# **Anritsu** envision : ensure

## Anritsu Ultraportable Spectrum Analyzer EduPack Bundle

Providing Today's Industry-Leading Technology to Tomorrow's Industry-Changing Engineers



Solutions Brief

As advancements in the research and development of technologies for both the RF and microwave markets continue, it is important for university engineering programs to provide the curriculum and training on equipment students need to succeed once they graduate. With the increasing utilization of higher frequencies, it is critical that students have a thorough understanding of modern radio frequency and microwave measurements and the use of spectrum analyzers for these measurements.

Anritsu's Ultraportable Spectrum Analyzer EduPack Bundle equips your engineering lab with the essential components your students need to learn and better understand these critical measurements. This bundle comes standard with a VectorStar<sup>™</sup> MS4644B 40 GHz vector network analyzer, Spectrum Master<sup>™</sup> MS2760A ultraportable spectrum analyzer, active measurement suite, and Cadence AWR lite software.

### Anritsu Ultraportable Spectrum Analyzer EduPack Bundle

Anritsu VectorStar MS4644B vector network analyzer (VNA) providing:

- Frequency coverage of 70 kHz to 40 GHz
- Industry-standard Cadence AWR software (lite version)

40 GHz high-precision manual calibration kit

Active measurement suite (includes: step attenuators, bias tees, direct access loops, and gain compression and efficiency measurement capabilities)

Time domain analysis for measuring your devices in time domain rather than frequency domain

IMD measurement wizard that characterizes your amplifiers for various parameters like IMD, TOI, IPn, etc.

Gain compression measurements to check active amplifier characteristics

Receiver offset for mixer and scaler measurements

Spectrum Master MS2760A ultraportable spectrum analyzer





## Integrating High-Performance VNAs with High-Frequency Design Tools

The VectorStar MS4644B VNA is a leading modular solution that provides coverage from 70 kHz to 40 GHz (available up to 220 GHz with a single coaxial test port) covering the most current communication standards including 5G. When coupled with Anritsu's Spectrum Master MS2760A ultraportable spectrum analyzer, this system provides your university's lab with a unique solution that delivers both accurate S-parameter and spectrum analysis measurements.

- **Time and frequency domain measurements** combine the frequency domain measurement capabilities of a VNA with the time domain capabilities of a spectrum analyzer to measure parameters such as match, interference, analog signal purity, linearity, and other measurements
- **Excellent dynamic range** enables users to quickly and easily perform accurate measurements and overcome path loss at microwave and mmWave frequencies
- **Upgradeable system** the VectorStar MS4644B modular design allows you to easily upgrade your system's frequency coverage to 70/110/125/145/220 GHz as your needs and requirements grow

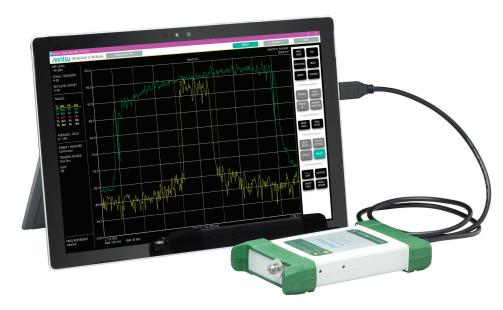
## **Cadence AWR Software**

Every VectorStar VNA solution includes a lite version of the industry-standard AWR software, enabling your university's students and staff to leverage a variety of tools for their high-frequency IC, PCB, and module design, including:

- Linear circuit simulators
- Electromagnetic (EM) analysis tools
- Integrated schematic and layout

## Spectrum Master MS2760A Ultraportable Spectrum Analyzer

As a foundational element in an engineering curriculum, spectrum analyzers help provide students with a deeper understanding of RF and microwave signals while helping them learn more about how frequency, amplitude, and modulation parameters behave over short and long intervals of time. While benchtop spectrum analyzers have been a steady fixture in engineering labs, Anritsu's Spectrum Master MS2760A ultraportable spectrum analyzer delivers portability and best-in-class price/performance ratio that are unmatched by traditional benchtop instruments. Leveraging Anritsu's patented NLTL technology, these high-performance solutions provide leading dynamic range, sweep speed, and amplitude accuracy, while their small size allows a direct connection to almost any DUT and eliminates the need for low loss, expensive cables. This enables students to achieve more accurate measurements and simulations while simplifying test setups and maximizing their time spent in the lab. Because this portable device is USB-powered and controlled from a Windows-based PC, laptop, or tablet, it is a unique and economical solution that can be easily shared amongst your entire engineering department.



## **Optimize Your Lab Today for Tomorrow's Future**

The Anritsu Ultraportable Spectrum Analyzer EduPack Bundle has the cutting-edge equipment your university's engineering lab needs to help bring your curriculum and research to life. Contact your local Anritsu sales representative to provide your students with the hands-on experience they need to become tomorrow's engineers and your researchers with the tools to discover their next technological breakthrough.



