ITECH

19-inch Rack
IT-E154 User Manual

Notices

Manual Part Number

IT-E154

Revision

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Itech Electronic, Co., Ltd.

Trademarks

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Warranty

Technology Licenses

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Restricted Rights Legend

Safety Notices

CAUTION

A CAUTION sign denotes a hazard. It calls attention to an operating procedure or practice that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION sign until the indicated conditions are fully understood and met.

WARNING

A WARNING sign denotes a hazard. It calls attention to an operating procedure or practice that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING sign until the indicated conditions are fully understood and met.

NOTE

A NOTE sign denotes important hint. It calls attention to tips or supplementary information that is essential for users to refer to.

Quality Certification and Assurance

We certify that instrument meets all the published specifications at time of shipment from the factory.

Warranty

ITECH warrants that the product will be free from defects in material and workmanship under normal use for a period of one (1) year from the date of delivery (except those described in the Limitation of Warranty below).

For warranty service or repair, the product must be returned to a service center designated by ITECH.

- The product returned to ITECH for warranty service must be shipped PREPAID. And ITECH will pay for return of the product to customer.
- If the product is returned to ITECH for warranty service from overseas, all the freights, duties and other taxes shall be on the account of customer.

Limitation of Warranty

This Warranty will be rendered invalid if the product is:

- Damaged resulting from customer-wired circuits or customer-supplied parts or accessories;
- Modified or repaired by customer without authorization;
- Damaged resulting from customer-wired circuits or use in an environment not designated by us;
- The product model or serial number is altered, deleted, removed or made illegible by customer;
- Damaged as a result of accidents, including but not limited to lightning, moisture, fire, improper use or negligence.

Safety Symbols

---	Direct current	|	ON (power)
∿	Alternating current	◯	OFF (power)
≂	Both direct and alternating current		Power-on state
	Chassis (earth ground) symbol.		Power-off state
	Earth (ground) terminal		Reference terminal
	Caution		Positive terminal
	Warning (refer to this manual for specific Warning or Caution information)	_	Negative terminal

	A chassis terminal	-	-

Regulatory Markings

$\mathsf{C}\,\mathsf{E}$	The CE mark indicates that the product complies with all the relevant European legal directives. The specific year (if any) affixed refers to the year when the design was approved.
	The instrument complies with the WEEE Directive (2002/96/EC) marking requirement. This affix product label indicates that you must not discard the electrical/electronic product in domestic household waste.
10	This symbol indicates the time period during which no hazardous or toxic substances are expected to leak or deteriorate during normal use. The expected useful life of the product is 10 years. The product can be used safely during the 10-year Environment Friendly Use Period (EFUP). Upon expiration of the EFUP, the product must be immediately recycled.

Waste Electrical and Electronic Equipment (WEEE) Directive

2002/96/EC Waste Electrical and Electronic Equipment (WEEE) Directive
This product complies with the WEEE Directive (2002/96/EC) marking requirement. This affix product label indicates that you must not discard the electrical/electronic product in domestic household waste.
Product Category
With reference to the equipment classifications described in the Annex 1 of the WEEE Directive, this instrument is classified as a "Monitoring and Control Instrument".
To return this unwanted instrument, contact your nearest ITECH office.

Compliance Information

Complies with the essential requirements of the following applicable European Directives, and carries the CE marking accordingly:

- Electromagnetic Compatibility (EMC) Directive 2014/30/EU
- Low-Voltage Directive (Safety) 2014/35/EU

Conforms with the following product standards:

EMC Standard

IEC 61326-1:2012/ EN 61326-1:2013 [1][2][3]
Reference Standards
CISPR 11:2009+A1:2010/ EN 55011:2009+A1:2010 (Group 1, Class A)
IEC 61000-4-2:2008/ EN 61000-4-2:2009
IEC 61000-4-3:2006+A1:2007+A2:2010/ EN 61000-4-3:2006+A1:2008+A2:2010
IEC 61000-4-4:2004+A1:2010/ EN 61000-4-4:2004+A1:2010
IEC 61000-4-5:2005/ EN 61000-4-5:2006
IEC 61000-4-6:2008/ EN 61000-4-6:2009
IEC 61000-4-11:2004/ EN 61000-4-11:2004

1. The product is intended for use in non-residential/non-domestic environments. Use of the product in residential/domestic environments may cause electromagnetic interference.
2. Connection of the instrument to a test object may produce radiations beyond the specified limit.
3. Use high-performance shielded interface cable to ensure conformity with the EMC standards listed above.

Safety Standard

IEC 61010-1:2010/ EN 61010-1:2010

CONTENTS

Chapter1 IT-E154 Introduction

IT-M series power supply or regenerative source and load system are compatible with a standard 19-inch cabinet. Befor installation, ITECH provides with a specially designed rack IT-E154 series, this series racks include IT-E154A/IT-E154B/IT-E154C/IT-E154D/IT-E154E/IT-E154F/IT-E154G/IT-E154 H. User can select different model according to requirement.

The introduction of rack as follows:

IT-E154A

IT-E154A rack is a set of separate mounting kit. When the 19-inch cabinet has a tray, and two sets of IT-M series instruments are mounted on the cabinet, the user can select the IT-E154A rack kit to mount the rack to the front end of two sets of IT-M series instruments, and then mount the instruments on the 19-inch cabinet.
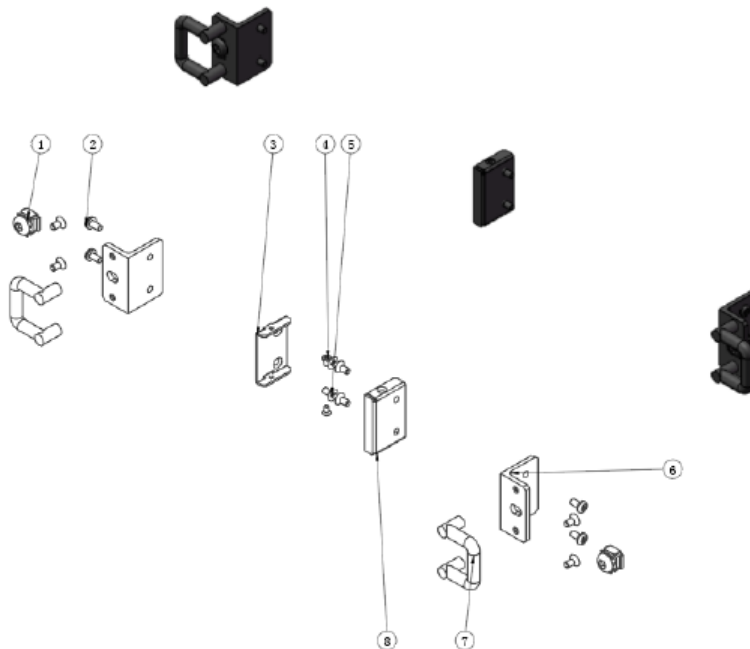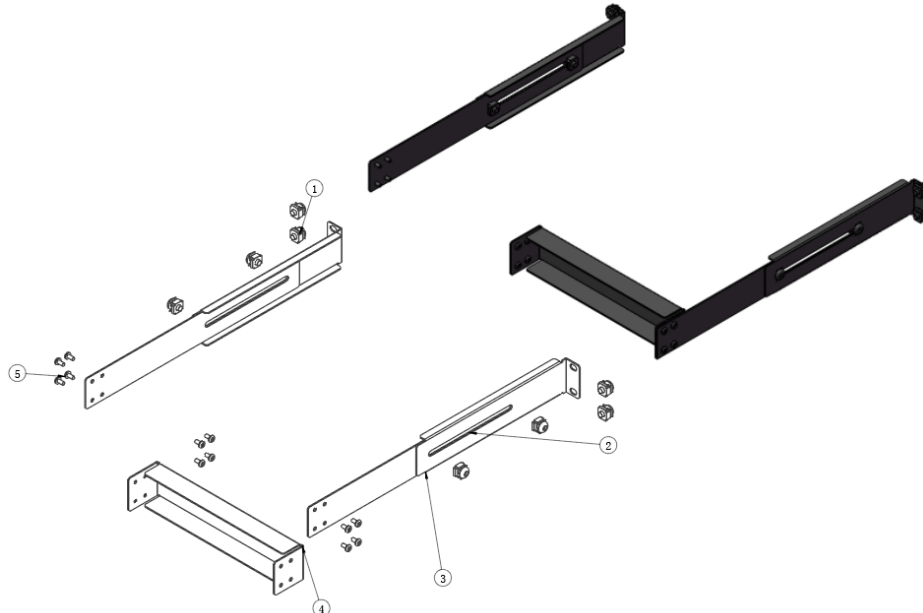
IT-E154B

