



Discover What's Possible™

Anritsu

MP1803A/MP1804A

43.5G MUX / 43.5G DEMUX

25 G to 43.5 Gbit/s



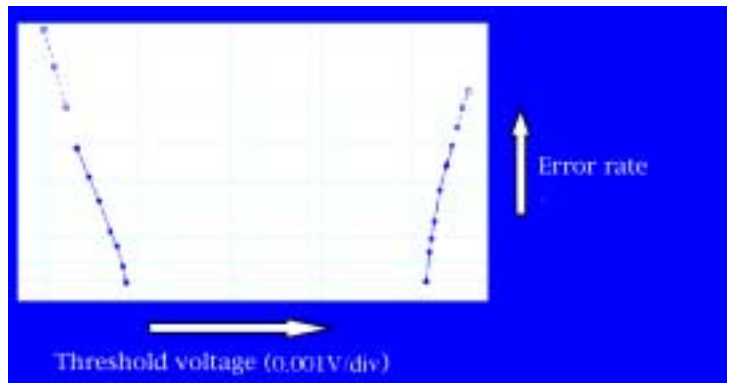
Features

- Adopting high resolution variable delay unit (Resolution : 0.1ps)
- High resolution threshold voltage setting suitable for the Q factor analysis (Resolution : 0.001V)
- Digital display
- For various applications with the remote control.

Applications

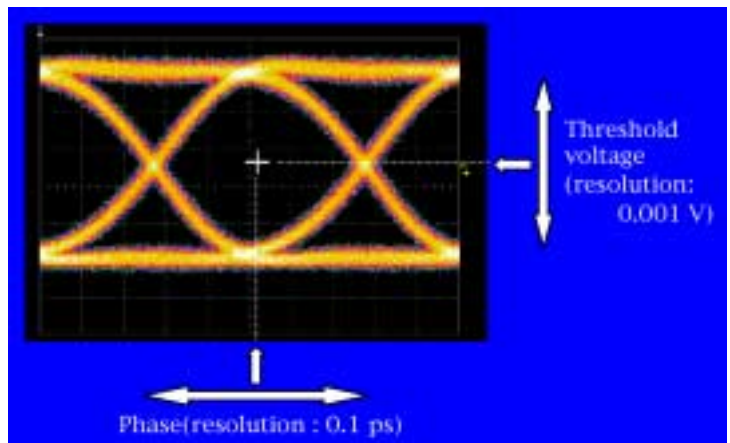
High resolution threshold voltage setting suitable for the Q factor Analysis (0.001 V steps)

Q factor is measured by setting up threshold with high accuracy.



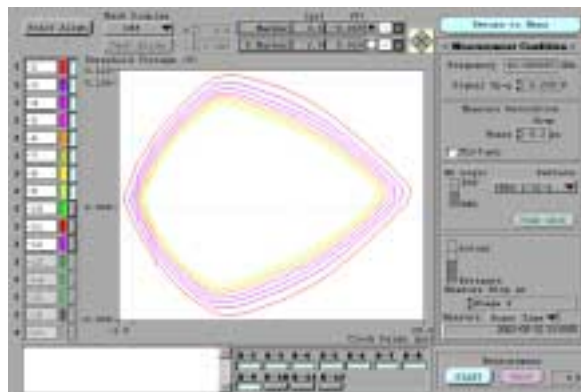
Auto search function

“Auto Search” can determine the best threshold voltage and phase to measure error ratio for waveform automatically.

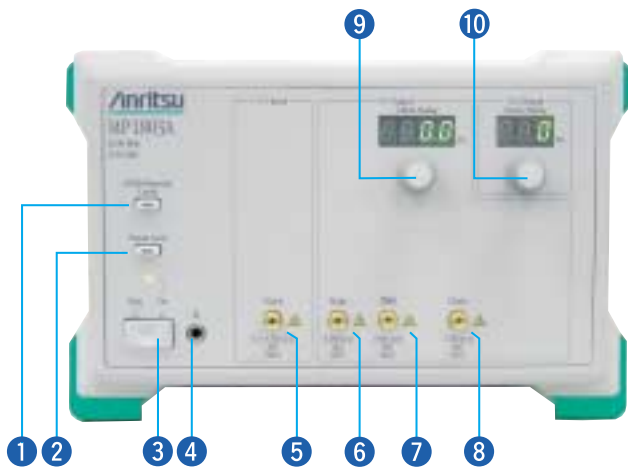


Eye margin (eye diagram) measurement

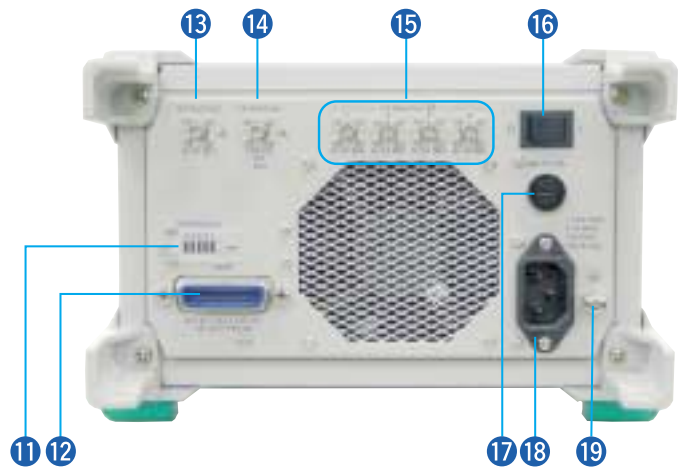
“Eye margin (eye diagram)measurement”evaluates the quality of the waveform on the basis of error rate .



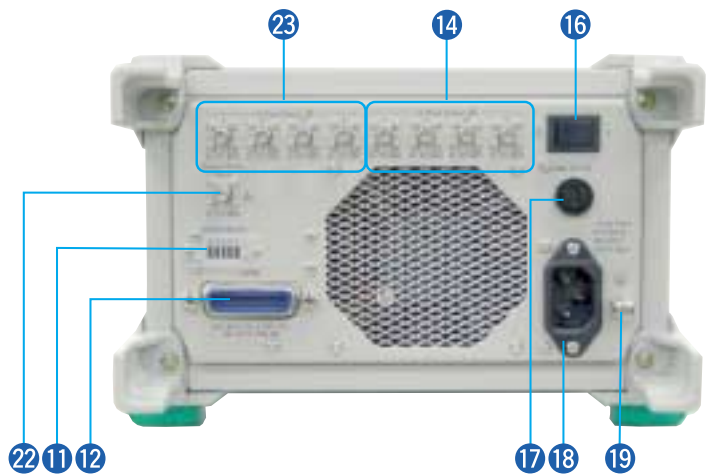
Front/Rear Panel



Front Panel



Rear Panel



- 1)Remote / Local button 2)Panel lock button 3)Power switch 4)Ground 5)1/1 Clock input 6)1/1 Data output 7) 1/1 Data output 8)1/1 Clock output 9)Phase adjust knob (1/1 Clock) 10)Phase adjust knob (1/4 Clock) 11)GPIB address 12)GPIB connector 13)1/64 Clock output 14)1/4 Clock output 15)1/4 Data input 16)Main power switch 17)Fuse 18)Power supply 19)Ground 20)1/1 Data input 21) V_{TH} adjust knob 22)DEMUX Reset input 23)1/4 Data output

Specifications

MP1803A 43.5G MUX

Operation frequency	25 to 43.5GHz (External clock)
Clock input	Input amplitude : 0.7 to 1.5 Vp-p, Waveform: Sine or rectangular wave (duty : 50 %), Input connector: V
Data output (25 to 43.5 Gbit/s)	Output waveform : NRZ, Number of Outputs : 2(DATA, DATA) Output amplitude : 2.0±0.2 Vp-p(AC coupled), Jitter : Less than 10ps Tr/Tf (20 to 80 %, >38Gbit/s) : 10 ps(typ.), Impedance : 50 Ω, Connector : V
Clock output (25 to 43.5 GHz)	Number of input : 1 (CLOCK), Output amplitude: 0.7 to 1.6 Vp-p (AC coupled) Clock delay : from - 70.0 to + 70.0 ps (0.1ps step), Impedance : 50 Ω, Connector : V
1/4 Data input (6.25 to 10.875 Gbi/s)	Number of input : 4 (D1,D2,D3,D4), Input Voltage : $V_{IH}= 0 V\pm 0.07 V$, $V_{IL}= - 1 V\pm 0.07 V$ Impedance : 50 Ω, Connector : SMA
1/4 Clock output (6.25 to 10.875 GHz)	Number of output : 1(CLOCK), Output Voltage : $V_{OH}= 0 V\pm 0.04 V$, $V_{amp}=1.40 V\pm 0.40 V$ Clock delay : from - 70 to +70 ps (1ps/div), Impedance : 50 Ω, Connector : SMA
Sync. Output	Number of output : 1 (1/64 Clock Output), Output Voltage : $V_{OH}= 0 V\pm 0.2 V$, $V_{OL}= - 1 V\pm 0.2 V$ Impedance : 50 Ω/GND, Connector : SMA
Control interface	GPIB
Dimensions, mass and power	213 (W) X 132.5 (H) X 450 (D) mm, Less than 10 kg, AC100 to 240 V, Frequency : 47 to 63 Hz, Less than 100 VA
Operation temperature	20 to 30 centigrade

Specifications

MP1804A 43.5G DEMUX

Operation frequency	25 - 43.5 GHz
Data input (25 to 43.5 Gbit/s)	Number of input : 1 (DATA), Input amplitude : from 0.1 V to 1.0 Vp-p Threshold Voltage : from - 0.75 to + 0.25 V (0.001 V step), Impedance: 50 Ω, Connector : V
Clock input (25 to 43.5 GHz)	Number of input : 1 (CLOCK), Input amplitude : from 0.7 V to 1.5 Vp-p.(AC coupled) Clock delay : from - 70 to + 70 ps (0.1 ps step), Impedance : 50 Ω/GND, Connector : V
1/4 Data output (6.25 to 10.875 Gbi/s)	Number of output : 4 (D1,D2,D3,D4), Output Voltage : V _{OH} = 0 ± 0.2 V, V _{OL} =- 1 ± 0.2 V Impedance : 50 Ω, Connector : SMA
1/4 Clock output (6.25 to 10.875 GHz)	Number of output : 4 (CLOCK), Output Voltage : V _{OH} = 0 ± 0.25V, V _{OL} =- 1 ± 0.25 V Clock delay : from - 70 to + 70ps (1 ps step), Impedance : 50 Ω, Connector : SMA
DEMUX Reset input	Number of input : 1 (1/64 Clock Output), Input Voltage : V _{IH} = 0 ± 0.1 V, V _{IL} =- 1 ± 0.1 V Impedance : 50 Ω/GND, Connector : SMA
Control interface	GPIB
Dimensions, mass and power	213 (W) X 132.5 (H) X 450 (D) mm, Less than 10 kg, AC100 to 240 V, Frequency : 47 to 63 Hz, Less than 100 VA
Operation temperature	20 to 30 centigrade

Ordering Information

Model/ Order No.	Name	Remarks	Model/ Order No.	Name	Remarks
MP1803A	-Main frame- 43.5G MUX		MP1804A	-Main frame- 43.5G DEMUX	
	-Standard Accessories-			-Standard Accessories-	
J1090	Coaxial Cable 3 PCS	V120MM-30CM (30 cm)	J1090	Coaxial Cable 2 PCS	V120MM-30CM (30 cm)
J0696E	Coaxial Cable 5 PC	AA-165-1500 (1.5 m)	J0696D	Coaxial Cable 1 PC	AA-165-2000 (2 m)
J1108	Coaxial Cable 1 PC	V120MM-50CM (50 cm)	J0696E	Coaxial Cable 8 PC	AA-165-1500 (1.5 m)
J1138	Coaxial Cable 1 PC	1.5m	J1145	Terminator 2 PCS	V210
J1145	Terminator 4 PCS	V210	J1137	Terminator 9 PCS	HRM-601
J1137	Terminator 6 PCS	HRM-601	J1144	Fixed Coaxial Attenuator 1 PC	41V-6,for MUX-DEMUX connection
J0008	GPIB Cable 2.0 m 1 PC	408JE-102	J0008	GPIB Cable 2.0 m 1 PC	408JE-102
F0012	Fuse 3.15 A 1 PC	T3.15 250 V	F0012	Power Code 2.5 m 1 PC	
Z0306A	Wrist strap 1 PC		Z0306A	Fuse 3.15 A 1 PC	T3.15 250 V
W2031AE	MP1803A 1 COPY		W2033AE	Wrist strap 1 PC	
W2032AE	MP1803A GPIB 1 COPY		W2034AE	MP1804A 1 COPY	
MP1803A-01	Operation Manual			Operation Manual	
MP1803A-11	Remote Control			MP1804A GPIB 1 COPY	
	Operation Manual			Remote Control	
	-Operation-			Operation Manual	
	2.6 V Data Output			-Operation-	
	Extended up to 48 Gbit/s		MP1804A-11	Extended up to 48 Gbit/s	



Specifications are subject to change without notice.

ANRITSU CORPORATION

5-10-27, Minamiazabu, Minato-ku, Tokyo 106-8570, Japan
Phone: +81-3-3446-1111
Telex: J34372
Fax: +81-3-3442-0235

● U.S.A.

ANRITSU COMPANY

North American Region Headquarters
1155 East Collins Blvd., Richardson, Tx 75081, U.S.A.
Toll Free: 1-800-ANRITSU (267-4878)
Phone: +1-972-644-1777
Fax: +1-972-671-1877

● Canada

ANRITSU ELECTRONICS LTD.
700 Silver Seven Road, Suite 120, Kanata,
ON K2V 1C3, Canada
Phone: +1-613-591-2003
Fax: +1-613-591-1006

● Brasil

ANRITSU ELETRÔNICA LTDA.
Praia de Botafogo 440, Sala 2401 CEP 22250-040,
Rio de Janeiro, RJ, Brasil
Phone: +55-21-5276922
Fax: +55-21-537-1456

● U.K.

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

● Germany

ANRITSU GmbH
Grafenberger Allee 54-56, 40237 Düsseldorf, Germany
Phone: +49-211-96855-0
Fax: +49-211-96855-55

● France

ANRITSU S.A.
9, Avenue du Québec Z.A. de Courtabœuf 91951 Les
Ulis Cedex, France
Phone: +33-1-60-92-15-50
Fax: +33-1-64-46-10-65

● Italy

ANRITSU S.p.A.
Via Elio Vittorini, 129, 00144 Roma EUR, Italy
Phone: +39-06-509-9711
Fax: +39-06-502-24-25

● Sweden

ANRITSU AB
Botvid Center, Fittja Backe 1-3 145 84 Stockholm,
Sweden
Phone: +46-853470700
Fax: +46-853470730

● Spain

ANRITSU ELECTRÓNICA, S.A.
Europa Empresarial Edificio Londres, Planta 1, Oficina
6 C/ Playa de Liencres, 2 28230 Las Rozas. Madrid,
Spain
Phone: +34-91-6404460
Fax: +34-91-6404461

● Singapore

ANRITSU PTE LTD.
10, Hoe Chiang Road #07-01/02, Keppel Towers,
Singapore 089315
Phone: +65-6282-2400
Fax: +65-6282-2533

● Hong Kong

ANRITSU COMPANY LTD.
Suite 719, 7/F., Chinachem Golden Plaza, 77 Mody
Road, Tsimshatsui East, Kowloon, Hong Kong, China
Phone: +852-2301-4980
Fax: +852-2301-3545

● Korea

ANRITSU CORPORATION
14F Hyun Juk Bldg. 832-41, Yeoksam-dong,
Kangnam-ku, Seoul, Korea
Phone: +82-2-553-6603
Fax: +82-2-553-6604~5

● Australia

ANRITSU PTY LTD.
Unit 3/170 Forster Road Mt. Waverley, Victoria, 3149,
Australia
Phone: +61-3-9558-8177
Fax: +61-3-9558-8255

● Taiwan

ANRITSU COMPANY INC.
6F, 96, Sec. 3, Chien Kou North Rd. Taipei, Taiwan
Phone: +886-2-2515-6050
Fax: +886-2-2509-5519