

MS9740A Optical Spectrum Analyzer

New function introduction

MS9740A

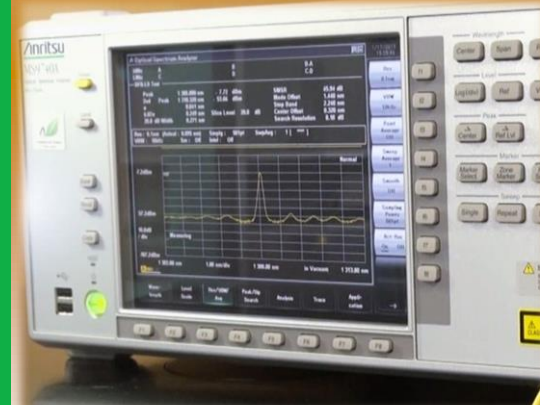
Optical Spectrum Analyzer

MS9740A Optical Spectrum Analyzer

New function introduction

Anritsu Corporation

2014, July



Introduction

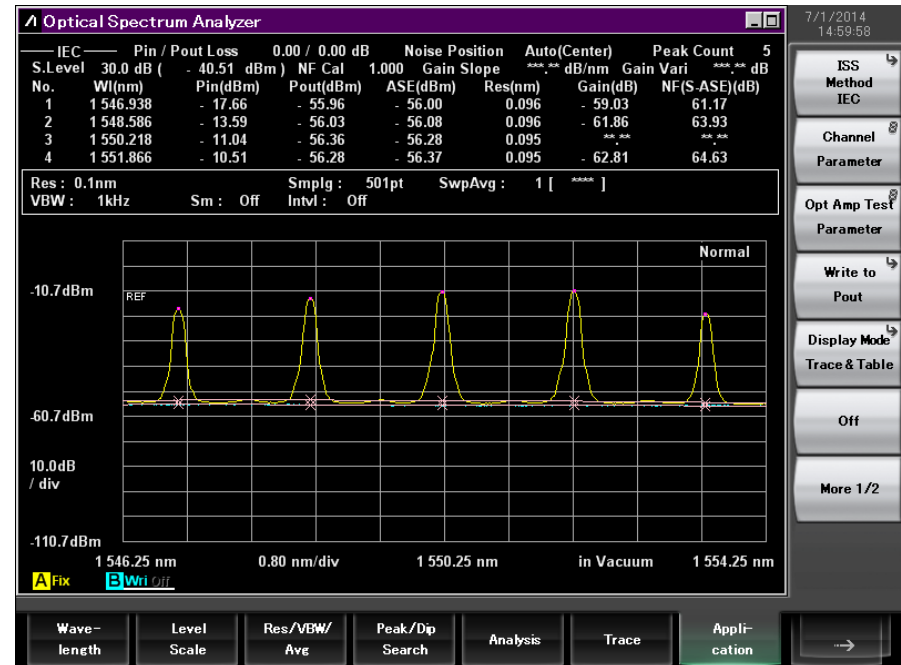
- This material explain the new functions added by version 1.4.00 of the MS9740A software.
- The software and release note can be downloaded free of charge from Anritsu web site. Downloading requires user registration.
 - Japan: <http://www.anritsu.com/ja-JP/Downloads/Software/Drivers-Software-Downloads/DWL7097.aspx>
 - USA: <http://www.anritsu.com/en-US/Downloads/Software/Drivers-Software-Downloads/DWL7097.aspx>
 - Europe: <http://www.anritsu.com/en-GB/Downloads/Software/Drivers-Software-Downloads/DWL7097.aspx>
 - ASIA: <http://www.anritsu.com/en-AU/Downloads/Software/Drivers-Software-Downloads/DWL7097.aspx>

Summary

Version	Item	Function	Slide
1.04.00	Addition of Opt Amp (Multi-channel) Application	Added the EDFA evaluating applications supporting inputting and simultaneously analyzing the multichannel (WDM) signals.	4
	Addition of VBW setting parameter	Added 2 kHz and 200 Hz to VBW	5
1.05.00	Addition of SCPI remote commands	Added the commands that follow the rules specified in the SCPI (Standard Commands for Programmable Instruments) standard. MS9740A can now support the following two types of remote commands: MS9740A's unique remote commands and SCPI commands.	6
	Addition of the WDM Filter Test application	Added the application that can simultaneously analyze characteristics of a wavelength division multiplexed (WDM) optical filter, separately for each wavelength. Simultaneous measurement of the following items is now available: Wavelength, level, bandwidth and spacing of signals.	7
	Addition of analysis items to the LD Module Test application	Added the following analysis items to the LD Module Test application, for evaluation of the DFB light source: Center Offset and Stop Band.	8

