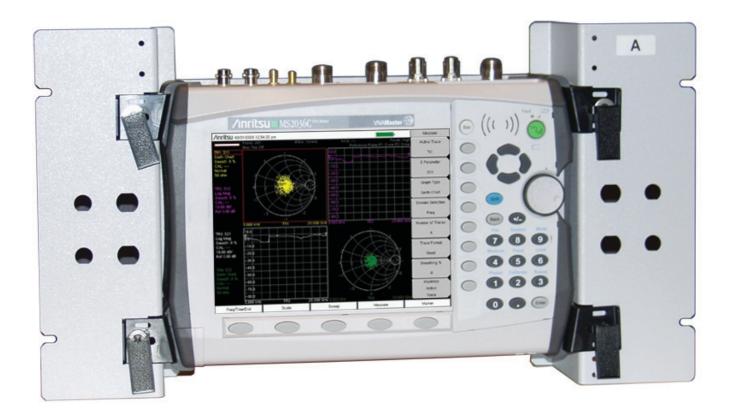
Rack Mount Accessory Installation Guide

for most Anritsu Handheld Instruments Thick-Case (with Wire Tilt Bail), Thin-Case (with Wire Tilt Bail), Thin-Case (with New-Style, Integrated Tilt Bail), and Compact-Case





Part Number: 10580-00338 Revision: C Published: February 2020 Copyright 2020 Anritsu Company

WARRANTY

The Anritsu product listed on the title page is warranted against defects in materials and workmanship for one year from the date of shipment.

Anritsu's obligation covers repairing or replacing products which prove to be defective during the warranty period. Buyers shall prepay transportation charges for equipment returned to Anritsu for warranty repairs. Obligation is limited to the original purchaser. Anritsu is not liable for consequential damages.

LIMITATION OF WARRANTY

The foregoing warranty does not apply to Anritsu connectors that have failed due to normal wear. Also, the warranty does not apply to defects resulting from improper or inadequate maintenance, unauthorized modification or misuse, or operation outside of the environmental specifications of the product. No other warranty is expressed or implied, and the remedies provided herein are the Buyer's sole and exclusive remedies.

DISCLAIMER OF WARRANTY

DISCLAIMER OF WARRANTIES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, ANRITSU COMPANY AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE PRODUCT. THE USER ASSUMES THE ENTIRE RISK OF USING THE PRODUCT. ANY LIABILITY OF PROVIDER OR MANUFACTURER WILL BE LIMITED EXCLUSIVELY TO PRODUCT REPLACEMENT.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL ANRITSU COMPANY OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THE PRODUCT, EVEN IF ANRITSU COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. BECAUSE SOME STATES AND JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

TRADEMARK ACKNOWLEDGMENTS

BTS Master, Spectrum Master, VNA Master, Site Master, and Cell Master are all trademarks of Anritsu Company.

NOTICE

Anritsu Company has prepared this manual for use by Anritsu Company personnel and customers as a guide for the proper installation, operation and maintenance of Anritsu Company equipment and computer programs. The drawings, specifications, and information contained herein are the property of Anritsu Company, and any unauthorized use or disclosure of these drawings, specifications, and information is prohibited; they shall not be reproduced, copied, or used in whole or in part as the basis for manufacture or sale of the equipment or software programs without the prior written consent of Anritsu Company.

UPDATES

Updates, if any, can be downloaded from the Documents area of the Anritsu Website at: http://www.anritsu.com

For the latest service and sales contact information in your area, please visit: http://www.anritsu.com/contact.asp

Notes On Export Management

This product and its manuals may require an Export License or approval by the government of the product country of origin for re-export from your country.

Before you export this product or any of its manuals, please contact Anritsu Company to confirm whether or not these items are export-controlled.

When disposing of export-controlled items, the products and manuals need to be broken or shredded to such a degree that they cannot be unlawfully used for military purposes.

Mercury Notification

This product contains no mercury.

Restriction of Hazardous Substances (RoHS) Directive

This product is fully RoHS compliant.