IT-E154B rack is a set of separate mounting kit. When the 19-inch cabinet has a tray, and a single set of IT-M instrument is mounted on the cabinet, the user can select the IT-E154B rack kit to mount the rack to the front end of the IT-M series instrument, and then mount the instrument on the 19-inch cabinet.
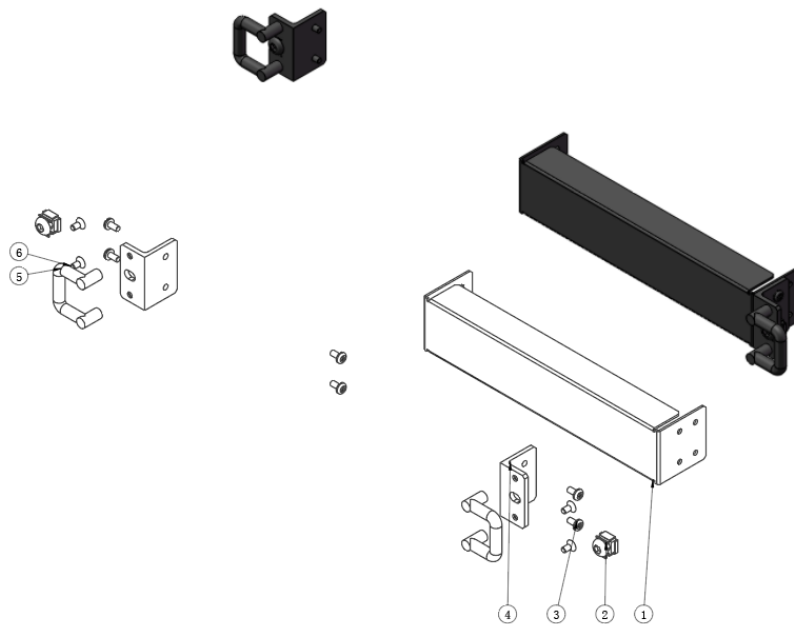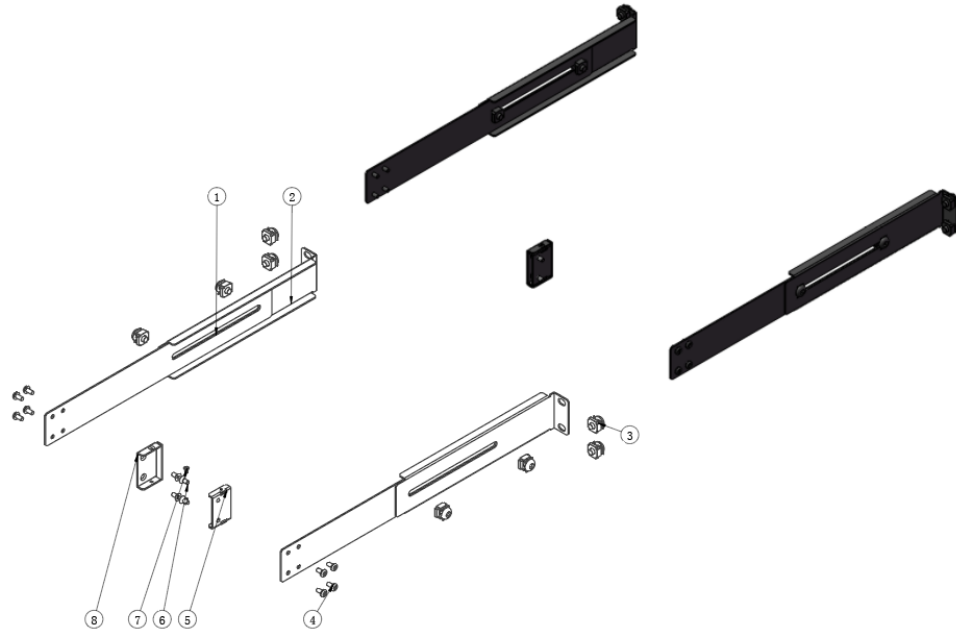
IT-E154C

IT-E154C rack is a set of separate mounting kit. When the 19-inch cabinet has no tray, the user can select the IT-E154C rack kit to fix the rear end of the IT-M series instrument on the cabinet. This model of rack cannot be used independently, and needs to be used together with IT-E154A and IT-E154B.

If there are two sets of instruments, use the following components:

IT-E154D

IT-E154D rack is a set of separate mounting kit. It applies for ITECH cabinet or a similar cabinet with brackets and mounting holes on the side. When the 19-inch cabinet has no tray, the user can select the IT-E154D rack kit to fix the rear end of the IT-M series instrument on the cabinet side. This model of rack cannot be used independently, and needs to be used together with IT-E154A.

If there are two sets of instruments, use the following components:
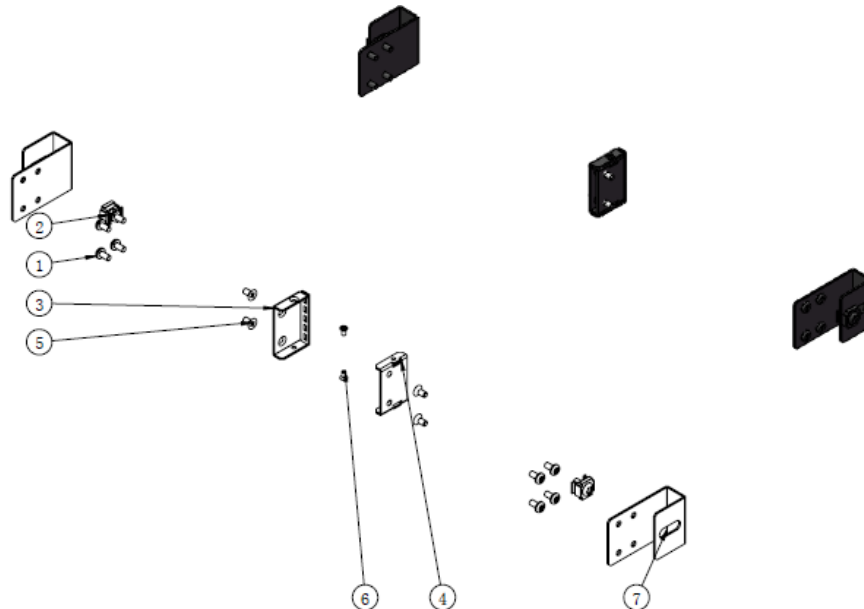
IT-E154E

IT-E154E rack is a set of separate mounting kit. When the 19-inch cabinet has a tray, and two sets of IT-M series instruments are mounted on the cabinet, the user can select the IT-E154E rack kit to mount the rack to the front end of two sets of IT-M series instruments, and then mount the instruments on the 19-inch
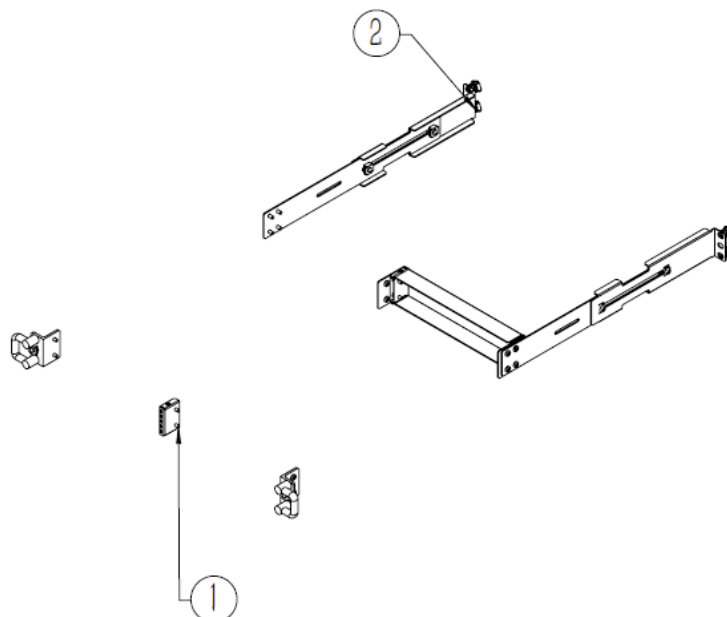
cabinet.

