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optical solutions

COMMITTED TO PROVIDING PROFESSIONAL SOLUTIONS FOR
OPTICAL COMMUNICATION CUSTOMERS WORLDWIDE

Focused, hence professional
Persistent, hence innovative



1.6T Bit Error Rate Tester

800G CDR

Programmable Attenuator

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Creativity

Sichuan RESOO Electronics Co., Ltd.

Chengdu RESOO Intelligent technology Co.,Ltd

Professional Manufacturer of Optical Communication Test Equipment

Company Profile

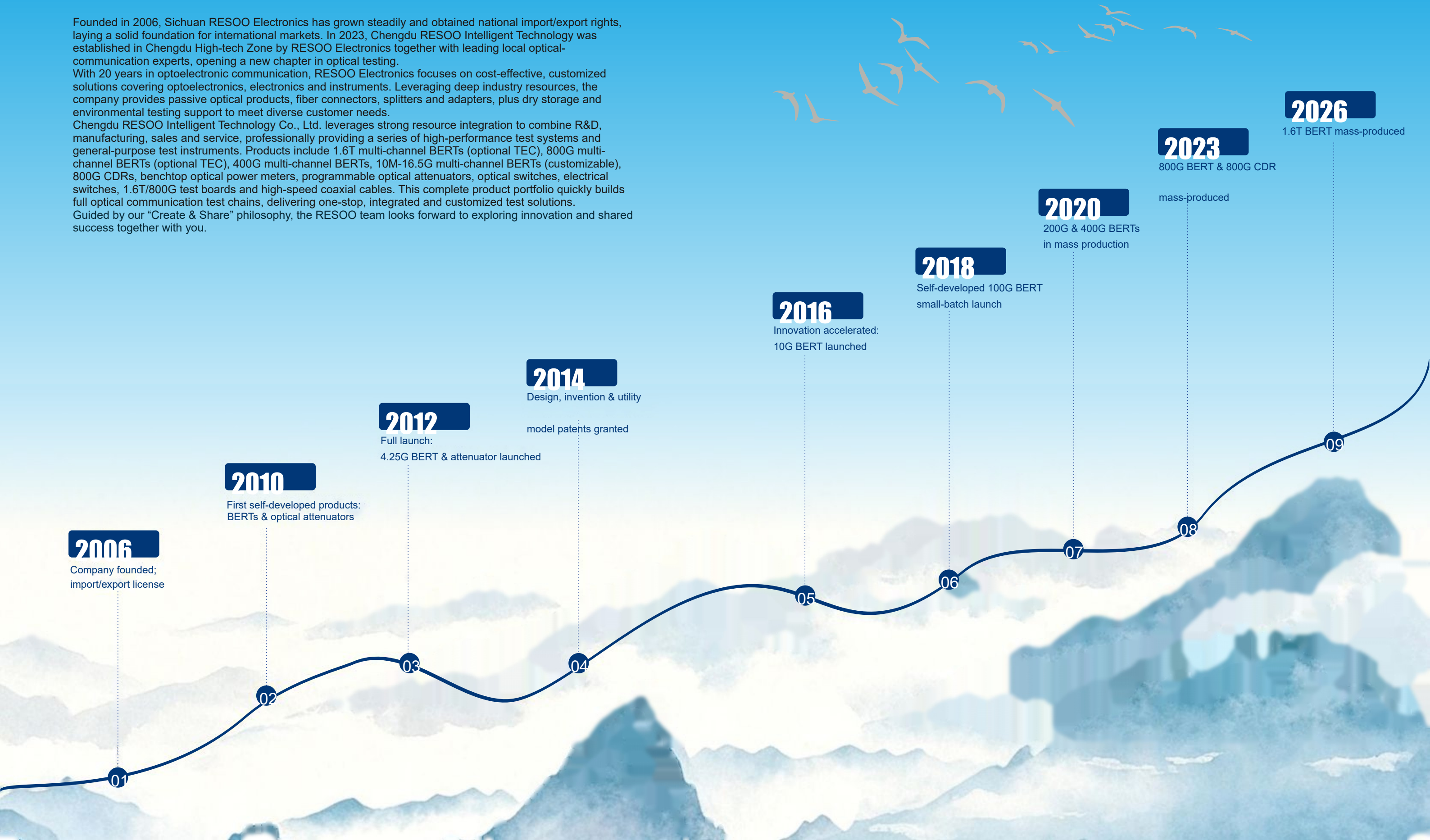
Founded in 2006, Sichuan RESOO Electronics has grown steadily and obtained national import/export rights, laying a solid foundation for international markets. In 2023, Chengdu RESOO Intelligent Technology was established in Chengdu High-tech Zone by RESOO Electronics together with leading local optical-communication experts, opening a new chapter in optical testing.

With 20 years in optoelectronic communication, RESOO Electronics focuses on cost-effective, customized solutions covering optoelectronics, electronics and instruments. Leveraging deep industry resources, the company provides passive optical products, fiber connectors, splitters and adapters, plus dry storage and environmental testing support to meet diverse customer needs.