European Parliament and Council Directive 2002/96/EC

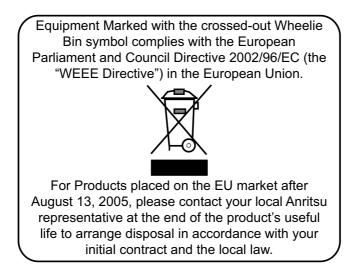


Table of Contents

1-1	Introduction
1-2	Compatible Instruments 1-1 Thick-Case (with Wire Tilt Bail) 1-1 Thin-Case (with Wire Tilt Bail) 1-1 Thin-Case (with New Style Integrated Tilt Bail) 1-1 Compact-Case 1-1
1-3	Tilt Bail Identification for Thick-Case Instruments. 1-2 Wire Tilt Bail 1-2 Integrated Tilt Bail 1-3
1-4	Part Numbers
1-5	Instrument Mounting Dimensions 1-4
1-6	Rack Mount Accessory Overview 1-5
1-7	Thick-Case Instruments (9.5 cm Thick) 1-6 Mounting Instructions for Thick-case Instruments (with Wire Tilt Bail) 1-6 Mounting the Instrument 1-7
1-8	Thin-Case Instruments (8 cm Thick). 1-8 Mounting Instructions for Thin-case Instruments. 1-8 Mounting the Instrument 1-9
1-9	Thin-Case Instruments (8.6 cm thick) (with New Integrated Tilt Bail). 1-10 Mounting Instructions 1-10 Mounting the Instrument 1-11
1-10	Compact-Case Instruments (9.1 cm Thick) 1-12 Mounting Instructions for Compact-case Instruments 1-12 Mounting the Instrument 1-13
1-11	Rack Mount Assembly Dimensions 1-15 Main Bracket (A) 1-15 Thin-Case Spacer (B) (for Wire Tilt Bail) 1-16 Case Spacer (D) (for New Style Integrated Tilt Bail) 1-17 Compact-Case Bracket (C) 1-18

Chapter 1 — Installation

1-1 Introduction

This publication provides instructions for mounting Anritsu handheld instruments into the Anritsu Rack Mount Accessory, part number 66864.

1-2 Compatible Instruments

This section lists describes the instrument types that are compatible with this rack-mount kit.

Thick-Case (with Wire Tilt Bail)

This instrument type installs into the A bracket without spacers.

Thin-Case (with Wire Tilt Bail)

This instrument type installs into the A bracket with the additional B spacer installed.

Thin-Case (with New Style Integrated Tilt Bail)

This instrument type installs into the A bracket with the additional D spacer installed.

Compact-Case

This instrument type installs into the A bracket with the additional B spacer installed and the tilt bail is removed and replaced with the C bracket.

Noto	In each of the sections describing the installation of an instrument with this mounting kit (sec 1-7
Note	through 1-10), the Main Bracket (A) is dismounted from the rack and is lying on its back.

Note Thick-Case instruments with New Style Integrated Tilt Bail not compatible with Rack Mount Kit.

1-3 Tilt Bail Identification for Thick-Case Instruments

Wire Tilt Bail

Thick-cased instruments with the wire-style tilt-bail are compatible with the rack mount.



Figure 1-1. Wire Tilt Bail on Thick Cased Instrument

Integrated Tilt Bail

The integrated style tilt-bail on thick-cased instruments is not removable. Instruments with this type of tilt bail are not compatible with the Rack Mount Kit. Models affected are MS203xC, MT8220T.



Figure 1-2. Integrated Tilt Bail on Thick Case

1-4 Part Numbers

The Rack Mount Accessory Kit includes several parts, which are:

 Table 1-1.
 Anritsu Part Numbers for Rack Mount Accessory

Part Number	Туре	Description	Label
66864	Assembly:	NEXTGEN 76 mm RCKMNT ASSY	
3-67748	Bracket:	NEXTGEN 76 mm RCKMNT BRKT	Α
3-67749	Spacer:	NEXTGEN 76 mm RCKMNT SPCR	В
3-85158	Spacer:	NEXTGEN 76 mm RCKMNT SPCR	D
3-73379	Bracket:	NEXTGEN CMPCT-CASE BRKT	С
10580-00338	Document:	This Installation Guide	

1-5 Instrument Mounting Dimensions

 Table 1-2.
 Mounting Dimensions

Instrument Case Type	Case Depth	Use With Bracket and/or Spacer:
Thick (with wire tilt bail)	9.5 cm	A only
Thin (with wire tilt bail)	8 cm	A and B
Thin (with new style integrated tilt bail)	8.6 cm	A and D
Compact	9.1 cm	A, B and C
Thick (with integrated, plastic bail)	10.0 cm	n/a

1-6 Rack Mount Accessory Overview

Four plastic latches hold Anritsu handheld instruments in the Rack Mount. These latches hold tight to instrument bumpers directly (with or without B or D spacers) or to the bumpers on Compact-Case Bracket (C). Tension on the latches prevents the latches from sliding away from the bumpers. Test the mounted instrument to ensure that the mounting tension meets your specifications. For tension adjustment, refer to the footnotes on page 1-6.