The IT-E154E is similar to the IT-E154A, the difference between the two is the number of intermediate connectors, the IT-E154E provides two intermediate connectors, which are mounted on the front and rear of the two machines.
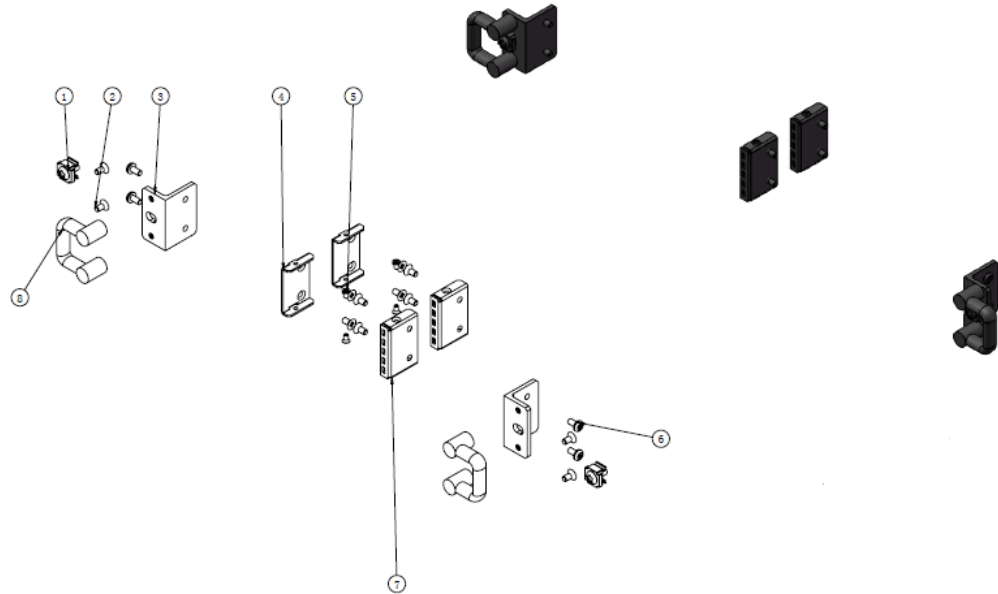
IT-E154F

IT-E154F bracket is a combined mounting kit. When the 19-inch cabinet has no tray, and two sets of IT-M series instruments are mounted on the cabinet, the user can select the IT-E154F rack kit.
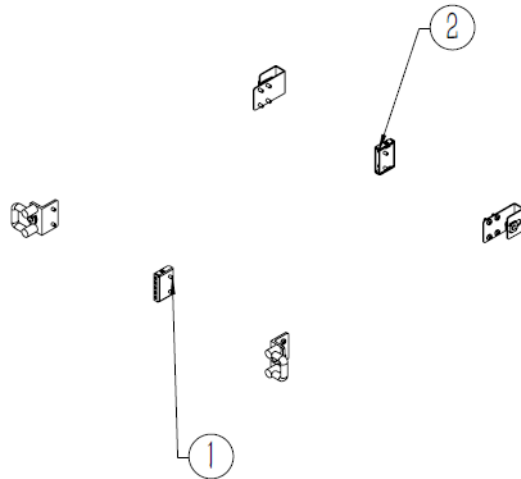
This rack model is a combination of IT-E154A and IT-E154C, Attach the IT-E154A mounting lugs to the left and right ends of the two IT-M series instruments, and then attach the center connector to the middle of the two instruments. Attach the IT-E154C mounting kit to the rear end of the instrument and secure to the cabinet.

IT-E154G

IT-E154G bracket is a combined mounting kit. When the 19-inch cabinet is ITECH cabinet or a similar cabinet with brackets and mounting holes on the side. When the cabinet has no tray, and two sets of IT-M series instruments are mounted on the cabinet, the user can select the IT-E154G rack kit.

This rack model is a combination of IT-E154A and IT-E154D, Attach the IT-E154A mounting lugs to the left and right ends of the two IT-M series instruments, and then attach the center connector to the middle of the two instruments. Attach the IT-E154D mounting kit to the rear end of the instrument and secure to the cabinet.

IT-E154H

IT-E154H bracket is a combined mounting kit. When the 19-inch cabinet has no tray, and one set of IT-M series instrument is mounted on the cabinet, the user can select the IT-E154H rack kit.

This rack model is a combination of IT-E154B and IT-E154C, Attach the IT-E154B mounting lugs to the left and right ends of the IT-M series instrument. Attach the IT-E154C mounting kit to the rear end of the instrument and secure to the cabinet.
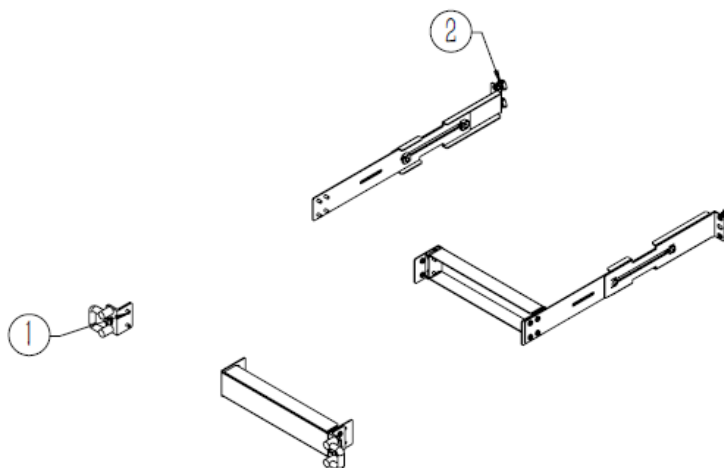
Chapter2 Mounting Instrument

2.1 Preparation

When the IT-E154 rack is used, it is necessary to remove the side footing of the instrument. Use a screwdriver to loosen the two screws for fixing the side footing, and remove the side footing. As shown in the figure below, remove four side footings at the front, rear, left and right of the instrument.

📖 NOTE

After the feet are removed, do not use the screws that were removed when installing the rack kit, as different screw sizes can cause other problems. Please use the screws that come with the rack kit.
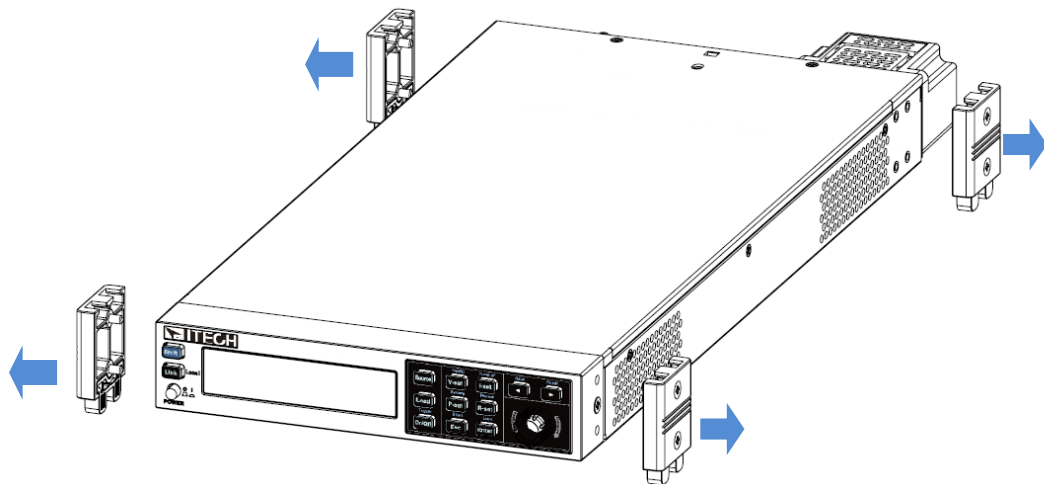
After the side footings are removed from the instrument, the user can see the rack mounting holes on both sides of the instrument.