Chengdu RESOO Intelligent Technology Co., Ltd. leverages strong resource integration to combine R&D, manufacturing, sales and service, professionally providing a series of high-performance test systems and general-purpose test instruments. Products include 1.6T multi-channel BERTs (optional TEC), 800G multi-channel BERTs (optional TEC), 400G multi-channel BERTs, 10M-16.5G multi-channel BERTs (customizable), 800G CDRs, benchtop optical power meters, programmable optical attenuators, optical switches, electrical switches, 1.6T/800G test boards and high-speed coaxial cables. This complete product portfolio quickly builds full optical communication test chains, delivering one-stop, integrated and customized test solutions.

Guided by our “Create & Share” philosophy, the RESOO team looks forward to exploring innovation and shared success together with you.

Company Milestones



Enterprise Certificates

ENTERPRISE CERTIFICATES



40⁺
Professional
Certificates

Cooperating Customers

COOPERATING CUSTOMERS



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Automated Test System

AUTOMATED TEST SYSTEM SOLUTION



I Solution

The RESOO automated test system is an efficient, intelligent solution for comprehensive, fast and accurate product testing in optical communication manufacturing. Integrating advanced test technology and automated control algorithms, it precisely measures key parameters via multi-threaded parallel TX & RX testing - transmitter eye diagram, optical power, sensitivity...

I Advantages

Higher efficiency: automated testing shortens cycle times.
Test quality: precision instruments and advanced calibration ensure accurate, reliable results.
Lower labor costs: reduces manual dependence.

I Features

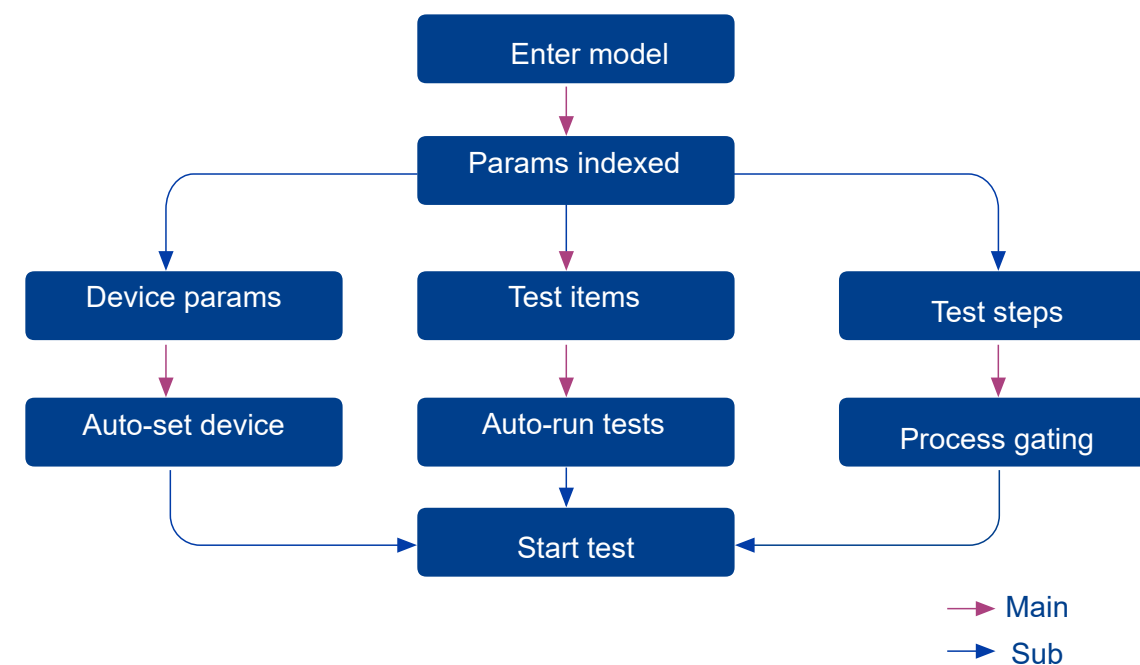
Highly automated: connect, test, record and analyze without manual intervention.
Comprehensive testing: optical power, sensitivity, eye diagram, overload, DDMI and more.
Data management: automatic recording, storage and analysis with detailed test reports...