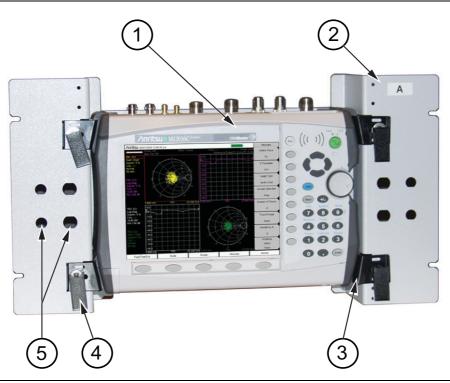


Figure 1-3. Handheld Instrument Mounted in Rack

1.	Sample thick-case instrument (MS2036C VNA Master) mounted in rack assembly
2.	Main Bracket for thick-case instruments (9.5 cm)
3.	Plastic Bracket held tight by Latch Handle (one of four)
4.	Latch Handle (one of four)
5.	Mounting Holes for additional connectors (refer to Step 5 on page 1-6)

1-7 Thick-Case Instruments (9.5 cm Thick)¹

Mounting Instructions for Thick-case Instruments (with Wire Tilt Bail)

Needed Rack Mount Kit Components	Sticker Label
1. Main Bracket with four Latches and four Brackets	A

- **1.** Remove the carry handle by removing the two screws (with straight-blade screw driver) from your instrument and save handle, screws, and washers for future use.
- 2. Remove any spacers (if installed) from the Main Bracket (A) and save for future use.
- **3.** Loosen the four latching brackets on the rack (refer to Figure 1-4) by lifting up the latch handles.²
- 4. Push the four latching brackets away from center.
- 5. Mount additional connectors (if needed) in the holes provided in the bracket.

Note There are four large holes for Amphenol N and four small holes for Amphenol BNC.

6. Put instrument into Main Bracket (A), pushing it against the back and resting on the ledge of Main Bracket (A).

The factory-applied "A" label marks the top of the main bracket.

- **Note** The ledge is centered at the bottom of the main bracket (A). It provides additional instrument support should the instrument and mounting assembly be subject to severe forces.
- 7. Position the four plastic latching brackets onto the bumpers of the instrument by sliding each latching bracket as far as it will go over the instrument bumper.
- **8.** Push down the four latch handles to secure your instrument.²
- 9. Mount the Main Bracket (A) and instrument onto a 19-inch (48.3 cm) rack.

^{1.} This section applies only to thick-cased instruments that have the wire bail. Thick-cased instruments with the integrated bail (e.g., MT8220T) are not compatible with the Rack Mount kit.

^{2.} To adjust latching bracket tension, pull handles up to loosen latching bracket, then tighten or loosen by adjusting the hex screw on the back side of each latching bracket. This tension is designed to prevent the latching brackets from sliding sideways, away from the instrument bumpers. Test the mounted instrument to be sure that mounting tension meets your specifications.

Mounting the Instrument

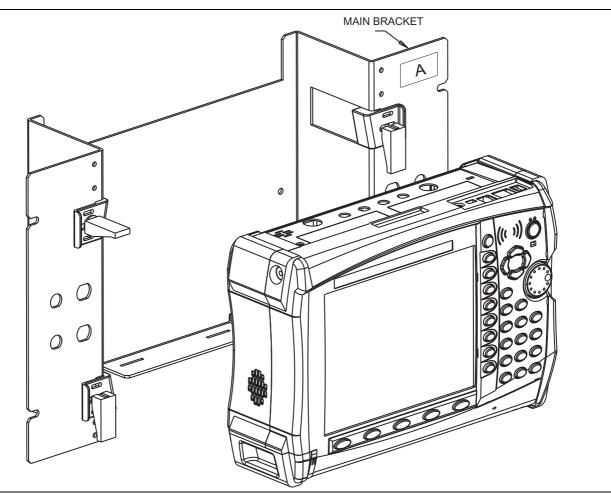


Figure 1-4. Rack Mount with Thick-Case Instrument

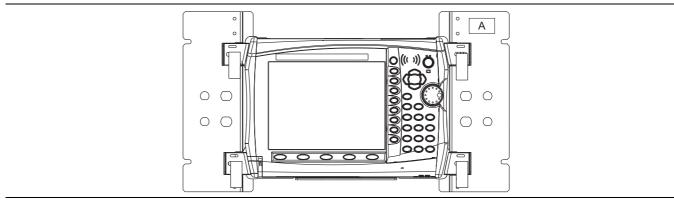


Figure 1-5. Thick-Case Instrument Mounted in Rack

1-8 Thin-Case Instruments (8 cm Thick)