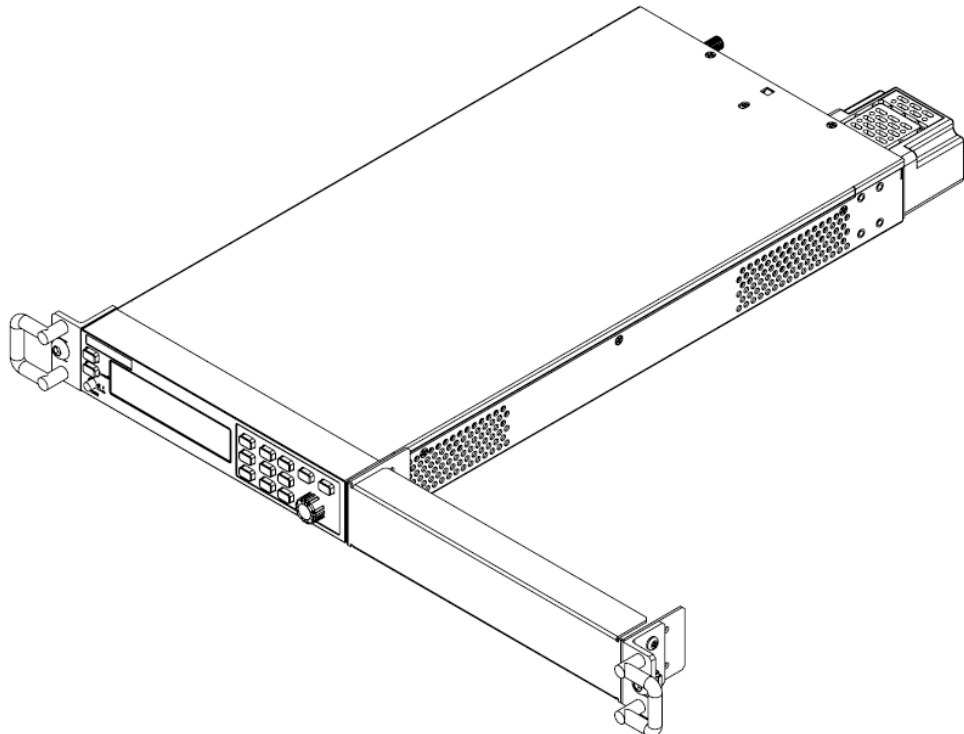## 2.2 Mounting a Single Instrument

2.2.1 Cabinet with a tray

When the 19-inch cabinet has a tray, to mount a single set of instrument on the cabinet, it is only necessary to mount the IT-E154B rack kit. The mounting method is as shown below.
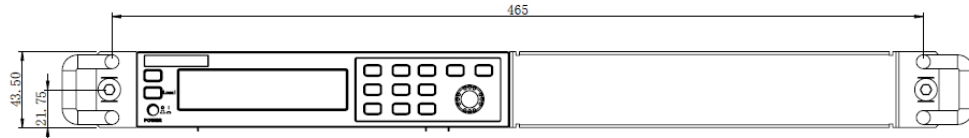
1. Based on the step ① shown in the figure below, mount the IT-E154B rack accessories on the left and right sides at the front of the instrument.

2. Based on the step ② shown in the figure below, use screws to fix the rack handle.
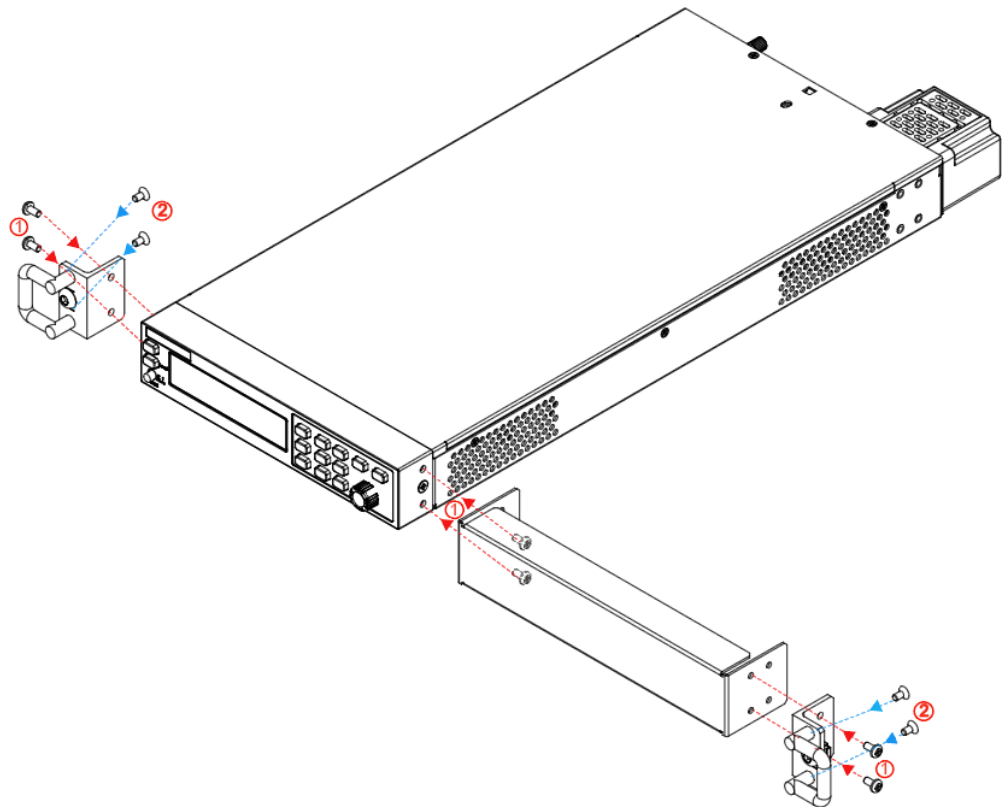
3. The effect diagram after mounting is as shown below.

4. The dimension diagram after mounting is as shown below (Unit: mm).

2.2.2 Cabinet without a tray

When the 19-inch cabinet has no tray, to mount a single set of instrument on the cabinet, it is necessary to mount the IT-E154B rack kit at the front of the instrument, and mount the IT-E154C kit at the rear of the instrument to fix the rear part of the instrument on the cabinet.
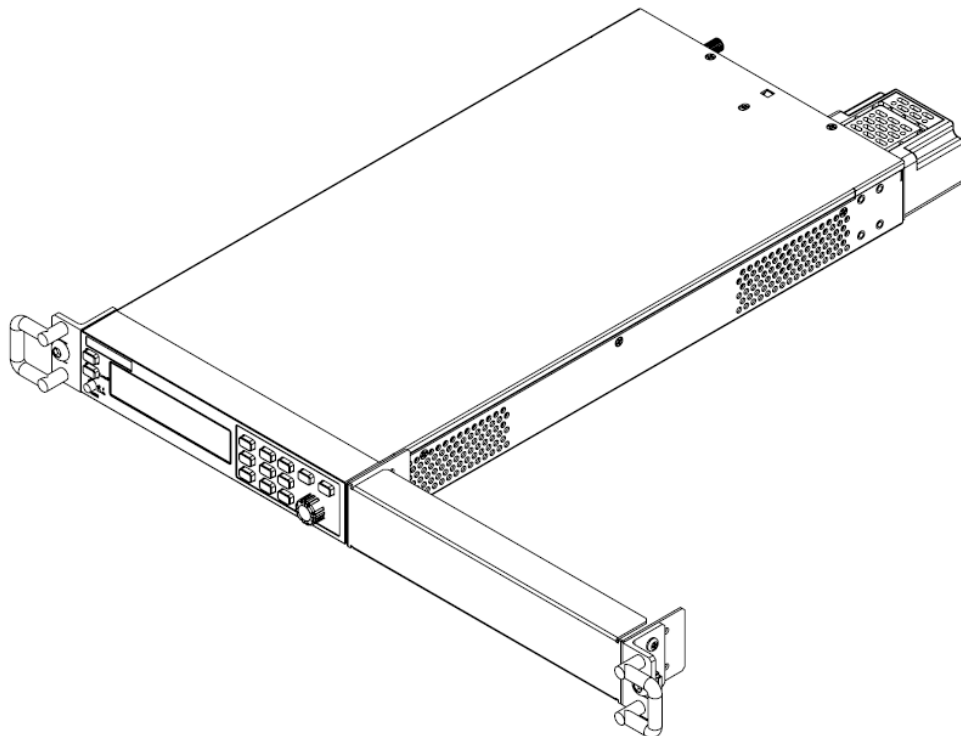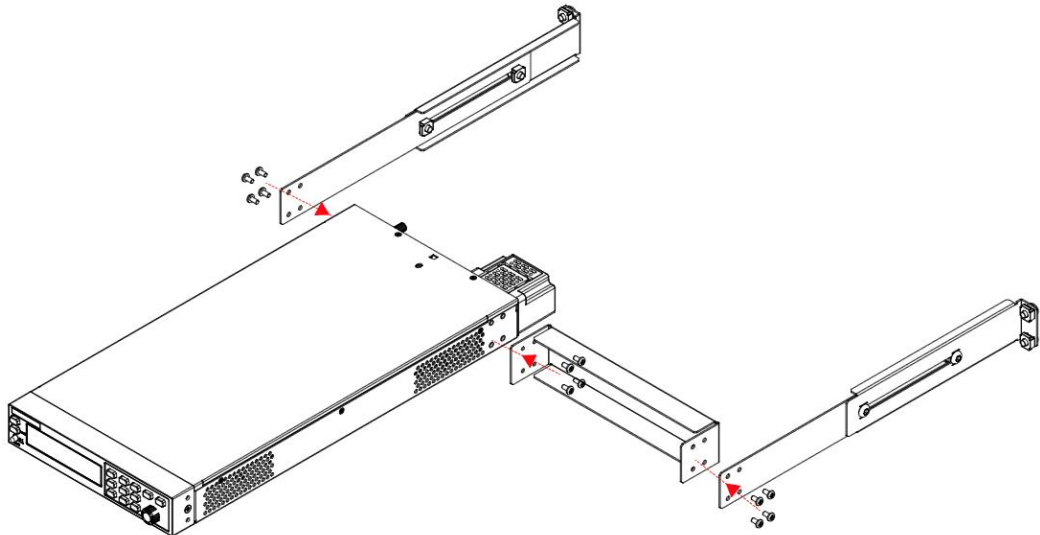
📖 NOTE