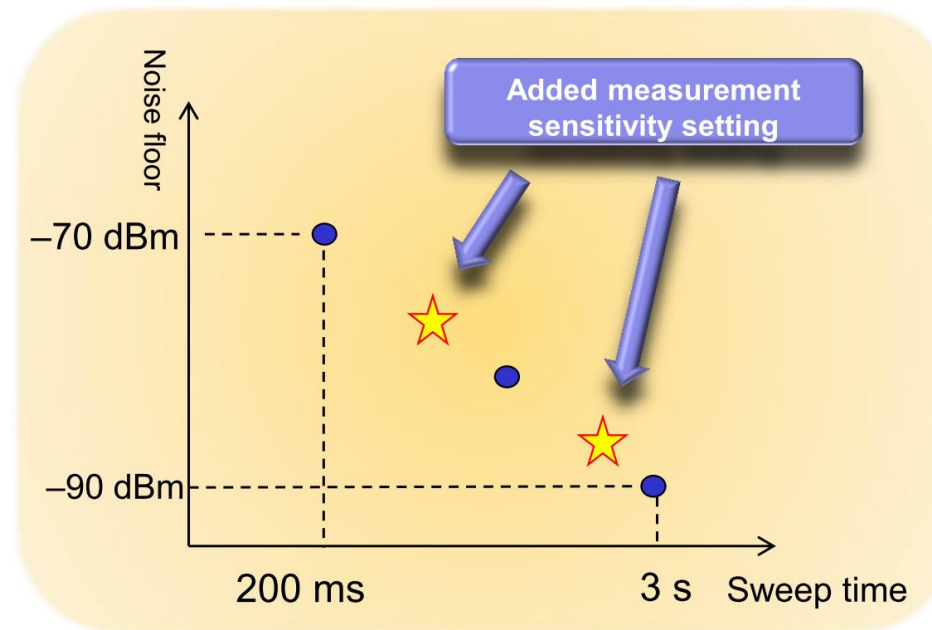
Opt Amp (Multi Channel) Application

- Addition of Opt. Amp (Multi-channel) for WDM signals and the latest IEC standards.
 - The IEC-recommended ISS (Interpolated Source Subtraction) method is supported for gain and ASE analysis
 - a mode for automatically detecting the noise position is also provided.
 - The Gain Variation and the Output Slope analysis are also supported within the same application.



VBW

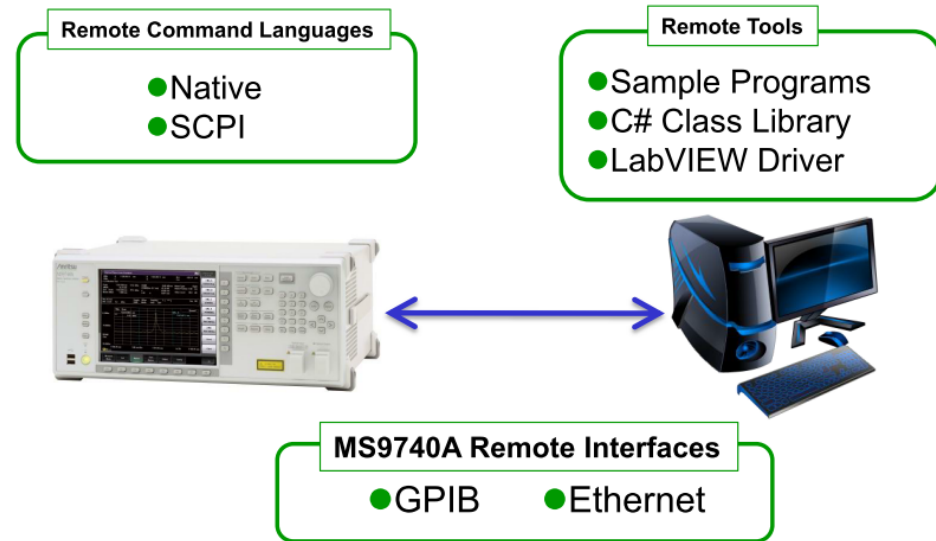
- Addition of 2 kHz and 200 Hz of VBW setting parameter
 - Various sensitivity settings for efficient measurement speeds
 - The measurement level range differs at evaluation of optical elements and devices due to the coupling efficiency, measurement system, and type of optical element.
 - To support efficient measurement speeds, the MS9740A has two new sensitivity settings between the most frequently used -70 and -90 dBm noise.