Mounting Instructions for Thin-case Instruments

Rack Mount Components	Sticker Label
1. Main Bracket with four Latches and four Brackets	A
2. Thin-Case Spacer	В

- **1.** Remove the carry handle by removing the two screws (with straight-blade screw driver) from your instrument and save handle, screws, and washers for future use.
- 2. Ensure that only the Thin-Case Spacer (B) is installed in the Main Bracket (A).
- 3. Ensure the tightness of the thumb screws that hold spacer (B) to bracket (A). Refer to Figure 1-6.
- 4. Loosen the four latching brackets by lifting up the latch handles.¹
- 5. Push the four latching brackets away from center.

6. Mount additional connectors (if needed) in the holes provided in bracket (A).

Note There are four large holes for Amphenol N and four small holes for Amphenol BNC.

7. Put instrument into bracket (A), pushing it against spacer (B) and resting the instrument on the ledge of bracket (A).

The factory-applied labels "A" and "B" mark the tops of the main bracket and the spacer.

Note The ledge is centered at the bottom of the main bracket (A). It provides additional instrument support should the instrument and mounting assembly be subject to severe forces.

8. Position the four plastic latching brackets onto the bumpers of the instrument by sliding each latching bracket as far as it will go over the instrument bumper.

9. Push down the four latch handles to secure your instrument.¹

10. Mount bracket (A) with spacer (B) and instrument onto 19-inch (48.3 cm) rack.

^{1.} To adjust latching bracket tension, pull handles up to loosen latching bracket, then tighten or loosen by adjusting the hex screw on the back side of each latching bracket. This tension is designed to prevent the latching brackets from sliding sideways, away from the instrument bumpers. Test the mounted instrument to be sure that mounting tension meets your specifications.

Mounting the Instrument

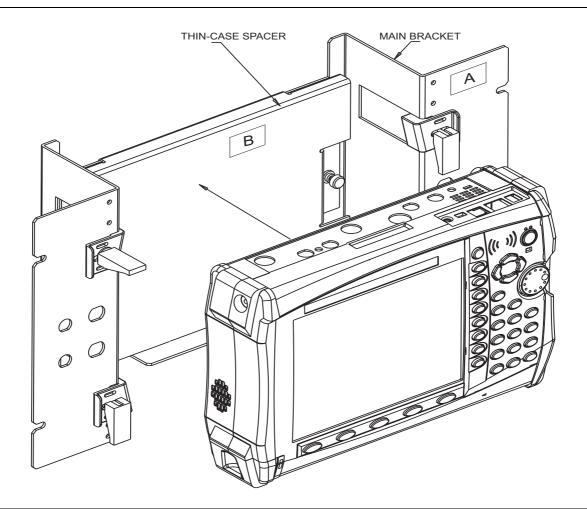


Figure 1-6. Thin-Case Rack Mount with Instrument

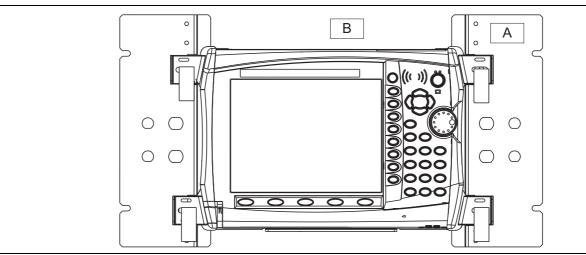


Figure 1-7. Instrument Mounted in Thin-Case Rack

1-9 Thin-Case Instruments (8.6 cm thick) (with New Integrated Tilt Bail)

This section contains instructions for mounting Thin Case instruments with the new integrated bail.