Users can purchase the IT-E154C and IT-E154B separately or purchase the combined IT-E154H directly.
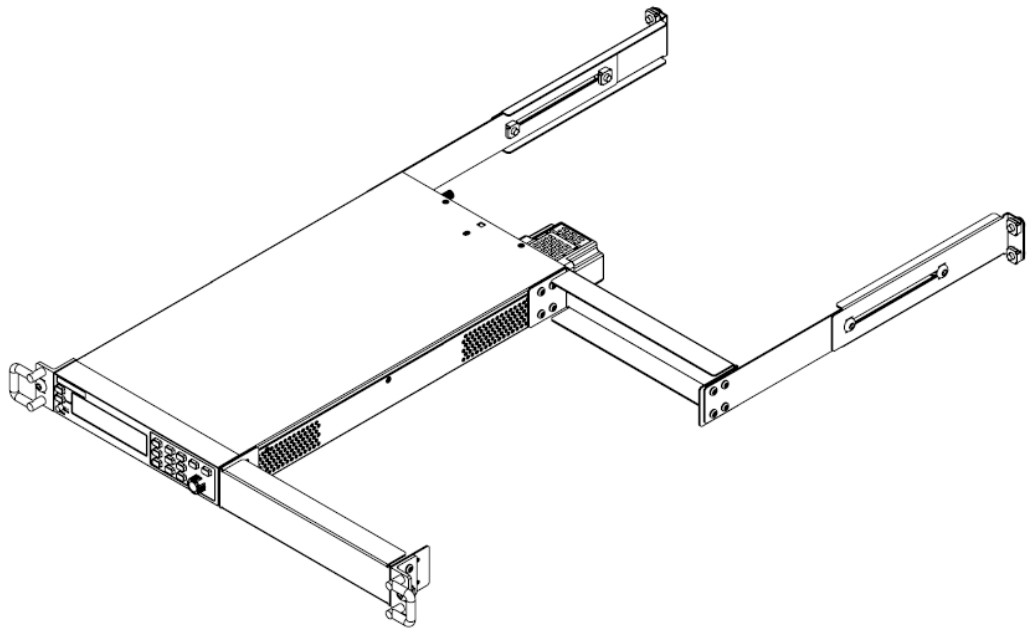
The mounting method is as shown below.

1. Mount the front rack based on the mounting method of the front kit IT-E154B for the instrument with a tray. As shown below.
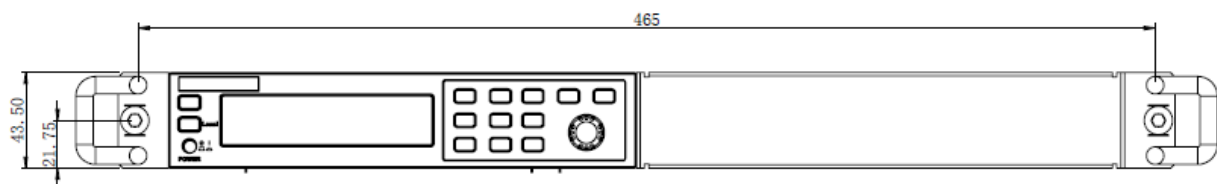

2. Based on the steps shown below, mount the rear rack IT-E154C.

3. The effect diagram after mounting is as shown below.

4. The user may install the rack-mounted instrument on a standard cabinet. The size for rack-mounted instrument is as shown below. (Unit: mm)
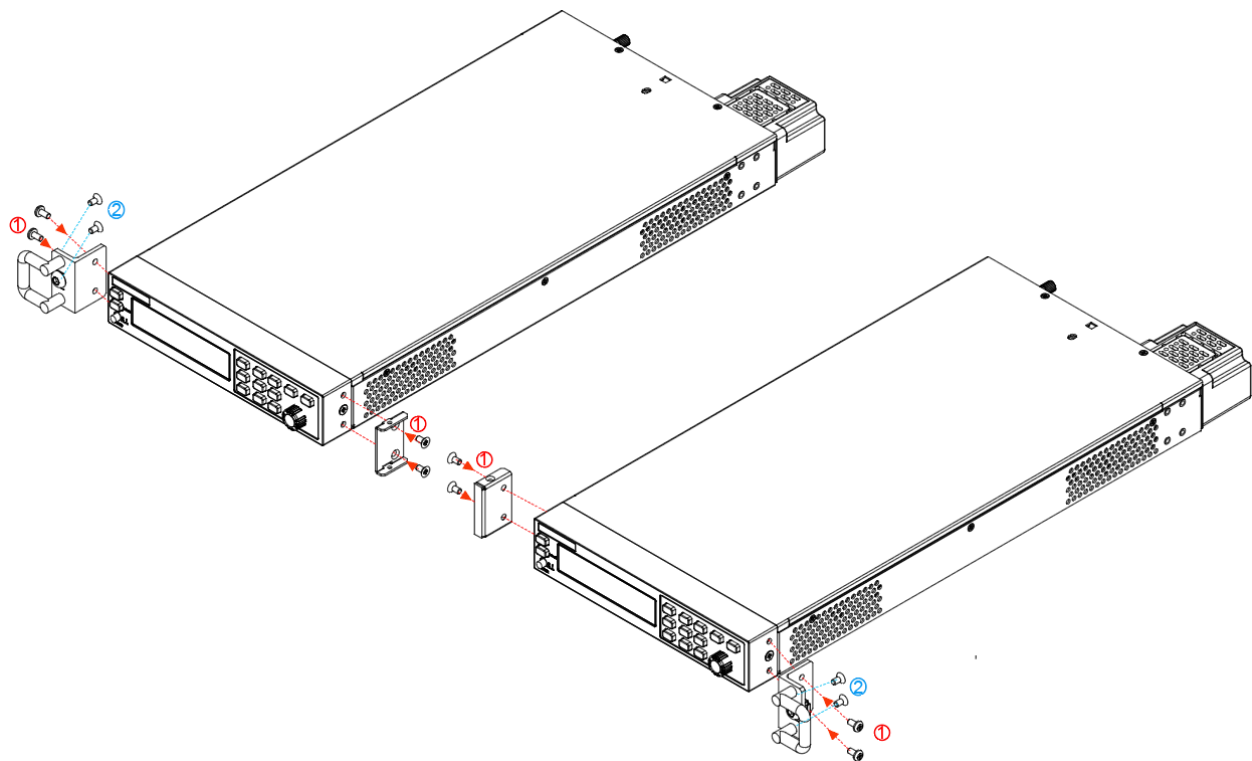
2.3 Mounting Two Instruments
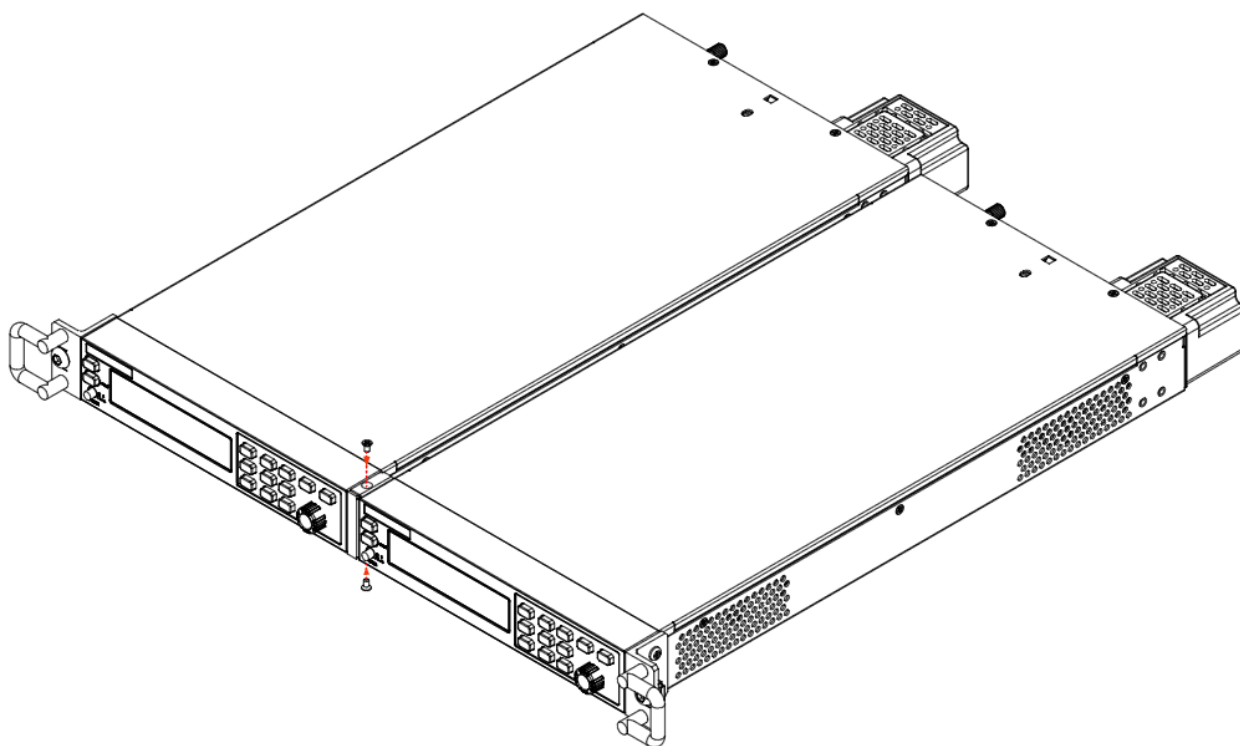
2.3.1 Cabinet with a tray

When the 19-inch cabinet has a tray, to mount two sets of instruments on the cabinet, it is only necessary to mount the IT-E154A rack kit. The mounting method is as shown below. （Take IT-E154A as an example for demonstration. The IT-E154E has one more step, which requires connection to the back-end middleware.）

1. Based on the step ① shown in the figure below, mount the IT-E154B rack accessories on the left and right sides at the front of the instrument.

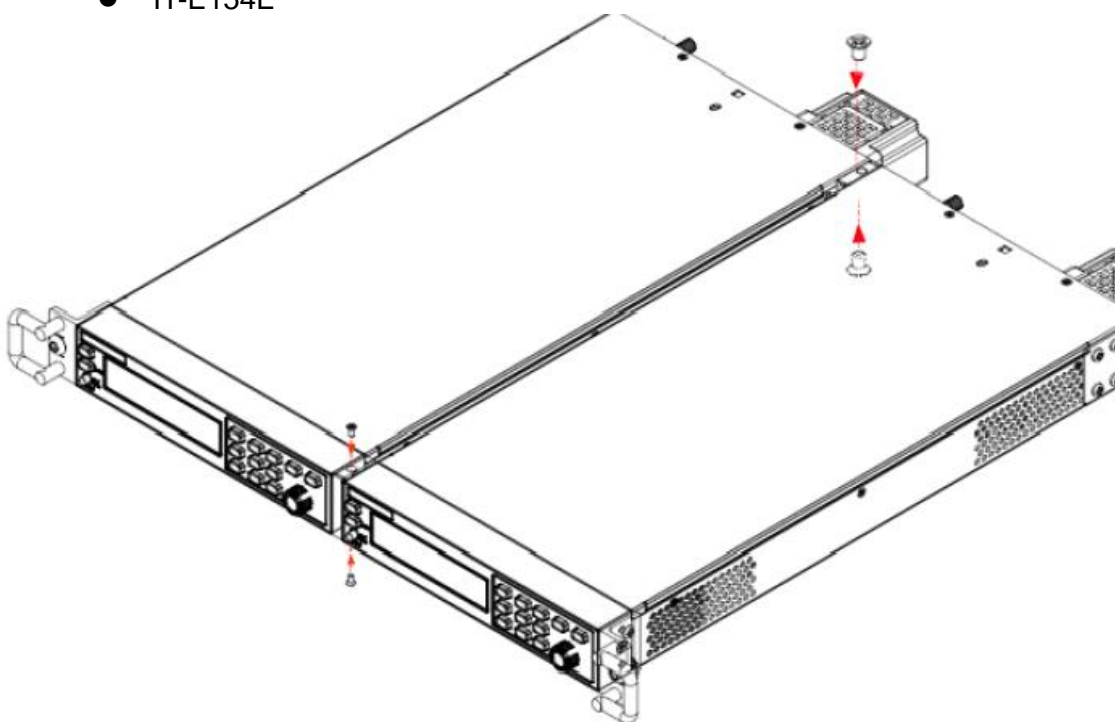2. Based on the step ② shown in the figure below, use screws to fix the rack handle.

3. As shown below, combine two sets of instruments mounted with left and right racks. Use screws to fix the two sets of instruments from up to down.
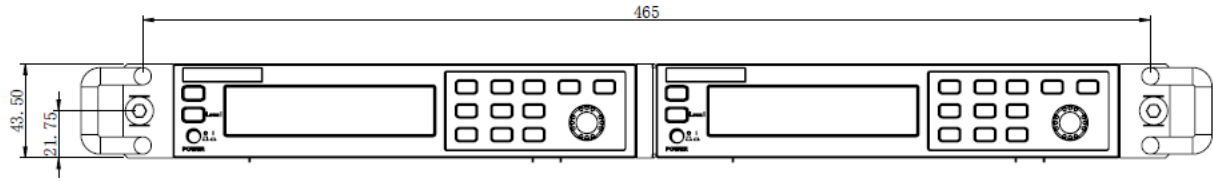
● IT-E154A

● IT-E154E

4. The user may install the two rack-mounted instruments on a standard cabinet. The size for rack-mounted instrument is as shown below. (Unit: mm)

2.3.2 Cabinet without a tray

When the 19-inch cabinet has no tray, to mount two sets of instruments on the cabinet, it is necessary to mount the IT-E154A rack kit at the front of the instruments, and mount the IT-E154C kit at the rear of the instruments to fix the rear parts of the instruments on the cabinet.

If the cabinet is an ITECH cabinet or a similar cabinet with brackets and mounting holes on the side. It is also possible to use the IT-E154A + IT-E154D kit to fix the instruments on the cabinet.


