# VectorStar<sup>™</sup> Vector Network Analyzers and Accessories

This guide provides warranty, safety and regulatory compliance information for the VectorStar $^{\text{TM}}$  Series VNA products. The VectorStar $^{\text{TM}}$  Series VNA products provide powerful network measurement tools for performance analysis of RF and microwave devices with frequency ranges spanning from 70 kHz to 70 GHz in a single connector, and up to 1.1 THz using broadband mm-wave modules.

For additional information and literature, visit the product page of your instrument and select the Library tab:

# MS464xB VNA, ME7838x and ME7838A4 Broadband VNA, 3743x, 3744x-xx, MA25300A Broadband/Banded mm-Wave Modules, MN469xx Multiport Test Set

http://www.anritsu.com/en-US/products-solutions/products/MS464xB-series.aspx http://www.anritsu.com/en-US/Products-Solutions/Products/ME7838A.aspx http://www.anritsu.com/en-US/Products-Solutions/Products/ME7838A4.aspx

## 3680x UTF, 36585 AutoCal Module, MN4765B O/E Calibration Module

http://www.anritsu.com/en-US/components-accessories/products/3680-series http://www.anritsu.com/en-US/components-accessories/products/36585-Series.aspx http://www.anritsu.com/en-US/components-accessories/products/mn4765b.aspx

## 365xx, 366xx Calibration Kits

http://www.anritsu.com/en-US/components-accessories/products/3651-series http://www.anritsu.com/en-US/components-accessories/products/3652-Series.aspx http://www.anritsu.com/en-US/components-accessories/products/3654D.aspx http://www.anritsu.com/en-US/components-accessories/products/3656.aspx http://www.anritsu.com/en-US/components-accessories/products/3659.aspx http://www.anritsu.com/en-US/components-accessories/products/366X-Series.aspx

## **Contacting Anritsu**

http://www.anritsu.com/contact.asp

Here, you can find the latest sales, service and support contact information for your country or region, provide online feedback, complete a "Talk to Anritsu" form to get your questions answered, or obtain other services offered by Anritsu.



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# 1 — Important Notices and Warranty

## 1-1 Applicable Product Models

The information in this guide relates to the following product models:

VectorStar™ VNA Instruments	Broadband/Banded Millimeter-Wave Modules	4 Port VNA Test Sets	Calibration Devices, Kits, and Measurement Fixtures
MS4642B	3743A	MN4694B	3651A
MS4644B	3743E	MN4697B	3652A
MS4645B	3744A-EE	MN4694C	3654D
MS4647B	3744E-EE	MN4697C	3656B
ME7838A	3744A-EW		3659
ME7838D	3744E-EW		3666-1
ME7838E	3744A-Rx		3668-1
ME7838A4	3744E-Rx		3669B
	MA25300A		3680-20
			3680K
			3680V
			36585K-2x
			36585V-2x
			MN4765B

#### 1-2 Unauthorized Use or Disclosure

Anritsu Company has prepared VectorStar user documentation 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.

## 1-3 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 must be broken or shredded to such a degree that they cannot be unlawfully used for military purposes.

## 1-4 Trademark Acknowledgments

The following trademark acknowledgments are listed for one or more of the products listed in Section 1-1.

Anritsu, VectorStar, AutoCal, Advanced-LRM, K-Connector, V-Connector, and W1-Connector are trademarks or registered trademarks of the Anritsu Company, Morgan Hill, California, USA.

Hampshire is a registered trademark and TSHARC a trademark of Microchip Technology.

LabView, LabWindows, NI, NI-VISA, are registered trademarks of the National Instruments Corporation.

Smith (Smith Chart) is a registered trademark of Analog Instruments Company.

Teflon is a registered trademark and brand name of the DuPont Company.

Windows, Windows 7, and Windows XP are registered trademarks of Microsoft Corporation.

Bi-Lobe is a registered trademark of Omnetics Corporation.

Teflon is a registered trademark and brand name of the DuPont Company.

All other trademarks mentioned are the property of their respective companies.

## 1-5 Warranty Information

Anritsu products are warranted against defects in materials and workmanship as listed below.

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.

#### 3 Year Warranty:

MS464xB Series VNA

MN464xC Series 4-Port VNA

3743x, 3744x-xx Broadband/Banded mm-Wave Modules; MA25300A Broadband mm-Wave Module

#### 1 Year Warranty:

ME7838x Series 2-Port Broadband/Banded Millimeter-Wave VNA

ME7838A4 Series 4-Port Broadband/Banded Millimeter-Wave VNA

MN469xB Series 4-Port VNA

MN4765B O/E Calibration Module

3680 Series Universal Test Fixture (UTF)

36585-Series Precision Automatic Calibrators (AutoCal)

36xxx Series Calibration/System Performance Verification Kits

## **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 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.

## 2 — Regulatory Compliance

Following are compliance notices and Declarations of Conformity applicable to the VectorStar™ products.

## 2-1 Compliance Notifications

## **CE Conformity Marking**

**Applicable Models:** MS464xB, ME7838x, ME7838A4, MN464xC, MN464xB, MN4765B, 36585, 3743x, 3744-xx. MA25300A



Anritsu affixes the CE Conformity marking onto its conforming products in accordance with Council Directives of The Council Of The European Communities in order to indicate that these products conform to the EMC and LVD directive of the European Union (EU).

Anritsu affixes the CE Conformity marking onto its conforming products in accordance with Council Directives of The Council Of The European Communities in order to indicate that these products conform to the EMC and LVD directive of the European Union (EU).

## **European Parliament and Council Directive 2002/96/EC**

**Applicable Models:** MS464xB, ME7838x, ME7838A4, MN464xC, MN464xB, MN4765B, 36585, 3743x, 3744-xx, MA25300A



Equipment Marked with the crossed-out Wheelie Bin symbol complies with the European Parliament and Council Directive 2002/96/EC (the "WEEE Directive") in the European Union.

For Products placed on the EU market after August 13, 2005, please contact your local Anritsu representative at the end of the product's useful life to arrange disposal in accordance with your initial contract and the local law.

#### **RCM Conformity Marking**

**Applicable Models:** MS464xB, ME7838x, ME7838A4, MN464xC, MN464xB, MN4765B, 36585, 3743x, 3744x-xx, MA25300A



Anritsu affixes the Regulatory Compliance Mark (RCM) onto its conforming products in accordance with the electromagnetic compliance regulations of Australia and New Zealand in order to indicate that these products conform to the EMC regulations of Australia and New Zealand.

## **KCC Conformity Marking**

**Applicable Models:** MS464xB, ME7838x, ME7838A4, MN464xC, MN464xB, MN4765B, 36585, 3743x, 3744x-xx, MA25300A



Anritsu affixes the Korean Communications Commissions (KCC) mark onto its conforming products in accordance with the electromagnetic compliance regulations of Korea

## **Recycle Marking**

**Applicable Models:** MS464xB, ME7838x, ME7838A4, MN464xC, MN464xB, MN4765B, 36585, 3743x, 3744x-xx, MA25300A



Anritsu affixes the universal recycle symbol onto its products to indicate that the marked part is made from recyclable materials and should be recycled. Materials should be recycled in accordance with your local regulatory requirements.

Anritsu affixes the universal recycle symbol onto its products to indicate that the marked part is made from recyclable materials and should be recycled. Materials should be recycled in accordance with your local regulatory requirements.

## **Mercury Notification**

**Applicable Models:** MS464xB

The above listed products use an LCD backlight lamp that contains mercury. Disposal may be regulated due to environmental considerations. Please contact your local authorities or, within the United States, the Electronic Components Industry Association (ECIA), for disposal or recycling information.

## Perchlorate Material Notification – Special Handling May Apply

Applicable Models: MS464xB, MN4675B

Notification for California customers: The products listed above use a small Lithium battery installed internally on the circuit board that may contain perchlorate. Disposal may be regulated due to environmental considerations. Please contact your local authorities for disposal or recycling information. For information, see: http://www.dtsc.ca.gov/hazardous waste/perchlorate/

## **Chinese RoHS Compliance Statements**

Applicable Models: MS464xB, ME7838x, ME7838A4

产品中有毒有害物质或元素的名称及含量

部件名称	<b>牛名称</b> 有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
	(Pb)	(Hg)	(Cd)	[Cr (VI)]	(PBB)	(PBDE)
印刷线路板	×	0	×	×	0	0
(PCA)	_ ^	0	_ ^	^		
机壳、支架	X	0	×	×	_	0
(Chassis)			^	^		
LCD	X	×	×	×	0	0
其他(电缆、风扇、						
连接器等)	×	0	×	×	0	0
(Appended goods)						

For Chinese Customers Only YLNB

#### 环保使用期限



这个标记是根据 2006/2/28 公布的「电子信息产品污染控制管理办法」以及 SJ/T 11364-2006「电子信息产品污染控制标识要求」的规定,适用于在中国销售的电子信息产品的环保使用期限。仅限于在遵守该产品的安全规范及使用注意事项的基础上,从生产日起算的该年限内,不会因产品所含有害物质的泄漏或突发性变异,而对环境污染,人身及财产产生深刻地影响。

注) 生产日期标于产品序号的前四码(如 S/N 0728XXXX 为07 年第 28 周生产)。

Applicable Models: MN464xC, MN464xB, MN4765B, 36585, 3680x, 3743x, 3744x-xx, MA25300A,

产品中有毒有害物质或元素的名称及含量 For Chinese Customers Only NLNB

部件名称	有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
	(Pb)	(Hg)	(Cd)	[Cr(VI)]	(PBB)	(PBDE)
印刷线路板	×	0	×	×	0	0
(PCA)	^		^	^		U
机壳、支架	×	0	×	×	0	0
(Chassis)						0
其他(电缆、风扇、						
连接器等)	×	0	×	×	0	0
(Appended goods)						

〇:表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

#### 环保使用期限



这个标记是根据 2006/2/28 公布的「电子信息产品污染控制管理办法」以及 SJ/T 11364-2006「电子信息产品污染控制标识要求」的规定,适用于在中国 销售的电子信息产品的环保使用期限。仅限于在遵守该产品的安全规范及使用 注意事项的基础上,从生产日起算的该年限内,不会因产品所含有害物质的泄漏或突发性变异,而对环境污染,人身及财产产生深刻地影响。

注) 生产日期标于产品序号的前四码(如 S/N 0728XXXX 为 07 年第 28 周生产)。

〇:表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

<sup>×:</sup>表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

<sup>×,</sup>表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

## 2-2 Declarations of Conformity

## VectorStar™ MS464xB VNA

## **DECLARATION OF CONFORMITY**

Manufacturer's Name: ANRITSU COMPANY

Manufacturer's Address: Microwave Measurements Division

490 Jarvis Drive

Morgan Hill, CA 95037-2809

USA

declares that the product specified below:

Product Name: VectorStar (Microwave Vector Network Analyzer)

Model Number: MS464XB

conforms to the requirement of:

EMC Directive: 2004/108/EC Low Voltage Directive: 2006/95/EC

Electromagnetic Compatibility: EN61326-1:2006

Emissions: EN55011:2009 +A1:2010 Group 1 Class A

Immunity: EN 61000-4-2:2009 4 kV CD, 8 kV AD

EN 61000-4-3:2006 +A2:2010 3 V/m

EN 61000-4-4;2004 0.5 kV S-L, 1 kV P-L EN 61000-4-5;2006 0.5 kV L-L, 1 kV L-E

EN 61000-4-6: 2009 3 V

EN 61000-4-11: 2004 100% @ 20 ms

**Electrical Safety Requirement:** 

Product Safety: EN 61010-1:2010

Eric McLean, Corporate Quality Director

Morgan Hill, CA

22 Aul 2013

European Contact: For Anritsu product CE information, contact Anritsu EMEA Limited, 200 Capability Green, Luton, Bedfordshire, LU1 3LU, England. (Telephone: +44 (0)1582 433200; Email: <u>bert.francis@anritsu.com</u>)

## VectorStar™ ME7838A/D/E Broadband VNA

## DECLARATION OF CONFORMITY

Manufacturer's Name: ANRITSU COMPANY

Manufacturer's Address: Microwave Measurements Division

490 Jarvis Drive

Morgan Hill, CA 95037-2809

USA

declares that the product specified below:

Product Name: VectorStar Broadband VNA

Model Number: ME7838A, ME7838D, ME7838E

conforms to the requirement of:

EMC Directive: 2004/108/EC Low Voltage Directive: 2006/95/EC

Electromagnetic Compatibility: EN61326-1:2006

Emissions: EN55011:2009 +A1:2010 Group 1 Class A

Immunity: EN 61000-4-2:2009 4 kV CD, 8 kV AD

EN 61000-4-3:2006 +A2:2010 3 V/m

EN 61000-4-4:2004 0.5 kV S-L, 1 kV P-L EN 61000-4-5:2006 0.5 kV L-L, 1 kV L-E

EN 61000-4-6: 2009 3 V

EN 61000-4-11: 2004 100% @ 20 ms

Electrical Safety Requirement:

Product Safety: EN 61010-1:2010

Eric McLean, Corporate Quality Director

Morgan Hill, CA

20 MARCM 2014

Date

ı

European Contact: For Anritsu product CE information, contact Anritsu EMEA Limited, 200 Capability Green, Luton. Bedfordshire. LUI 3LU, England. (Telephone: +44 (0)1582 433200; Email: bert.francis@anritsu.com)

## VectorStar™ ME7838A4 4-Port Broadband VNA

## **DECLARATION OF CONFORMITY**

Manufacturer's Name: ANRITSU COMPANY

Manufacturer's Address: Microwave Measurements Division

490 Jarvis Drive

Morgan Hill, CA 95037-2809

USA

declares that the product specified below:

Product Name: VectorStar 4-Port Broadband VNA

Model Number: ME7838A4

conforms to the requirement of:

EMC Directive: 2004/108/EC Low Voltage Directive: 2006/95/EC

**Electromagnetic Compatibility: EN61326-1:2006** 

Emissions: EN55011:2009 +A1:2010 Group 1 Class A

Immunity: EN 61000-4-2:2009 4 kV CD, 8 kV AD

EN 61000-4-3:2006 +A2:2010 3 V/m

EN 61000-4-4:2004 0.5 kV S-L, 1 kV P-L EN 61000-4-5:2006 0.5 kV L-L, 1 kV L-E

EN 61000-4-6: 2009 3 V

EN 61000-4-11: 2004 100% @ 20 ms

## **Electrical Safety Requirement:**

Product Safety: EN 61010-1:2010

Eric McLean, Corporate Quality Director

Morgan Hill, CA

28 Oct 2014 Date

European Contact: For Anritsu product CE information, contact Anritsu EMEA Limited, 200 Capability Green, Luton, Bedfordshire, LU1 3LU, England. (Telephone: +44 (0)1582 433200; Email: <a href="mailto:bert.francis@anritsu.com">bert.francis@anritsu.com</a>)

## VectorStar™ MN469xB/MN469xC Multiport Test Set

## **DECLARATION OF CONFORMITY**

Manufacturer's Name: ANRITSU COMPANY

Manufacturer's Address: Microwave Measurements Division

490 Jarvis Drive

Morgan Hill, CA 95037-2809

declares that the product specified below:

**Product Name:** Multi-Port Test Set

Model Number: MN469XB, MN469XC

conforms to the requirement of:

EMC Directive: 2004/108/EC Low Voltage Directive: 2006/95/EC

Electromagnetic Compatibility: EN61326-1:2006

Emissions: EN55011:2009 +A1:2010 Group 1 Class A

Immunity: EN 61000-4-2:2009 4 kV CD, 8 kV AD

> EN 61000-4-3:2006 +A2:2010 3 V/m

EN 61000-4-4:2004 0.5 kV S-L, 1 kV P-L EN 61000-4-5:2006 0.5 kV L-L, 1 kV L-E

EN 61000-4-6: 2009 3 V

EN 61000-4-11: 2004 100% @ 20 ms

**Electrical Safety Requirement:** 

Product Safety: EN 61010-1:2010

Eric McLean, Corporate Quality Director

Morgan Hill, CA

20 Feb 2014

European Contact: For Anritsu product CE information, contact Anritsu EMEA Limited, 200 Capability Green, Luton, Bedfordshire, LU1 3LU, England. (Telephone: +44 (0)1582 433200; Email: bert.francis@anritsu.com)

#### MN4765B OE Calibration Module

## **DECLARATION OF CONFORMITY**

Manufacturer's Name: ANRITSU COMPANY

Manufacturer's Address: Microwave Measurements Division

490 Jarvis Drive

Morgan Hill, CA 95037-2809

**USA** 

declares that the product specified below:

Product Name: O/E Calibration Module

Model Number: MN4765B

conforms to the requirement of:

EMC Directive: 2004/108/EC

Low Voltage Directive: 2006/95/EC

Electromagnetic Compatibility: EN 61326-1:2013

Emissions: EN 55011:2009 +A1:2010 Group 1 Class A

Immunity: EN 61000-4-2:2009 4 kV CD, 8 kV AD

EN 61000-4-3:2006 +A2:2010 3 V/m

EN 61000-4-4:2004 0.5 kV S-L, 1 kV P-L EN 61000-4-5:2006 0.5 kV L-L, 1 kV L-E

EN 61000-4-6: 2009 3 V

EN 61000-4-11: 2004 100% @ 20 ms

#### **Electrical Safety Requirement:**

Product Safety: EN 61010-1:2010

Eric McLean, Corporate Quality Director

Morgan Hill, CA

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European Contact: For Anritsu product CE information, contact Anritsu EMEA Limited, 200 Capability Green, Luton, Bedfordshire, LU1 3LU, England. (Telephone: +44 (0)1582 433200; Email: bert.francis@anritsu.com)

## Precision Autocal 36585 Series Automatic VNA Calibrator

## **DECLARATION OF CONFORMITY**

Manufacturer's Name: ANRITSU COMPANY

Manufacturer's Address: Microwave Measurements Division

490 Jarvis Drive

Morgan Hill, CA 95037-2809

USA

declares that the product specified below:

**Product Name:** Precision AutoCal 36585-Series Automatic VNA Calibrator

Model Number: 3658X Series

conforms to the requirement of:

EMC Directive:

2004/108/EC

Low Voltage Directive:

2006/95/EC

**Electromagnetic Compatibility: EN61326:2006** 

Emissions:

EN55011: 2007 Group 1 Class A

Immunity:

EN 61000-4-2:1995 +A1:1998 +A2:2001 4kV CD, 8kV AD

EN 61000-4-3:2006 +A1:2008 3V/m

EN 61000-4-4:2004 0 5kV SL, 1kV PL EN 61000-4-5:2006 0 5kV L-L, 1kV L-E

EN 61000-4-6: 2007 3V

EN 61000-4-11: 2004 100% @ 20msec

### **Electrical Safety Requirement:**

Product Safety:

EN 61010-1:2001

Eric McL ean, Corporate Quality Director

27 Jan 2009

Morgan Hill, CA

European Contact: For Anritsu product EMC & LVD information, contact Anritsu LTD, Rutherford Close, Stevenage Herts, SG1 2EF UK, (FAX 44-1438-740202)

## 3 — Safety

To reduce the risk of personal injury or loss related to equipment malfunction, Anritsu Company uses the following symbols to indicate safety-related information. You may encounter them on your products and in documentation. For your own safety, please read the information carefully before operating the equipment.

## 3-1 Safety Symbols Used in Manuals

#### Warning



Danger or Warning indicates a risk from a hazardous condition or procedure that could result in light-to-severe injury or death, or loss related to equipment malfunction. Follow all safety precautions and procedures to minimize this risk.

#### Caution



Caution indicates a risk from a hazardous procedure that could result in loss related to equipment malfunction. Follow all safety precautions and procedures to minimize this risk.

## 3-2 Safety Symbols Used on Equipment and in Manuals

The following safety symbols are used inside or on the equipment near operation locations to provide information about safety items and operation precautions. Ensure that you clearly understand the meanings of the symbols and take the necessary precautions *before* operating the equipment. Some or all of the following five symbols may or may not be used on all Anritsu equipment. In addition, there may be other labels attached to products that are not shown in the diagrams in the manual.

	This indicates a prohibited operation. The prohibited operation is indicated symbolically in or near the barred circle.
	This indicates a compulsory safety precaution. The required operation is indicated symbolically in or near the circle.
$\triangle$	This indicates a danger, warning, or caution. The contents are indicated symbolically in or near the triangle.
	This indicates a note. The contents are described in the box.

3-3 Safety Notices Safety

## 3-3 Safety Notices

#### Warning



Always refer to the operation manual when working near locations where the alert mark, shown on the left, is displayed. If equipment operation is conducted without heeding the advice in the operation manual, there is a risk of personal injury. In addition, the equipment performance may be reduced.

This alert mark is sometimes used with other marks and descriptions indicating other dangers.

#### Warning



When supplying power to this equipment, connect the accessory 3-pin power cord to a 3-pin grounded power outlet. If power is supplied without grounding the equipment, there is a risk of receiving a severe or fatal electric shock.

#### Warning



This equipment cannot be repaired by the operator. Do not attempt to remove the equipment covers or to disassemble internal components. Only qualified service technicians with a knowledge of electrical fire and shock hazards should service this equipment. There are high-voltage parts in this equipment that present a risk of severe injury or fatal electric shock. In addition, there is a risk of damage to precision components.

#### Warning



Use two or more people to lift and move this equipment, or use an equipment cart. There is a risk of back injury if this equipment is lifted by one person.

#### Caution



Electrostatic Discharge (ESD) can damage the highly sensitive circuits in the instrument. ESD is most likely to occur as test devices are being connected to, or disconnected from, the instrument's front and rear panel ports and connectors. You can protect the instrument and test devices by wearing a static-discharge wristband. Alternatively, you can ground yourself to discharge any static charge by touching the outer chassis of the grounded instrument before touching the instrument's front and rear panel ports and connectors. Avoid touching the test port center conductors unless you are properly grounded and have eliminated the possibility of static discharge.

Repair of damage that is found to be caused by electrostatic discharge is not covered under warranty.

### Warning



Laser radiation may be present at fiber-optic cable connectors and ports. This laser radiation could present an ocular hazard from either direct viewing or by diffuse reflection. Do not view the emitted laser radiation directly or indirectly because permanent blindness may result.

## 4 — Product Documentation List

All documents listed below are available on the VectorStar  $^{\text{TM}}$  User Documentation USB Storage Device 10920-00067, except for the Calibration, Verification, and System Performance Verification documents, which are included on a separate USB storage device included in each kit.

To download the latest version of these documents go to:

http://www.anritsu.com/en-us/products-solutions/products/MS464xB-series.aspx and click on the Library tab.

## 4-1 VectorStar™ MS464xB Series Vector Network Analyzers

- MS464xB Series VNA Technical Data Sheet (TDS) 11410-00611
- MS464xB Series VNA Operation Manual (OM) 10410-00317
- MS464xB Series VNA Measurement Guide (MG) 10410-00318
- MS464xB Series VNA User Interface Reference Manual (UIRM) 10410-00319
- MS464xB Series VNA Maintenance Manual (MM) 10410-00320
- MS464xB Series VNA Programming Manual (PM)- 10410-00322
- MS464xB Series VNA Programming Manual Supplement (PMS) 10410-00323
- MS464xB Series VNA User Help System 10450-00040
- MS464xB Series VNA User Documentation USB Memory Device 2300-564-R or CD 10920-00067