*Using noise floor as standard criterion

Remote command

- Addition of SCPI Remote Command
 - MS9740A can now support the following SCPI and native of remote commands.
 - The MS9740A Remote Tools Package supports easy creation of remote command sequences.
 - What is Remote tool Package
 - The Remote Tools Package includes the quick-start guide, sample programs, C# class library, and LabVIEW Driver.
 - This package can be downloaded from the Anritsu site.



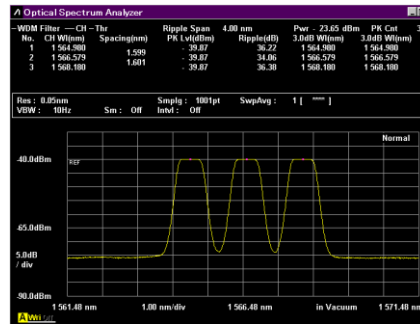
Anritsu MS9740A Website

<http://www.anritsu.com/en-AU/Downloads/Manuals/Quick-Start-Guide/DWL10293.aspx>

WDM Filter test Application

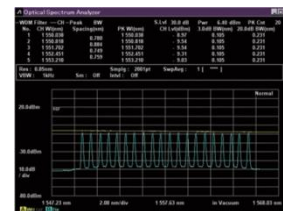
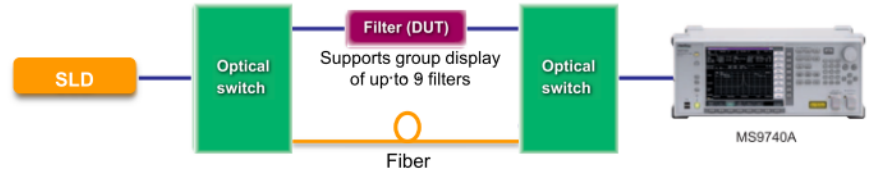
- The MS9740A adds a new WDM Filter analysis function supporting group display for WDM Filter devices, such as WSS and optical bandpass filters.
- Batch Measurement of Optical Bandpass Filter Transmittance
- Insertion Loss Evaluation
 - The MS9740A Trace Mode function supports measurement using optical switches to measure DUT insertion loss by Waveform Difference Comparison, saving the results in one file and displaying up to 10 waveforms simultaneously on one screen.

Transmittance Evaluation

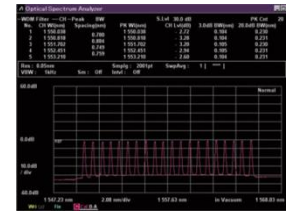


- ### WDM Filter Function Measurements
- Signal Level
 - Peak Signal No.
 - Signal Wavelength
 - Spacing (Wavelength)
 - Pass Band
 - Ripple