NOTE

- When a regular cabinet, user can purchase the IT-E154A and IT-E154C separately or purchase the combined IT-E154F directly.
- When a ITECH cabinet or similar cabinet, user can purchase the IT-E154A and IT-E154D separately or purchase the combined IT-E154G directly
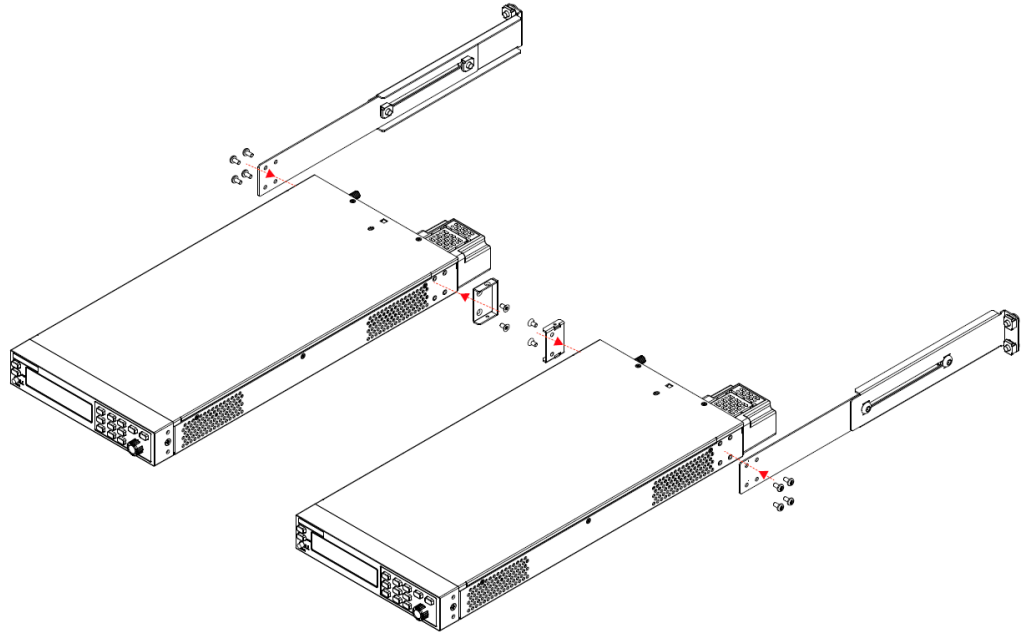
Mounting the IT-E154A+IT-E154C（IT-E154F）
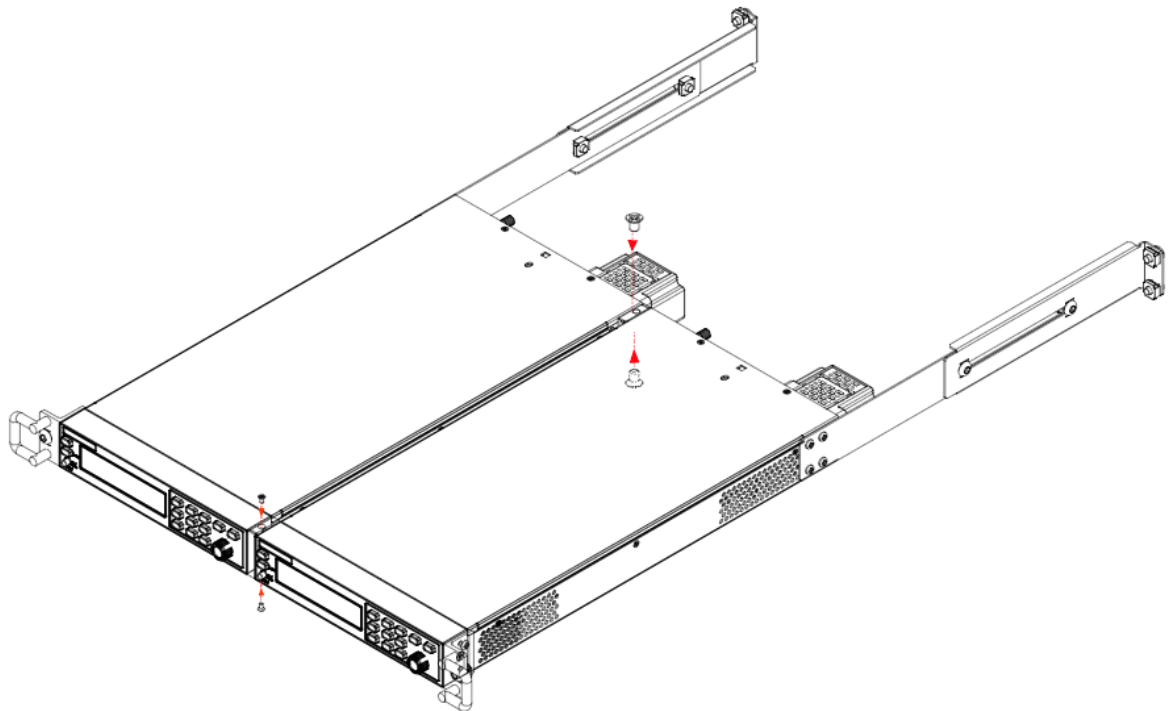
The mounting method is as shown below.

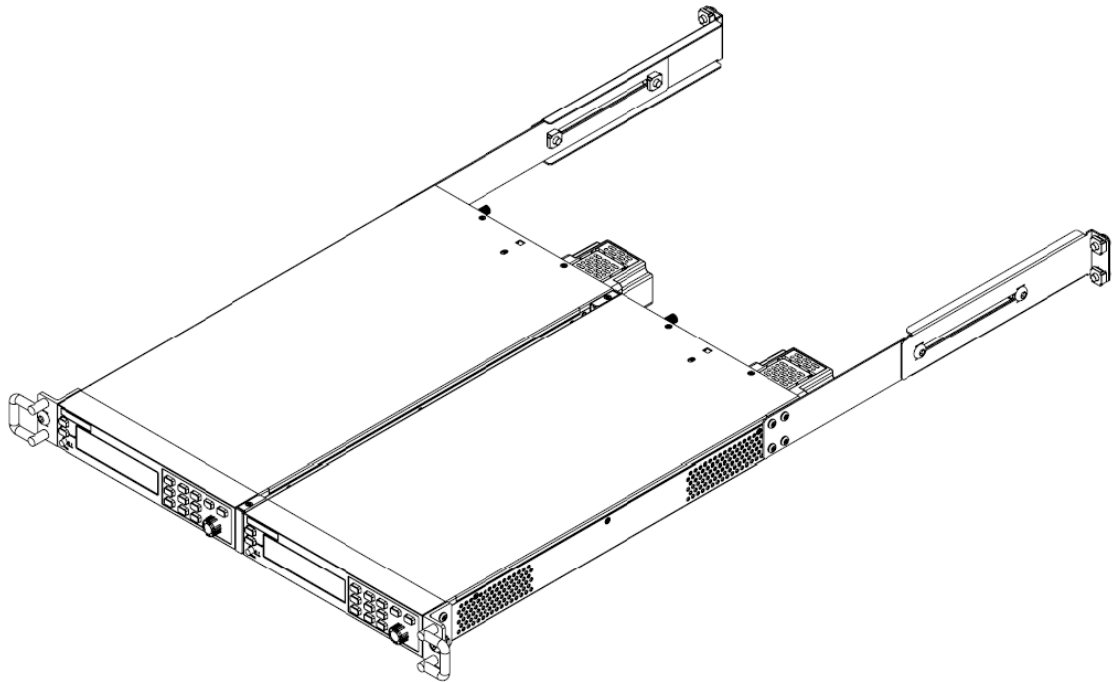1. As shown below, mount the front rack IT-E154A accessories.
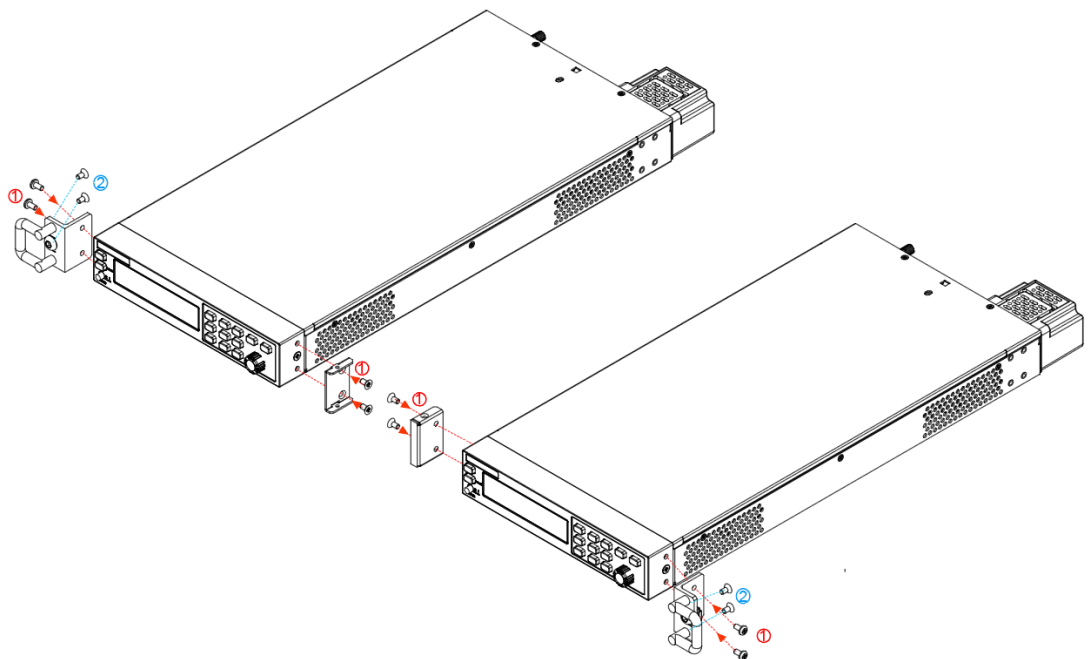
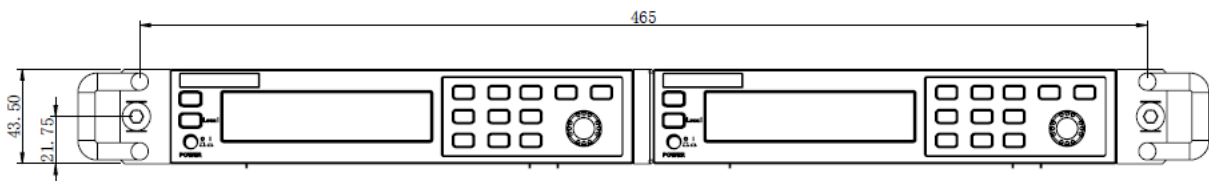2. Based on the steps shown below, mount the rear rack IT-E154C.

3. Based on the steps shown below, combine two sets of instruments mounted with left and right rack accessories. Use screws to fix the front and rear ends of the two sets of instruments from up to down.
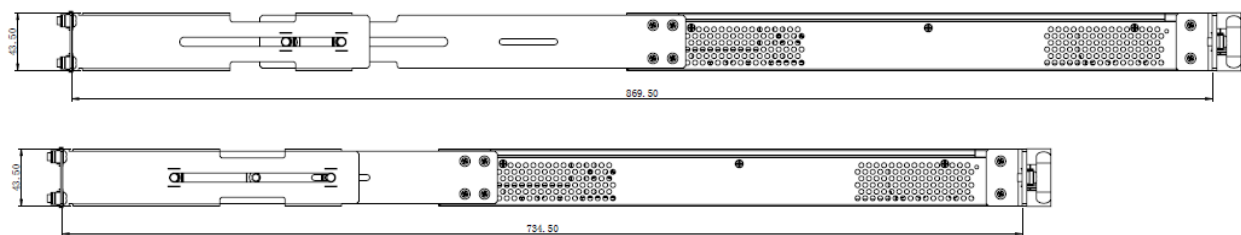

4. The effect diagram after mounting is as shown below.

5. The user may install the rack-mounted instrument on a standard cabinet. The size for rack-mounted instrument is as shown below. (Unit: mm)
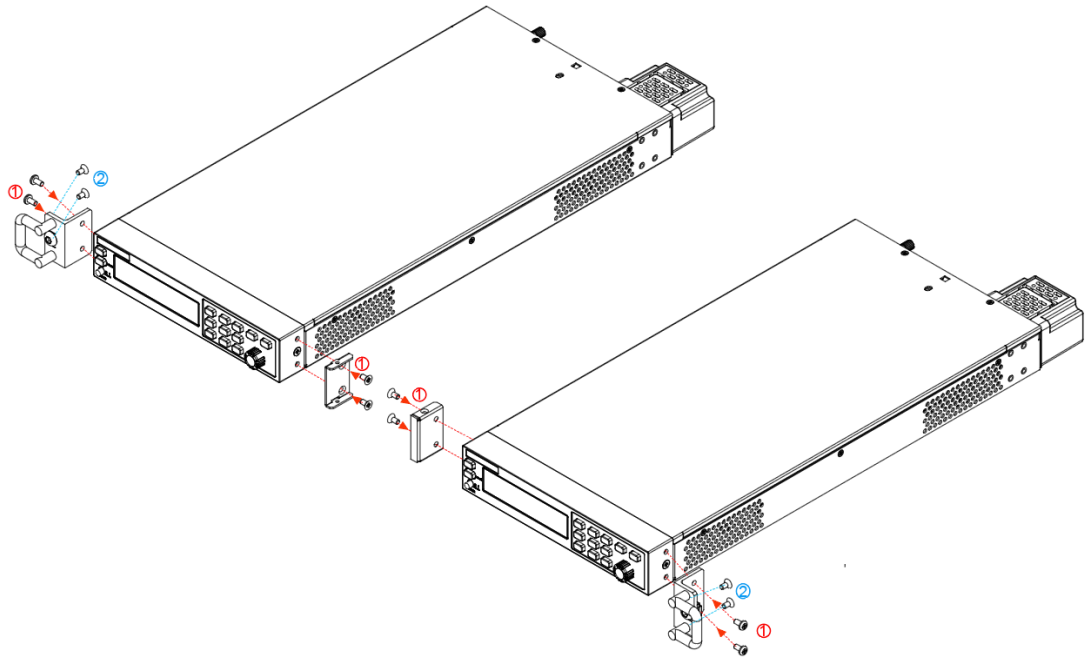

The rack at the rear of the IT-E154C is retractable, allowing the user to adjust it to the cabinet's needs, with a maximum length of 869.50mm and a minimum length of 734.50mm.
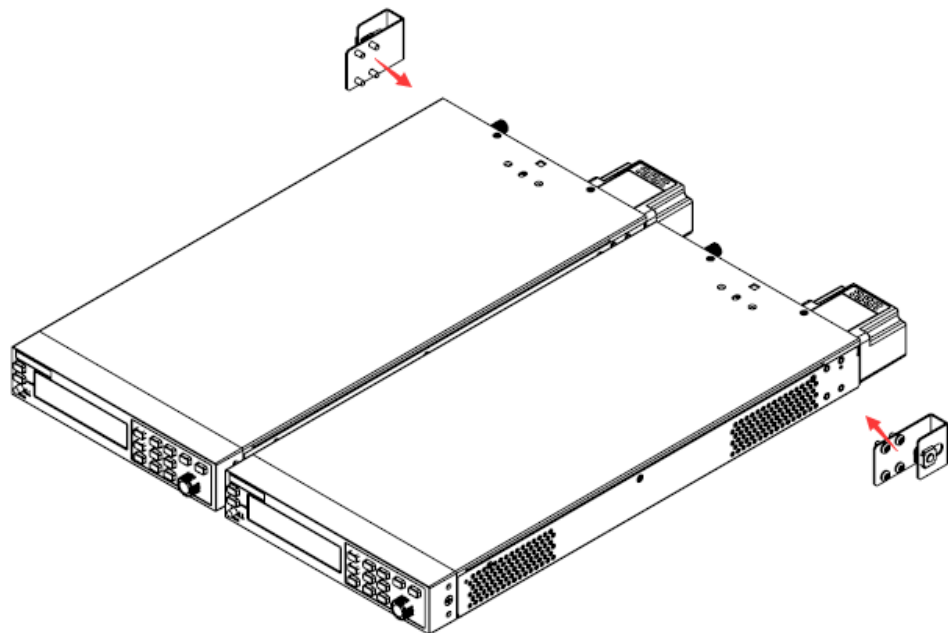

Mounting the IT-E154A+IT-E154D（IT-E154G）

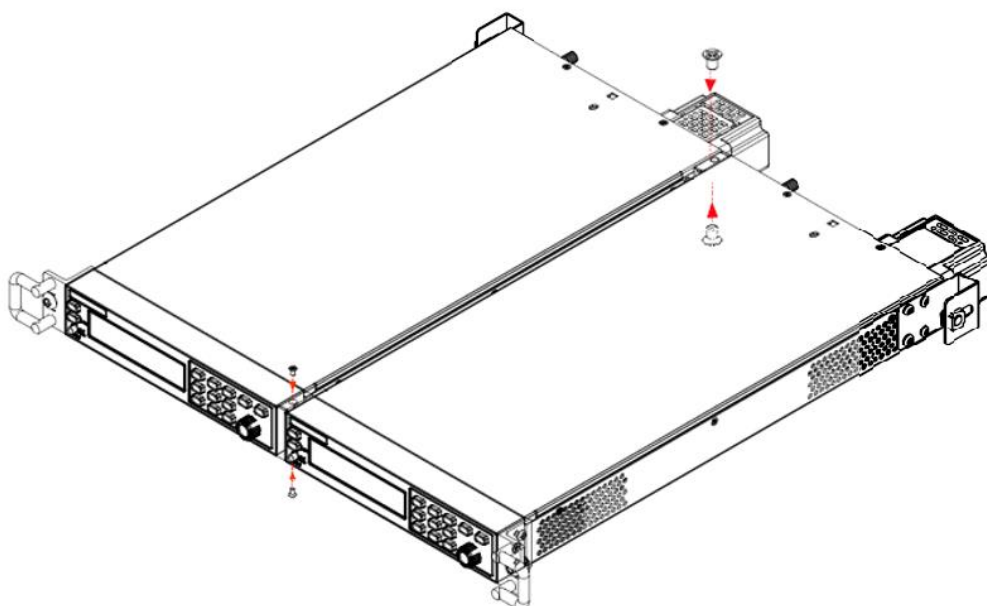The mounting method is as shown below.

1. As shown below, mount the front rack IT-E154A accessories.

2. Based on the steps shown below, mount the rear rack IT-E154C.

3. Based on the steps shown below, combine two sets of instruments mounted with left and right rack accessories. Use screws to fix the front and rear ends of the two sets of instruments from up to down.

4. The user may install the rack-mounted instrument on a standard cabinet. The size for rack-mounted instrument is as shown below. (Unit: mm)
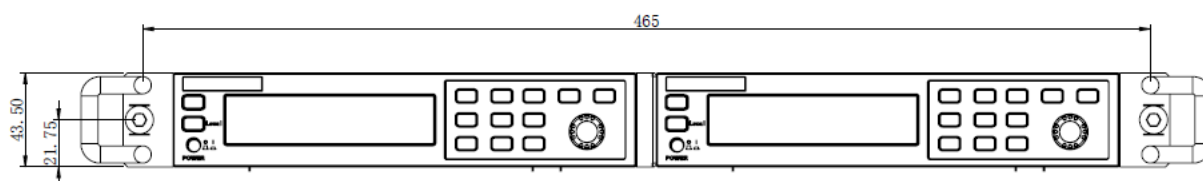
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