Mounting Instructions

Needed Rack Mount Kit Components	Sticker Label
1. Main Bracket with four Latches and four Brackets	A
2. New Thin Case Spacer	D

- **1.** Remove the carry handle by removing the two screws (with straight-blade screw driver) from your instrument and save handle, screws, and washers for future use.
- 2. Ensure that only the New Thin Case Spacer (D) is installed in the Main Bracket A and is resting on the ledge of bracket (A).

The factory-applied labels "A" and "D" mark the tops of the bracket (A) and the spacer (D).

- **Note** The ledge is centered at the bottom of the main bracket (A). It provides additional instrument support should the instrument and mounting assembly be subject to severe forces.
- **3.** Ensure the tightness of the thumb screws that hold the spacer (D) to the bracket (A). Refer to Figure 1-11 on page 1-14.
- 4. Loosen the four latching brackets by lifting up the latch handles.
- 5. Push the four latching brackets away from center.
- 6. Mount additional connectors (if needed) in the holes provided in Main Bracket (A).

Note There are four large holes for Amphenol N and four small holes for Amphenol BNC.

- 7. Slide instrument and attached spacer (D) into bracket (A), and resting on the ledge of bracket (A).
- **8.** Position the four plastic latching brackets onto the bumpers of the instrument by sliding each latching bracket as far as it will go over the instrument bumper.
- 9. Push down the four latch handles to secure your instrument.¹
- **10.** Mount bracket (A) with spacer (D) and instrument onto 19-inch (48.3 cm) rack.

^{1.} To adjust latching bracket tension, pull handles up to loosen latching bracket, then tighten or loosen by adjusting the hex screw on the back side of each latching bracket. This tension is designed to prevent the latching brackets from sliding sideways, away from the New Thin Case Spacer (D). Test the mounted instrument to be sure that mounting tension meets your specifications.

Mounting the Instrument

The upper holes are spaced wider than the lower holes due to the design of the tilt bail. Note that the factory-applied "D" label marks the top of the New Thin Case Spacer.

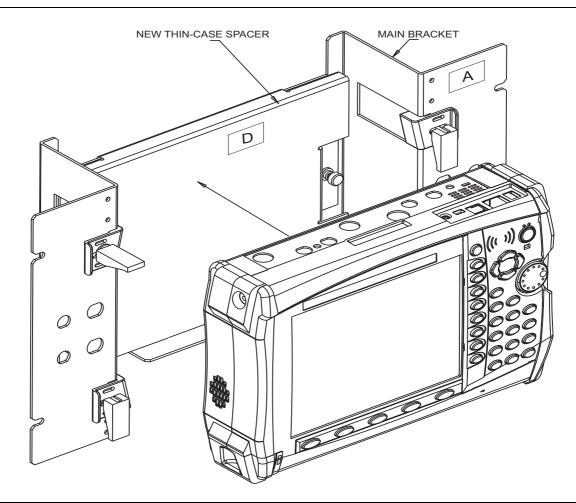


Figure 1-8. New Thin Case Rack Mount — Preparing the Instrument

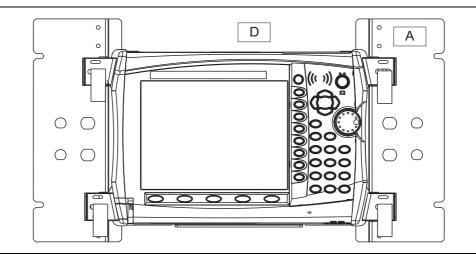


Figure 1-9. Thin Case Instrument Mounted with New Thin Case Spacer (D)

1-10 Compact-Case Instruments (9.1 cm Thick)

Mounting Instructions for Compact-case Instruments

Rack Mount Components	Sticker Label
1. Main Bracket with four Latches and four Brackets	A
2. Thin-Case Spacer	В
3. Compact-Case Bracket	С

- **1.** Remove the four screws from instrument's tilt bail (using a Phillips-head screw driver) and keep the screws for Step 3.
- 2. Detach tilt bail from instrument and save tilt bail for future use.
- **3.** Secure your instrument to the Compact-Case Bracket (C) with the four screws that were removed from the tilt bail in Step 1. Refer to Figure 1-10 on page 1-13. Note that the upper two holes are spaced wider apart than the bottom two holes due to the tilt bail mounting configuration.
- **4.** Ensure that Thin-Case Spacer (B) is resting on the ledge of Main Bracket (A) and that the lip of spacer B is over the top edge of bracket A. Note that the ledge is centered at the bottom of the bracket A.