Insertion Loss Evaluation



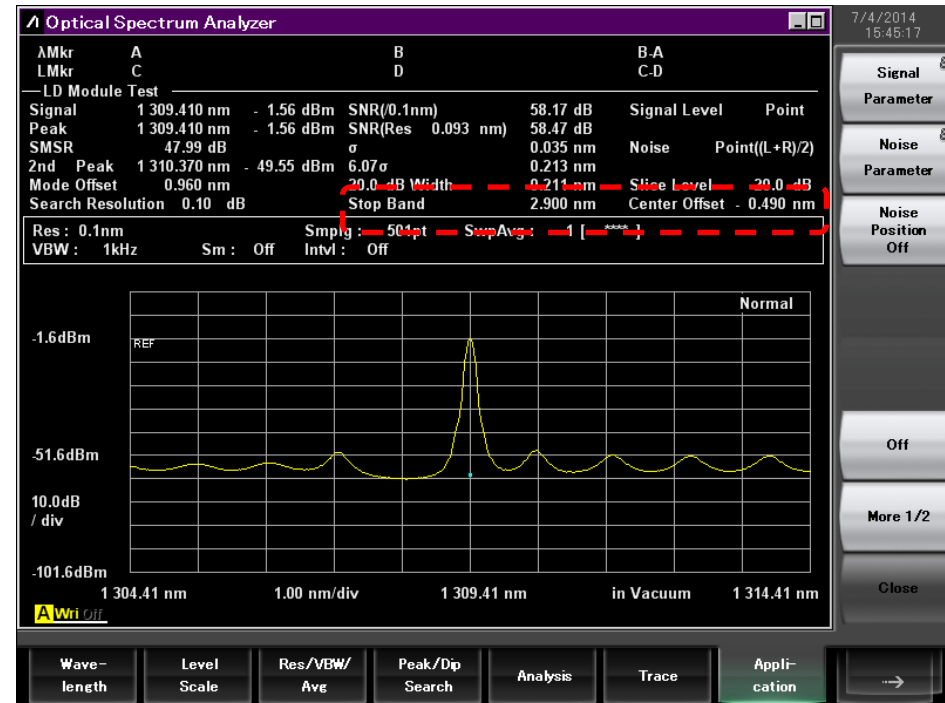
Waveform of Wideband Light Source Before and After Insertion to Optical Bandpass Filter



Filter Analysis by Waveform Difference Comparison

LD Module test Application

- Addition of analysis item in LD Module test Application
 - Addition of Center Offset and Stop Band.
 - The MS9740A supports the efficient measurement because the two analysis items are also supported within the same application.



● **United States**

Anritsu Company

1155 East Collins Blvd., Suite 100, Richardson,
TX 75081, U.S.A.
Toll Free: 1-800-267-4878
Phone: +1-972-644-1777
Fax: +1-972-671-1877

● **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 Eletrônica Ltda.

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

● **Mexico**

Anritsu Company, S.A. de C.V.

Av. Ejército Nacional No. 579 Piso 9, Col. Granada
11520 México, D.F., México
Phone: +52-55-1101-2370
Fax: +52-55-5254-3147

● **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, Bâtiment 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: +39-6-509-9711
Fax: +39-6-502-2425

● **Sweden**

Anritsu AB

Kistagången 20B, 164 40 KISTA, Sweden
Phone: +46-8-534-707-00
Fax: +46-8-534-707-30

● **Finland**

Anritsu AB

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

● **Denmark**

Anritsu A/S

Kay Fiskers Plads 9, 2300 Copenhagen S, Denmark
Phone: +45-7211-2200
Fax: +45-7211-2210

● **Russia**

Anritsu EMEA Ltd.

Representation Office in Russia

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

● **United Arab Emirates**

Anritsu EMEA Ltd.

Dubai Liaison Office

P O Box 500413 - Dubai Internet City
Al Thuraya Building, Tower 1, Suit 701, 7th Floor
Dubai, United Arab Emirates
Phone: +971-4-3670352
Fax: +971-4-3688460

● **India**

Anritsu India Private Limited

2nd & 3rd Floor, #837/1, Binnamangla 1st Stage,
Indiranagar, 100ft Road, Bangalore - 560038, India
Phone: +91-80-4058-1300
Fax: +91-80-4058-1301

● **Singapore**

Anritsu Pte. Ltd.

11 Chang Charn Road, #04-01, Shriro House
Singapore 159640
Phone: +65-6282-2400
Fax: +65-6282-2533

● **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: +81-46-296-1221
Fax: +81-46-296-1238

● **Korea**

Anritsu Corporation, Ltd.

5FL, 235 Pangyoyeok-ro, Bundang-gu, Seongnam-si,
Gyeonggi-do, 463-400 Korea
Phone: +82-31-696-7750
Fax: +82-31-696-7751

● **Australia**

Anritsu Pty. Ltd.

Unit 21/270 Ferntree Gully Road, Notting Hill,
Victoria 3168, 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

Please Contact: