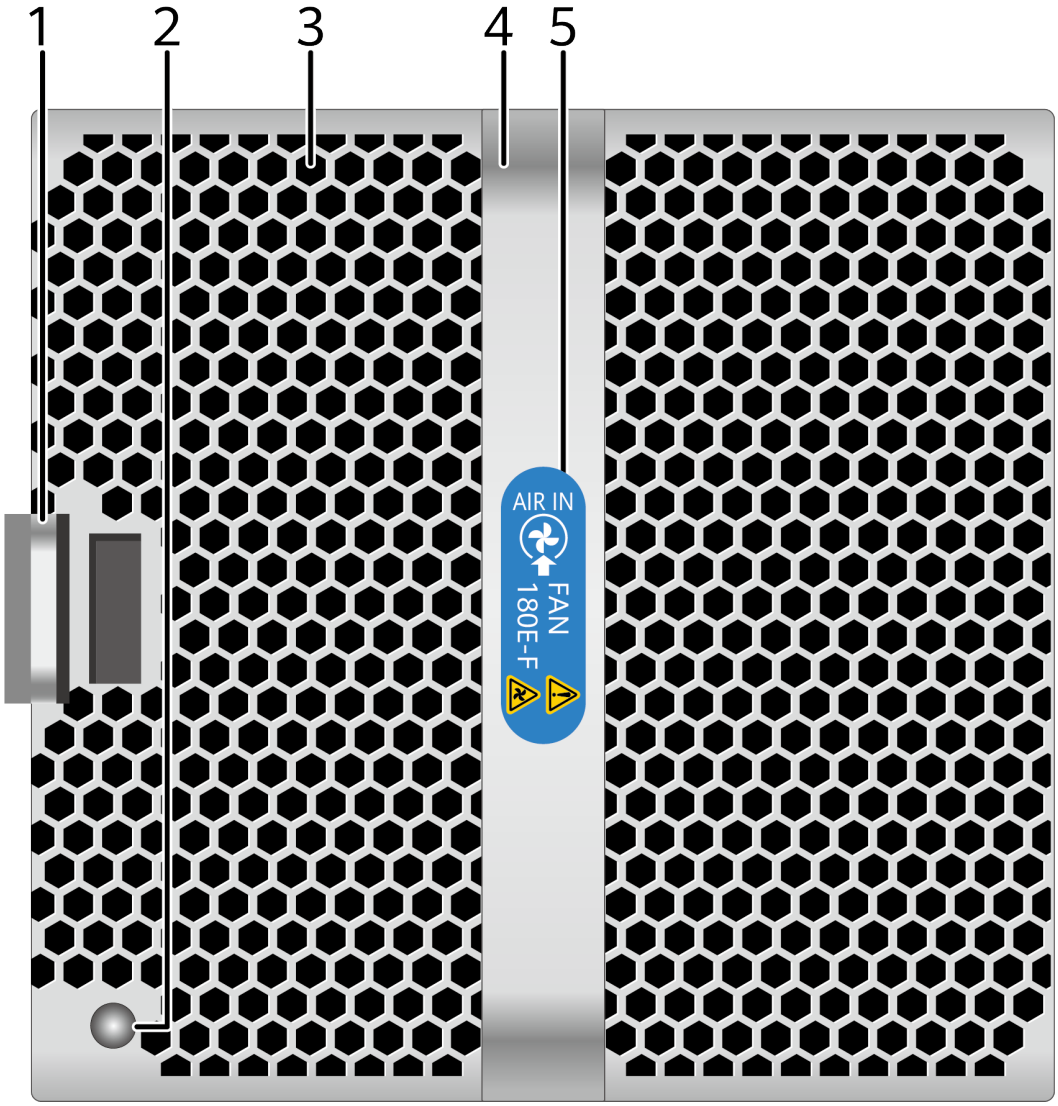
Table 6-51 Mappings between FAN-180E-F and product models

Product	Product Model	First Supported Version	Limitations
CloudEngine 8800	CE8850-64CQ-EI (02351RFF)	V200R021C10SPC600	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFF-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFF-004)	V200R022C00	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFJ-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFH-001)	V200R021C10SPC600	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFH-004)	V200R022C00	-
CloudEngine 8800	CE8850-64CQ-EI (02351RFJ-004)	V200R022C00	-

Copyright © Huawei Technologies Co., Ltd.

Panel

Figure 6-34 Panel of the FAN-180E-F



1. Lock	2. Indicator	3. Fan air vent

Copyright © Huawei Technologies Co., Ltd.

4. Handle	5. Airflow flag • : back-to-front airflow • : front-to-back airflow	-

Table 6-52 Indicators on the FAN-180E-F

Silkscreen	Name	Color	Status	Description
-	Fan running indicator	-	Steady off	The fan module is not running.
		Green	Blinking	The fan module is working properly.
		Red	Steady on	The fan module is faulty and needs to be replaced.
		Red	Blinking	An alarm is generated and needs to be handled accordingly. Common causes of this alarm include short circuit, fan blade blocking, and fan module fault.

Copyright © Huawei Technologies Co., Ltd.

Functions and Features

Table 6-53 Functions and features of the FAN-180E-F

Functions and Features	Description
Automatic fan speed adjustment	After the fan module communicates normally with the switch, the switch controls the speed of the fan based on temperature of the chassis.
Hot swapping	Supported
Heat dissipation	Front-to-back
Electronic tagging	Supported. The device reads and loads electronic labels of the fan modules through I2C buses.

Technical Specifications

Table 6-54 Technical specifications of the FAN-180E-F

Item	Specification
Dimensions without packaging (H x W x D) [mm (in.)]	82.0 mm x 82.0 mm x 169.3 mm (3.23 in. x 3.23 in. x 6.67 in.)
Dimensions with packaging (H x W x D) [mm (in.)]	130.0 mm x 170.0 mm x 390.0 mm (5.12 in. x 6.69 in. x 15.35 in.)
Weight without packaging [kg (lb)]	0.846 kg (1.87 lb)
Weight with packaging [kg (lb)]	1.246 kg (2.75 lb)
Number of fans	Two counter-rotating fans with each containing two fan blades
Typical power consumption	75
Maximum power consumption [W]	86 W
Operating voltage range [V]	7 V to 15 V
Maximum fan speed [RPM]	13200RPM (Front), 11340RPM (Rear)
Maximum airflow [CFM]	180 CFM
Maximum noise level [dB(A)]	80 dB(A)
Maximum wind pressure [Pa]	1050 Pa
Airflow direction	Front-to-back airflow

Copyright © Huawei Technologies Co., Ltd.