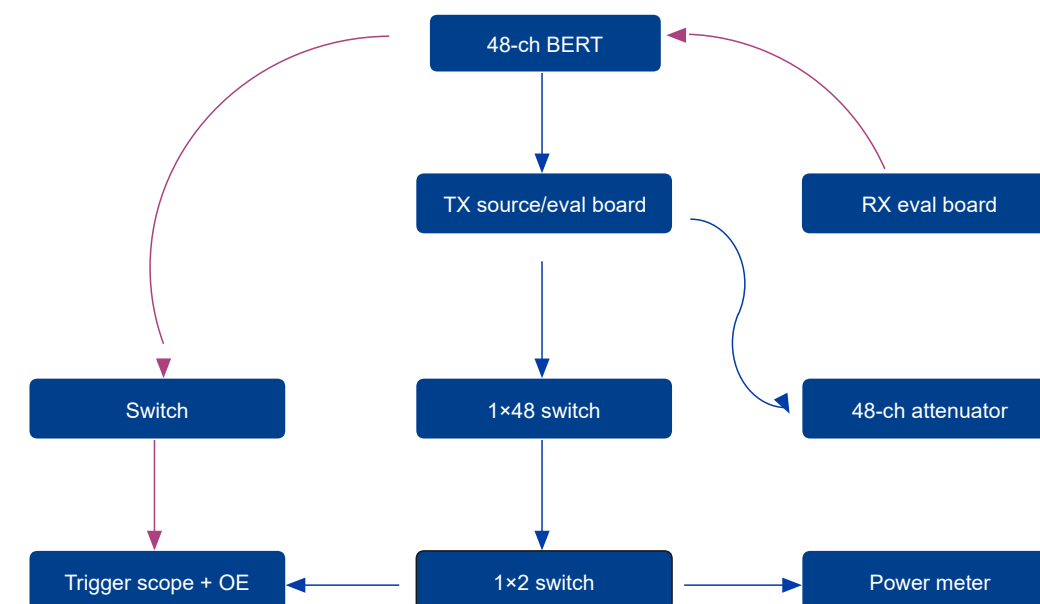
Demo ref. 1



Demo ref. 2



System Topology



Bit Error Rate Tester

BIT ERROR RATE TESTER SERIES

A bit error rate tester (BERT) is a dedicated electronic measuring instrument for evaluating the transmission quality of digital communication systems. Its core function is measuring the bit error rate (BER) - the ratio of erroneously received bits to total transmitted bits. The instrument typically consists of a pattern generator and an error detector: a known test pattern (e.g., PRBS) is sent to the system under test and compared with the received signal to count errors. It is widely used in R&D, production testing and maintenance of high-speed serial interfaces (Ethernet, PCI Express, Fibre Channel, etc.), and is a key tool for verifying physical-layer signal integrity and receiver performance.

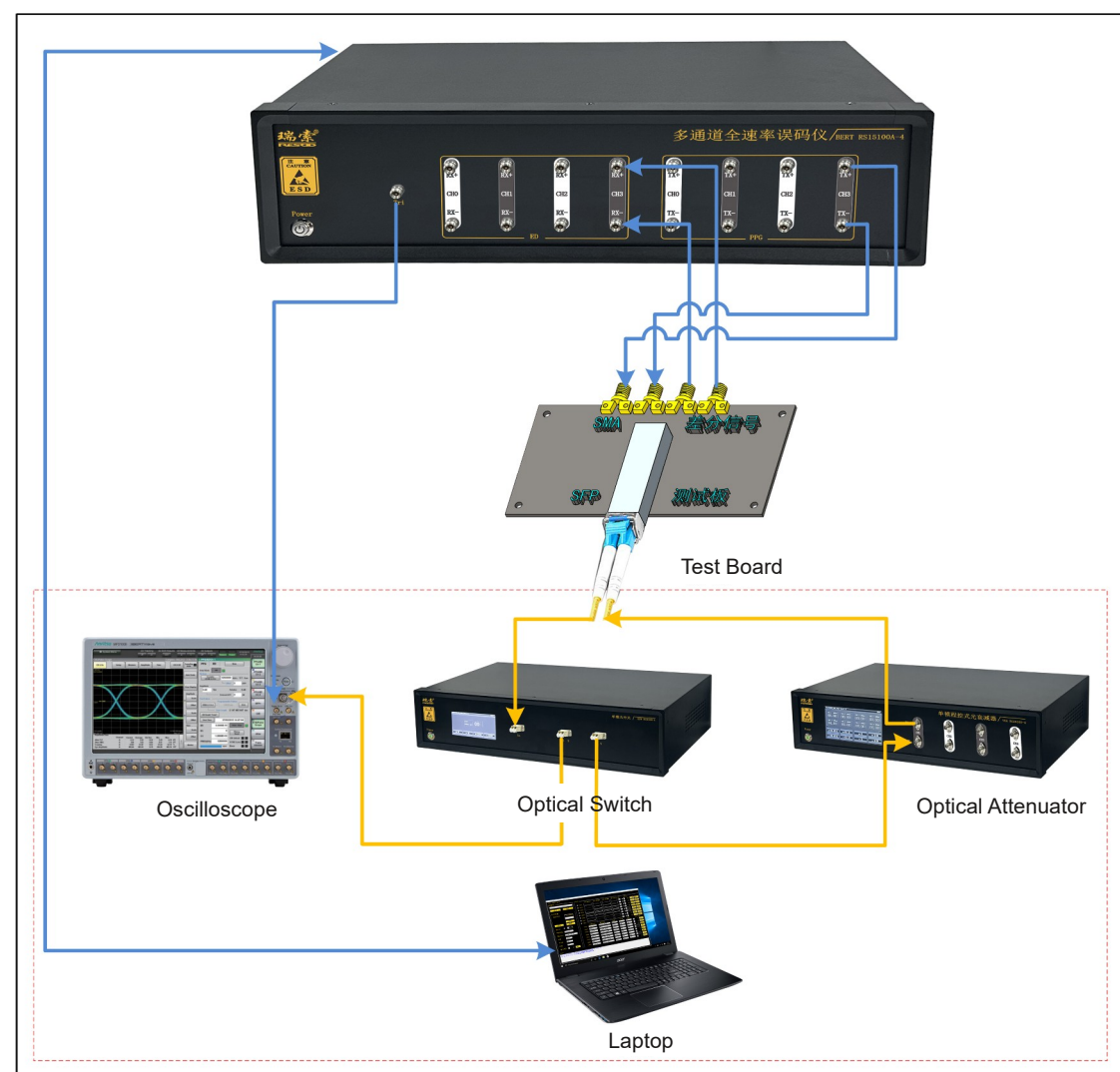
Working principle:

A BERT works in three stages: signal generation, signal transmission and error analysis:

- Signal generation: the tester produces digital signals at preset rates and formats, emulating real traffic.
- Signal transmission: the signal passes through the DUT and returns; interference and attenuation may distort it and cause errors.
- Error analysis: the tester compares transmitted and received signals to identify errors and compute the BER; the lower the BER, the better the link.

Applications:

Optical transceiver R&D and production; optical device/subsystem R&D and production; defense; electronics research institutes; medical.



Typical application wiring reference

1.6T Bit Error Rate Tester

1.6T ERROR RATE TEST



Product Introduction

The RS1600A is a flagship BERT for 400G-1.6T high-speed serial testing, focused on physical-layer characterization, compliance testing and advanced module R&D verification. Fully compatible with PAM4/NRZ, its wide rate coverage, high signal quality and rich test functions meet the most demanding requirements for optical modules, high-speed interconnects and chips - a one-stop solution for R&D, production and certification.

Features:

1. Flexible and comprehensive rate coverage: 53.125G-226G; per-channel independent format (PAM4/NRZ), amplitude and equalization settings for diverse test scenarios;
2. Rich test functions and wide protocol support; hardware PCS FEC with full-flow analysis: pre/post-FEC BER statistics, FEC testing and symbol error distribution.
3. High rate, excellent signal quality and stability: 8×226G, fast rise/fall edges, low intrinsic jitter;
4. Flexible programmable control via Ethernet and USB virtual COM;

Supported patterns:

PRBS7/9/10/11/13/15/16/20/23/31/49/58;
PRBS7Q/9Q/11Q/13Q/15Q/16Q/23Q/31Q; SSPRQ, JP03A/JP03B, linear test patterns, square wave;
User-defined patterns;

Other interfaces:

Chassis grounding terminal
220V AC power input
1 × USB 2.0 port

I Main Performance Specifications

Parameter	Unit	Spec.	Remarks
Error generation section			
Channels	pcs	N	
Modulation		NRZ / PAM4 differential	
Termination type		AC-coupled	
Symbol rate	GBaud	53.125 ~ 113	
Freq. acc.	ppm	±50 ppm	
Max out ampl. (diff)	Mv	2250mVp-p @ 106GBD	
Max. input amplitude (diff.)	Mv	2250mVp-p @ 106GBD	
Output impedance	OHM	50Ω ± 10%	
Rise time (20%-80%)	ps	<10ps	
Fall time (80%-20%)	ps	<10ps	
RMS jitter	fs	<300 fs	
RF interface		1.0mm female,50Ω	

Synchronous clock output

Amplitude	mVp-p	>300	
Output mode		AC-coupled, differential	
Divider		2/4/8/16/32	
RF interface		1.85 mm female,50 Ω	

Error analysis section

Input type		Differential PAM4	
Termination type		AC-coupled, differential	
Max. input amplitude		800mVp-p @106GBD	
Receiver sensitivity (diff.)		100mVp-p	
Symbol rate	GBaud	53.125 ~113	
Clock mode		Built-in clock recovery	
Sync type		Auto sync (level/phase)	
RF interface		1.0mm female, 50Ω	

FEC error-correction analysis

Type		Hardware FEC analysis	
Pre-/post-FEC BER test		Supported	
FEC margin test		Supported	
Symbol error distribution test		Supported	

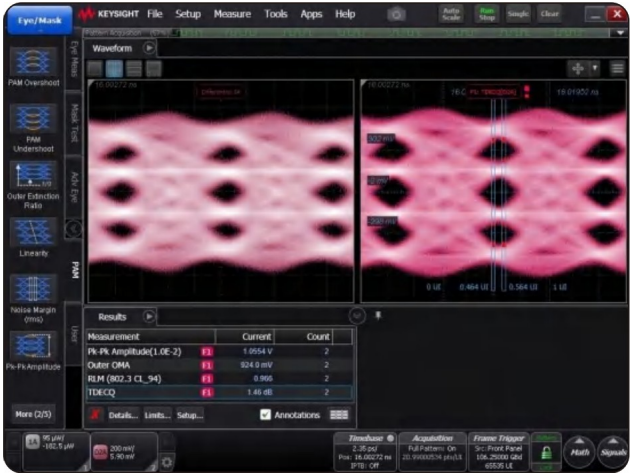
Service creates value!