## 4-2 VectorStar ME7838 Series 2-Port BB/mmW Vector Network Analyzers

- ME7838A Modular BB/mm-Wave Technical Data Sheet (TDS) 11410-00593
- ME7838D Modular BB/mm-Wave Technical Data Sheet (TDS) –11410-00778
- ME7838E Modular BB/mm-Wave Technical Data Sheet (TDS) –11410-00767
- ME7838A Modular BB/mm-Wave Quick Start Guide (QSG) -10410-00292
- ME7838D Modular BB/mm-Wave Quick Start Guide (QSG) -10410-00732
- ME7838E Modular BB/mm-Wave Quick Start Guide (QSG) -10410-00729
- ME7838 Series Modular BB/mm-Wave Installation Guide (IG) -10410-00293
- Broadband/Banded Millimeter-Wave Modules Reference Manual (RM) 10410-00311
- ME7838 Series Modular BB/mm-Wave Maintenance Manual (MM) -10410-00306

# 4-3 VectorStar™ ME7838A4 4-Port BB/mm-Wave Vector Network Analyzers

- ME7838A4 4-Port Broadband VNA Technical Data Sheet (TDS) 11410-00704
- ME7838A4 4-Port Broadband VNA Quick Start Guide (QSG) 10410-00735
- ME7838A4 4-Port Broadband VNA Installation Guide (IG) 10410-00734
- ME7838A4 4-Port Broadband VNA Maintenance Manual (MM) 10410-00736
- Broadband/Banded Millimeter-Wave Modules Reference Manual (RM) 10410-00311

## 4-4 VectorStar MN469xx Series Multiport Vector Network Analyzers

- MN469xC Series Multiport VNA Measurement System Technical Data Sheet (TDS) 11410-00777
- MN469xC Series Multiport Test Set Installation Guide (IG) 10410-00737
- MN469xC Series Multiport Test Set Quick Start Guide (QSG) 10410-00738
- MN469xC Series Multiport Test Set Maintenance Manual (MM) 10410-00730
- MN469xB Series Multiport VNA Measurement System Technical Data Sheet (TDS) 11410-00528
- MN469xB Series Multiport Test Set Installation Guide (IG) 10410-00288
- MN469xB Series Multiport Test Set Quick Start Guide (QSG) 10410-00290
- MN469xB Series Multiport Test Set Maintenance Manual (MM) 10410-00305

# 4-5 Calibration, Verification, and System Performance Verification Equipment

- MN4765B O/E Calibration Module Technical Data Sheet (TDS) 11410-00843
- MN4765B O/E Calibration Module Operation Manual (OM) 10410-00742
- 36585K and 36585V Precision Auto Calibrator (AutoCal) Module Reference Manual (RM) 10410-00279
- 3650A, 3652A, and 3654D Mechanical Calibration Kit Reference Manual (RM) 10410-00278
- 366X-1 Verification Kits (3666-1 3.5mm Connectors, 3668-1 K Connectors, 3669B-1 V Connectors) and 2300-527 Performance Verification Software (PVS) User Guide (UG) – 10410-00270
- 366X-1 Verification Kit and 2300-527 PVS Quick Start Guide (QSG) 10410-00285
- 3656B W1 (1 mm) Calibration/Verification Kit and 2300-496 System Performance Verification Software
  User Guide for the VectorStar™ ME7838A/ME7828A and Lightning ME7808A/B/C BB/mm-Wave VNA
  Systems (UG) 10410-00286
- 3659 Cal-Verif- Kit-UG and 2300-558 System Performance Verification Software for BB/mm-Wave ME7838D VNA with 0.8 mm Connectors 10410-00327

## 4-6 3680 Series Universal Test Fixture (UTF)

- 3680-20, 3680K, 3680V Universal Test Fixture Technical Data Sheet (TDS) 11410-00024
- 3680-20, 3680K, 3680V Universal Test Fixture Operation/Maintenance Manual (OMM) 10410-00064