The factory-applied labels "A," "B," and "C" mark the tops of the Main Bracket and the spacers.

- **Note** The ledge is centered at the bottom of the main bracket (A). It provides additional instrument support should the instrument and mounting assembly be subject to severe forces.
- **5.** Ensure the tightness of the thumb screws that hold the spacer (B) to the bracket (A). Refer to Figure 1-11 on page 1-14.
- 6. Loosen the four latching brackets by lifting up the latch handles.
- 7. Push the four latching brackets away from center.
- 8. Mount additional connectors (if needed) in the holes provided in Main Bracket (A).

Note There are four large holes for Amphenol N and four small holes for Amphenol BNC.

- **9.** Slide instrument and attached bracket (C) into bracket (A), pushing it against the spacer (B) and resting on the ledge of bracket (A).
- **10.** Position the four plastic latching brackets onto the bumpers of the bracket (C) by sliding each latching bracket as far as it will go over the bracket bumper.
- **11.** Push down the four latch handles to secure your instrument.¹
- 12. Mount bracket (A) with spacer (B), bracket (C), and instrument onto 19-inch (48.3 cm) rack.

^{1.} To adjust latching bracket tension, pull handles up to loosen latching bracket, then tighten or loosen by adjusting the hex screw on the back side of each latching bracket. This tension is designed to prevent the latching brackets from sliding sideways, away from the Compact-Case Bracket (C). Test the mounted instrument to be sure that mounting tension meets your specifications.

Mounting the Instrument

The upper holes are spaced wider than the lower holes to follow the design of the tilt bail. Note that the "C" label marks the top of the Compact-Case Bracket.

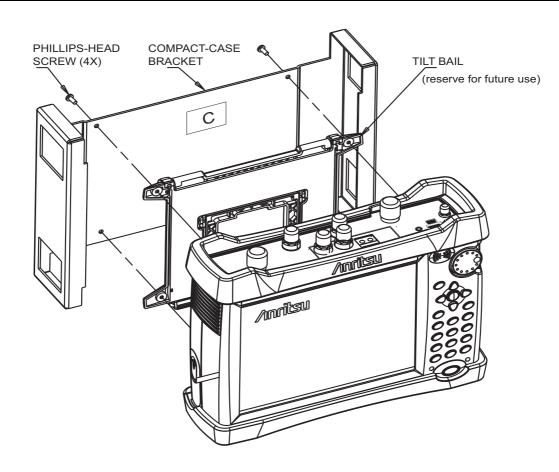


Figure 1-10. Compact-Case Rack Mount — Preparing the Instrument

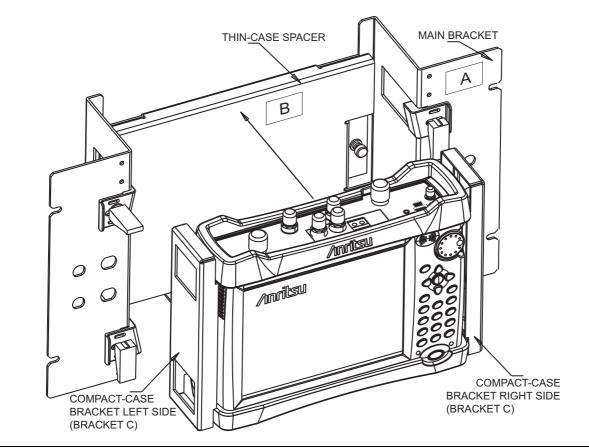


Figure 1-11. Compact-Case Rack Mount — Mounting the Instrument

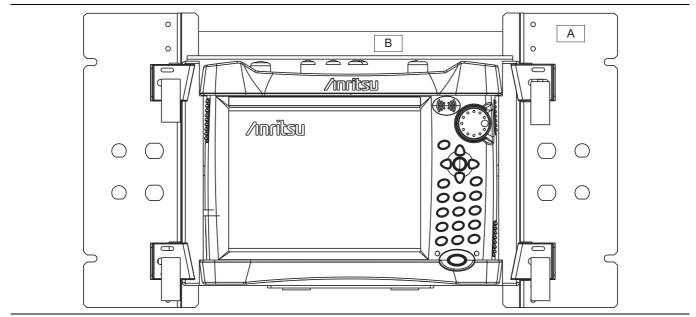


Figure 1-12. Instrument Mounted in Compact-Case Rack

1-11 Rack Mount Assembly Dimensions

Spacing of the openings in the Main Bracket, the Thin and Thin Case New Style spacers, and Compact bracket are shown in these figures:

Main Bracket (A)

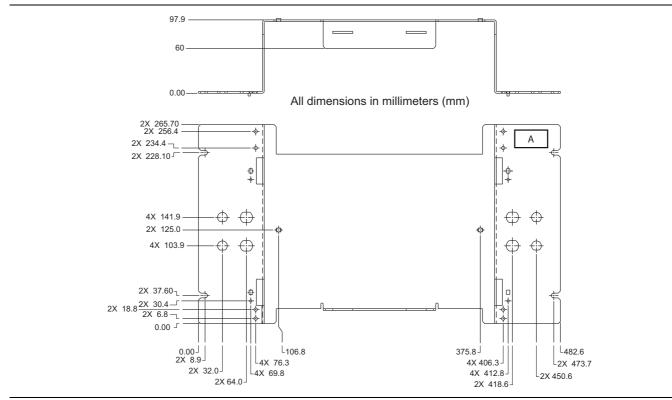


Figure 1-13. Main Bracket (A) Dimensions

Thin-Case Spacer (B) (for Wire Tilt Bail)

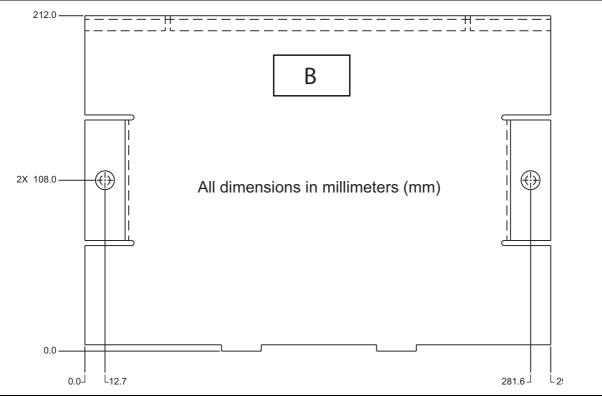
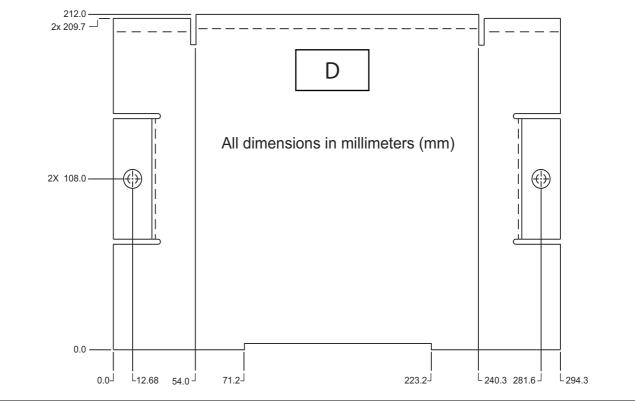


Figure 1-14. Thin-Case Spacer (B) Dimensions



Case Spacer (D) (for New Style Integrated Tilt Bail)

Figure 1-15. Thin-Case Bracket (D) Dimensions (for New Style Integrated Tilt Bail)

Compact-Case Bracket (C)

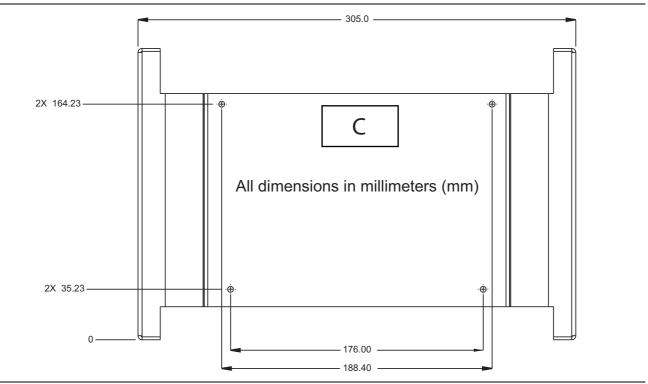


Figure 1-16. Compact-Case Bracket (C) Dimensions





 Δ Anritsu utilizes recycled paper and environmentally conscious inks and toner.

Anritsu Company 490 Jarvis Drive Morgan Hill, CA 95037-2809 USA http://www.anritsu.com