Parameter	Unit	Spec.	Remarks
Common section			
Power in	V	AC:100-240V 50Hz/60Hz	
GND	pcs	BERT grounding terminal	
Power	W	<60W	
Op. temp.	°C	-10~+55	
Stor. temp.	°C	-40~+85	
Humidity	%RH	10%~95%	
Stor. hum.	%RH	15%~90%	non-condensing
Warm	Min	20 min	non-condensing
Cooling	/	Min. 50 mm clearance on all sides	

Output eye diagram examples



Eye diagram 1



Eye diagram 2

I Ordering Information

Model	Product Description
RS1600A/B/C/D-N	Rate: 53.125-113 GBaud; A = electrical; B = integrated; C = touchscreen (optional); D = custom models for specific requirements; N = No. of channels;
Extended warranty	3-year extended warranty (optional);

1.6T Tri-temperature Bit Error Rate Tester

1.6T



Appearance & Structure

Product Introduction:

The RS164T TEC tri-temperature test system tests optical modules under high, ambient and low temperature: the unit creates the set temperature environment and runs BER and other tests to verify module parameters.

Features:

Temp. accuracy: $\pm 0.3^{\circ}\text{C}$ (equipment temp.)

Temp. range: -25°C to $+85^{\circ}\text{C}$

Low power consumption

Working principle:

TEC-based heating/cooling of the device under test; consists of test bench and controller.

Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.	Remarks
Temperature control section					
Range	°C	-25°C	20~50°C	+85°C	
Accuracy	°C	±0.3 °C (equipment temp.)			
Speed	S	90S(25°C~85°C)		140S(85°C~-25°C)	
Method	TEC module + water cooling				
Stations	Standard: 2 test stations (customizable)				
Cool-down time	30 min				
Power supply		AC220V,50Hz			
Power rating	KW	2.2			
Water pipe	mm	8 (inner dia.)		12 (outer dia.)	
Test bench size	mm	530mm x 550mm x 120mm			L×W×H
Controller	mm	380mm x 680mm x 600mm			L×W×H

Parameter	Unit	Spec.	Remarks
Error generation section			
Channels	pcs	N	
Modulation		NRZ / PAM4 differential	
Termination type		AC-coupled	
Symbol rate	GBaud	53.125 ~ 113	
Freq. acc.	ppm	± 50 ppm	
Max out ampl. (diff)	Mv	2250mVp-p @ 106GBD	
Max in ampl. (diff)	Mv	2250mVp-p @ 106GBD	
Output impedance	OHM	$50\ \Omega \pm 10\%$	
Rise time (20%–80%)	ps	<10ps	
Fall time (80%–20%)	ps	<10ps	
RMS jitter	fs	<300 fs	
RF interface		1.0mm female,50 Ω	
Synchronous clock output			
Amplitude	mVp-p	>300	
Output mode		AC-coupled, differential	
Divider		2/4/8/16/32	
RF interface		1.85 mm female,50 Ω	
Error analysis section			
Input type		Differential PAM4	
Termination type		AC-coupled, differential	
Max. input amplitude		800mVp-p @106GBD	
Receiver sensitivity (diff.)		100mVp-p	
Symbol rate	GBaud	53.125 ~113	
Clock mode		Built-in clock recovery	
Sync type		Auto sync (level/phase)	
RF interface		1.0mm female, 50 Ω	
FEC error-correction analysis			
Type		Hardware FEC analysis	
Pre-/post-FEC BER test		Supported	
FEC margin test		Supported	
Symbol error distribution test		Supported	

Parameter	Unit	Spec.	Remarks
Common section			
Power in	V	AC:100-240V 50Hz/60Hz	
GND	pcs	BERT grounding terminal	
Power	W	<60W	
Op. temp.	°C	-10~+55	
Stor. temp.	°C	-40~+85	
Humidity	%RH	10%~95%	non-condensing
Stor. hum.	%RH	15%~90%	non-condensing
Warm	Min	20 min	
Cooling	/	Min. 50 mm clearance on all sides	

Ordering Information

Model	Product Description
RS164T/D-N	Rate: 53.125-113 GBaud per optical port; T = TEC; D = custom models for specific requirements; N = No. of channels;
Extended warranty	3-year extended warranty (optional);

800G Bit Error Rate Tester

800G ERROR RATE TEST



Product Introduction:
The RS10800A series is a cost-effective, easy-to-use 800G BERT for testing components, cables, optical modules and systems in R&D and manufacturing. It supports multiple data rates and NRZ/PAM4/PAM4+FEC modes; optional DLL API; low power, compact size.

Features:
Multiple data rates
Supports NRZ / PAM4 / PAM4+FEC (KP4) modes
Host side: 8 × 115G PAM4
Line side: 8 × 115G PAM4
Internal reference clock
Built-in clock recovery
Output with configurable 7-tap pre-emphasis
KP4 FEC analysis
Multiple coaxial RF connectors
Trigger clock support

Supported patterns:
PRBS7/9/11/13/15/16/23/31; PRBS7Q/9Q/11Q/13Q/15Q/16Q/23Q/31Q, SSPRQ, JPO3A/JPO3B, linear test patterns, square wave
User-defined patterns (32/64-bit)

Interfaces:
Trigger output: single-ended, AC-coupled;
Electrical output: differential AC-coupled, data inversion supported;
Electrical input: differential AC-coupled, data inversion supported;
Single-ended input with 50 Ω termination;

Other interfaces:
Chassis grounding terminal
220V AC power input
1 × USB 2.0 port

Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.	Remarks
Error generation section					
Channels	pcs	8			Differential output
Modulation		NRZ,PAM4			
Supported rates	GBaud	24.33/24.8832/25/25.78125/26.5625/27.89/ 27.95/28.05/28.125/28.2/28.9/48.66/ 49.7664/51.5625/53.125/56/56.25/56.4/57.8;			
Freq. acc.	ppm	±100/±50 ppm			
Max out ampl. (diff)	Mv	600 mVp-p @ 56 GBaud 2600 mVp-p @ 56 GBaud (with high-amplitude option)			
Max in ampl. (diff)	Mv	800mVp-p @56GBd			
Output level accuracy	%		5	8	
Output impedance	OHM	45		55	Single-ended
Rise time (20%-80%)	ps	10ps			CH1~CH8
Fall time (80%-20%)	ps	10ps			CH1~CH8
JMS jitter	mUI	<450 fs @ 56GBaud,<400 fs @ 28GBaud			CH1~CH8
RF interface	pcs	33			1.85mm

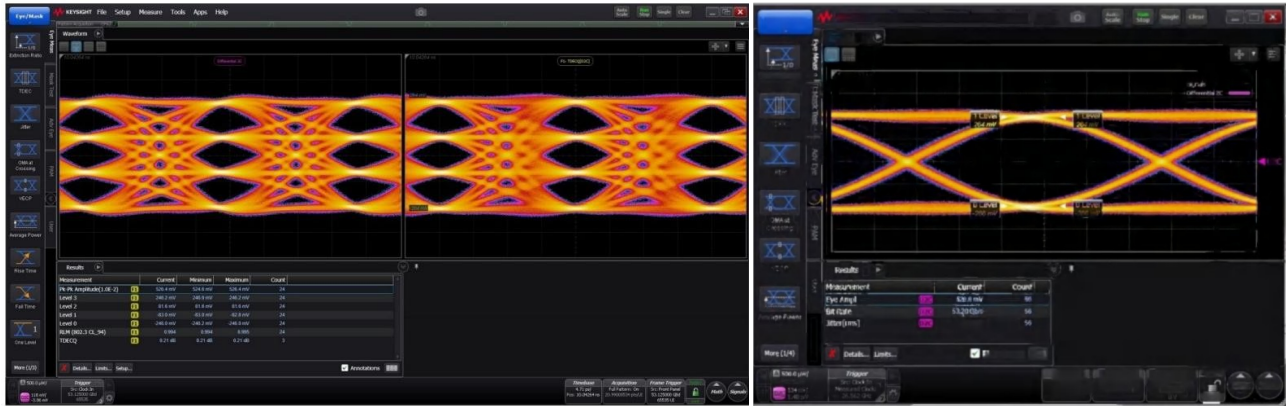
Synchronous clock output

Amplitude	Mv	>300			
Output mode		AC-coupled, single-ended			
Divider		2/4/8/16/32			
RF interface		1.82mm			50Ω
USB interface	pcs	USB2.0			

Common section

Power in	V	AC:100-240V 50Hz/60Hz			
GND	pcs	BERT grounding terminal			
Power	W	<60W			
Op. temp.	°C	-10-+55			
Stor. temp.	°C	-40-+85			
Humidity	%RH	10%~95%			non-condensing
Stor. hum.	%RH	15%~90%			non-condensing
Warm	Min	30 min			
Cooling	/	Min. 50 mm clearance on all sides			

Output eye diagram examples



Ordering Information

Model	Product Description
RS10800A/B/C/D-8	Rate: 24.33-57.8 GBaud; A = electrical; B = integrated; C = LCD touchscreen (optional); D = custom models for specific requirements; 8 = No. of channels;
Extended warranty	3-year extended warranty (optional);

800G TEC Tri-temperature Bit Error Rate Tester

800G TEC ERROR RATE TEST



Appearance & Structure

Product Introduction:

The RS804T TEC tri-temperature BERT tests optical modules under high, ambient and low temperature: the unit creates the set temperature environment and runs BER and other tests to verify module parameters.

Features:

Temp. accuracy: $\pm 0.3^{\circ}\text{C}$ (equipment temp.)

Temp. range: -20°C to $+80^{\circ}\text{C}$

Low power consumption

Supported rates: 24.33-57.8 GBaud

NRZ / PAM4 / PAM4+FEC (KP4) modes with KP4 FEC analysis

Internal reference clock, built-in clock recovery

Output with configurable 7-tap pre-emphasis

Supported patterns:

PRBS7/9/11/13/15/16/23/31; PRBS7Q/9Q/11Q/13Q/15Q/16Q/23Q/31Q, SSPRQ, JPO3A/JPO3B, linear test patterns, square wave

User-defined patterns (32/64-bit)

Working principle:

TEC-based heating/cooling of the device under test; consists of test bench and controller.