## **Anritsu** envision : ensure

#### United States Anritsu Company

450 Century Parkway, Suite 190, Allen, TX 75013 U.S.A. Phone: +1-800-Anritsu (1-800-267-4878)

#### • Canada

Anritsu Electronics Ltd. 700 Silver Seven Road, Suite 120, Kanata, Ontario K2V 1C3, Canada Phone: +1-613-591-2003 Fax: +1-613-591-1006

#### • Brazil

Anritsu Electrônica Ltda. Praça Amadeu Amaral, 27 - 1 Andar 01327-010 - Bela Vista - Sao Paulo - SP - Brazil Phone: +55-11-3283-2511 Fax: +55-11-3288-6940

#### • Mexico Anritsu Company, S.A. de C.V.

Blvd Miguel de Cervantes Saavedra #169 Piso 1, Col. Granada Mexico, Ciudad de Mexico, 11520, MEXICO Phone: +52-55-4169-7104

#### United Kingdom

Anritsu EMEA Ltd. 200 Capability Green, Luton, Bedfordshire LU1 3LU, U.K. Phone: +44-1582-433200 Fax: +44-1582-731303

#### France

Anritsu S.A. 12 avenue du Québec, Batiment Iris 1-Silic 612, 91140 VILLEBON-SUR-YVETTE, France Phone: +33-1-60-92-15-50 Fax: +33-1-64-46-10-65

#### Germany

Anritsu GmbH Nemetschek Haus, Konrad-Zuse-Platz 1 81829 München, Germany Phone: +49-89-442308-0 Fax: +49-89-442308-55

#### • Italy

**Anritsu S.r.l.** Via Elio Vittorini 129, 00144 Roma Italy Phone: +39-06-509-9711 Fax: +39-6-502-2425

#### Sweden Anritsu AB

Anritsu AB Isafjordsgatan 32C, 164 40 KISTA, Sweden Phone: +46-8-534-707-00

#### • Finland Anritsu AB

Teknobulevardi 3-5, FI-01530 VANTAA, Finland Phone: +358-20-741-8100 Fax: +358-20-741-8111

#### • Denmark Anritsu A/S

C/o Regus Winghouse, Ørestads Boulevard 73, 4th floor, 2300 Copenhagen S, Denmark Phone: +45-7211-2200

#### • Russia

Anritsu EMEA Ltd. Representation Office in Russia Tverskaya str. 16/2, bld. 1, 7th floor. Moscow, 125009, Russia Phone: +7-495-363-1694 Fax: +7-495-935-8962

#### • Spain

Anritsu EMEA Ltd. Representation Office in Spain Edificio Cuzco IV, Po. de la Castellana, 141, Pta. 5 28046, Madrid, Spain Phone: +34-915-726-761 Fax: +34-915-726-621

#### • United Arab Emirates Anritsu EMEA Ltd. Dubai Liaison Office

902, Aurora Tower, P O Box: 500311- Dubai Internet City Dubai, United Arab Emirates Phone: +971-4-3758479 Fax: +971-4-4249036

#### • India

Anritsu India Pvt Ltd. 6th Floor, Indiqube ETA, No.38/4, Adjacent to EMC2, Doddanekundi, Outer Ring Road, Bengaluru – 560048, India Phone: +91-80-6728-1300 Fax: +91-80-6728-1301

#### Singapore Anritsu Pte. Ltd.

Annisu Pte. Ltd. 11 Chang Charn Road, #04-01, Shriro House Singapore 159640 Phone: +65-6282-2400 Fax: +65-6282-2533 Specifications are subject to change without notice.

#### Vietnam

Anritsu Company Ltd. Room No. 1635, 16th Floor, ICON 4 Tower, 243A De La Thanh Street, Lang Thuong Ward, Dong Da District, Hanoi, Vietnam Phone: +84-24-3760-6216 Fax: +84-24-6266-2608

• P. R. China (Shanghai)

Anritsu (China) Co., Ltd. Room 2701-2705, Tower A, New Caohejing International Business Center No. 391 Gui Ping Road Shanghai, 200233, P.R. China Phone: +86-21-6237-0898 Fax: +86-21-6237-0899

• P. R. China (Hong Kong)

Anritsu Company Ltd. Unit 1006-7, 10/F., Greenfield Tower, Concordia Plaza, No. 1 Science Museum Road, Tsim Sha Tsui East, Kowloon, Hong Kong, P. R. China Phone: +852-2301-4980 Fax: +852-2301-3545

#### • Japan

Anritsu Corporation 8-5, Tamura-cho, Atsugi-shi, Kanagawa, 243-0016 Japan Phone: +81-46-296-6509 Fax: +81-46-225-8352

#### • Korea

Anritsu Corporation, Ltd. 5FL, 235 Pangyoyeok-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, 13494 Korea Phone: +82-31-696-7750 Fax: +82-31-696-7751

#### • Australia

Anritsu Pty Ltd. Unit 20, 21-35 Ricketts Road, Mount Waverley, Victoria 3149, Australia Phone: +61-3-9558-8177 Fax: +61-3-9558-8255

#### • Taiwan

Anritsu Company Inc. 7F, No. 316, Sec. 1, NeiHu Rd., Taipei 114, Taiwan Phone: +886-2-8751-1816 Fax: +886-2-8751-1817

Anritsu utilizes recycled paper and environmentally conscious inks and toner.



 Anritsu All trademarks are registered trademarks of their respective owners. Data subject to change without notice. For the most recent specifications visit: www.anritsu.com
 11410-02842, Rev. A Printed in United States 2020-11 ©2020 Anritsu Company. All Rights Reserved.