Service creates value!

Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.	Remarks
Temperature control section					
Temp. control range	$^{\circ}\text{C}$	-20°C	$20\sim 50^{\circ}\text{C}$	$+80^{\circ}\text{C}$	
Temp. control accuracy	$^{\circ}\text{C}$	$\pm 0.3^{\circ}\text{C}$ (equipment temp.)			
Temp. control speed	S	90S($20^{\circ}\text{C}\sim 70^{\circ}\text{C}$)/140S($70^{\circ}\text{C}\sim 20^{\circ}\text{C}$)			
Power supply	KW	AC220V, 50Hz			
Power	mm	3 (inner dia.)		12 (outer dia.)	
Water pipe	mm	530mm x 550mm x 120mm			L×W×H
Test bench size	mm	380mm x 680mm x 600mm			L×W×H

Controller

Error generation section

Channels	pcs	N	Differential output
Modulation		NRZ, PAM4	
Supported rates	GBaud	24.33/24.8832/25/25.78125/26.5625/27.89/ 27.95/28.05/28.125/28.2/28.9/48.66/ 49.7664/51.5625/53.125/56/56.25/56.4/57.8;	
Freq. acc.	ppm	$\pm 100/\pm 50$ ppm	
Max out ampl. (diff)	Mv	600 mVp-p @ 56 GBaud 2600 mVp-p @ 56 GBaud (with high-amplitude option)	
Max in ampl. (diff)	Mv	800mVp-p @56GBd	
Output level accuracy	%	5	8
Output impedance	OHM	45	55
Rise time (20%-80%)	ps	10ps	
Fall time (80%-20%)	ps	10ps	
JMS jitter	mUI	<450 fs @ 56GBaud, <400 fs @ 28GBaud	
RF interface	pcs	33	1.85mm

Synchronous clock output

Amplitude	Mv	>300	
Output mode		AC-coupled, single-ended	
Divider		2/4/8/16/32	
RF interface		1.82mm	50Ω
USB interface	pcs	USB2.0	

Parameter	Unit	Spec.	Remarks
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Common section

Power in	V	AC:100-240V 50Hz/60Hz	
GND	pcs	BERT grounding terminal	
Power	W	<60W	
Op. temp.	°C	-10~+55	
Stor. temp.	°C	-40~+85	
Humidity	%RH	10%~95%	non-condensing
Stor. hum.	%RH	15%~90%	non-condensing
Warm	Min	30 min	

Ordering Information

Model	Product Description
RS804T/D-N	Rate: 24.33-57.8 GBaud per optical port; T = TEC; D = custom models; N = No. of channels;
Extended warranty	3-year extended warranty (optional);

400G Bit Error Rate Tester

400G ERROR RATE TEST



Appearance & Structure

Product Introduction:

The RS10400A-8 BERT is a multi-channel, multi-rate, high-performance error analyzer with pattern generator, clock generation/recovery circuits and an error analyzer for physical-layer and compliance testing. Its unique multi-channel RF signals, custom-rate testing, standalone rate support and interconnection, plus continuous bandwidth from 9.953G-14G (PAM4: 19.906G-28G) and 18G-28G (PAM4: 36G-56G), provide NRZ/PAM4 signal sources and convenient conversion and interconnection (O/E and rate conversion). Optional DLL API; low power, compact size.

Features:

Multiple outputs: 8 differential pairs + 2 clocks;
Multiple inputs: 8 pairs of differential inputs;
User-defined input: 9.953-28 GBaud;
Multi-level input: differential 200-900 mV;
Polarity adjustable: adaptive on receiver side;
FEC: supported;
Calibration: transmission-delay calibration prevents line-delay-induced errors;
Statistics: real-time error statistics with exportable test reports for analysis;
Extensibility: programmable API for custom host software;
Logging: host software records and stores test data;
High stability: 5000 h continuous fault-free operation;
Flexible: any-channel output/input (same rate and pattern required);
Remote interconnection: two units at two sites can interconnect;
Multiple control options: GUI and remote control;

Supported patterns:

PPRBS7/9/11/13/15/16/23/31;PRBS7Q/9Q/11Q/13Q/15Q/16Q/23Q/31Q,JPO3B,LIN,CID, SSPRQ;

Interfaces:

Trigger output: single-ended AC-coupled, 1/2-1/64 clock;
Electrical output: differential AC-coupled, data inversion supported;
Electrical input: differential AC-coupled, data inversion supported;
Single-ended input with 50 Ω termination;

Other interfaces:

Chassis grounding terminal
220V AC power input
1 × USB 2.0 port

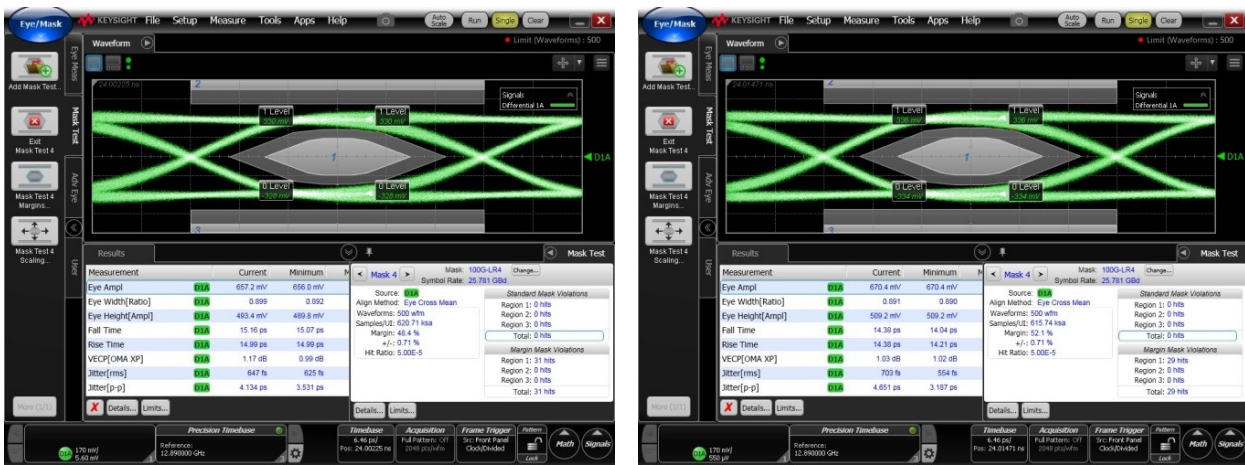
Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.	Remarks
Error generation section					
Channel	pcs	8			Differential output
Signal		NRZ,PAM4			
Rate range	GBaud	9.953		28	
Freq. acc.	ppm	-100		100	
Out. ampl. (diff)	Mv	200	300	600	
Clk out ampl. (diff)	Mv	200	300	600	
Output level accuracy	%		5	8	
Output impedance	OHM	45		55	Single-ended
Trigger clock frequency	GHz	0.312		14	1/2,1/4,1/8,1/16,1/32 divider
Rise time (20%-80%)	ps	10			CH1~CH8
Fall time (80%-20%)	ps	10			CH1~CH8
Jitter	mUI	0		100	CH1~CH8
RMS jitter	mUI	0	17	23	CH1~CH8
PAM4 eye width (0 crossing)	ps				
CTLE	dB	0		8	

Error analysis section

Channel	pcs	8			Differential input
Rate range	GBaud	9.953		28	
Freq. acc.	Ppm	-100		100	
In. ampl. (diff)	Mv	200	600	900	
USB interface	pcs	USB2.0			
RF interface	/	SMA interface			2.92 mm female
Power in	V	100-240VAC 50Hz/60Hz			
GND	pcs	BERT grounding terminal			
Power	W	<60W			
Op. temp.	°C	-10-+55			
Stor. temp.	°C	-40-+85			
Humidity	%RH	10%~95%			non-condensing
Stor. hum.	%RH	15%~90%			non-condensing
Size	Mm	440*105*270			
Weight	KG	4			
Warm	Min	30 min			
Cooling	/	Min. 50 mm clearance on all sides			
EMC	/	EC-61326-1			
Safety	/	IEC-61010-1			

Output eye diagram examples



Ordering Information

Model	Product Description
RS10400A/B/C/D-8	Rate: 9.953-14 GBaud & 18-28 GBaud; A = electrical; B = optical; C = LCD touchscreen (optional); D = custom models; 8 = No. of channels;
Extended warranty	3-year extended warranty (optional);

100G Bit Error Rate Tester

100G ERROR RATE TESTER



Appearance & Structure

Product Introduction:

The RS15100 is a multi-channel, multi-rate, high-performance error analyzer with a pattern generator, clock generation/recovery circuits and an error analyzer, controlled via an integrated computer GUI. Optional DLL API for user programming; low power, compact size.

Features:

Multiple outputs: N differential pairs and clocks;
Multiple inputs: N pairs of differential inputs;
High bandwidth: 9.953G-31G per channel;
User-defined input: any rate 23-31G or 9.953-15G;
Multi-level output: differential 200-1000 mV, configurable amplitude.
Multi-level input: differential 200-1000 mV;
Polarity adjustable on both TX and RX;
Calibration: transmission-delay calibration prevents line-delay-induced errors;
Statistics: real-time error statistics with exportable test reports for analysis;
Extensibility: programmable API for custom host software;
Logging: host software records and stores test data;
High stability: 5000 h continuous fault-free operation;
Flexible: any-channel output/input (same rate and pattern required);
Remote interconnection: two units at two sites can interconnect;
Multiple control options: GUI and remote control;

Supported patterns:

Patterns: PRBS 2⁷-1, 2⁹-1, 2¹⁵-1, 2²³-1, 2³¹-1;

Interfaces:

Output: single-ended AC-coupled 1/8 clock;
Electrical data output: differential AC-coupled, inversion supported;
Single-ended input with 50 Ω termination;

Other interfaces:

Chassis grounding terminal
220V AC power input
1 × USB 2.0 port

Service creates value!

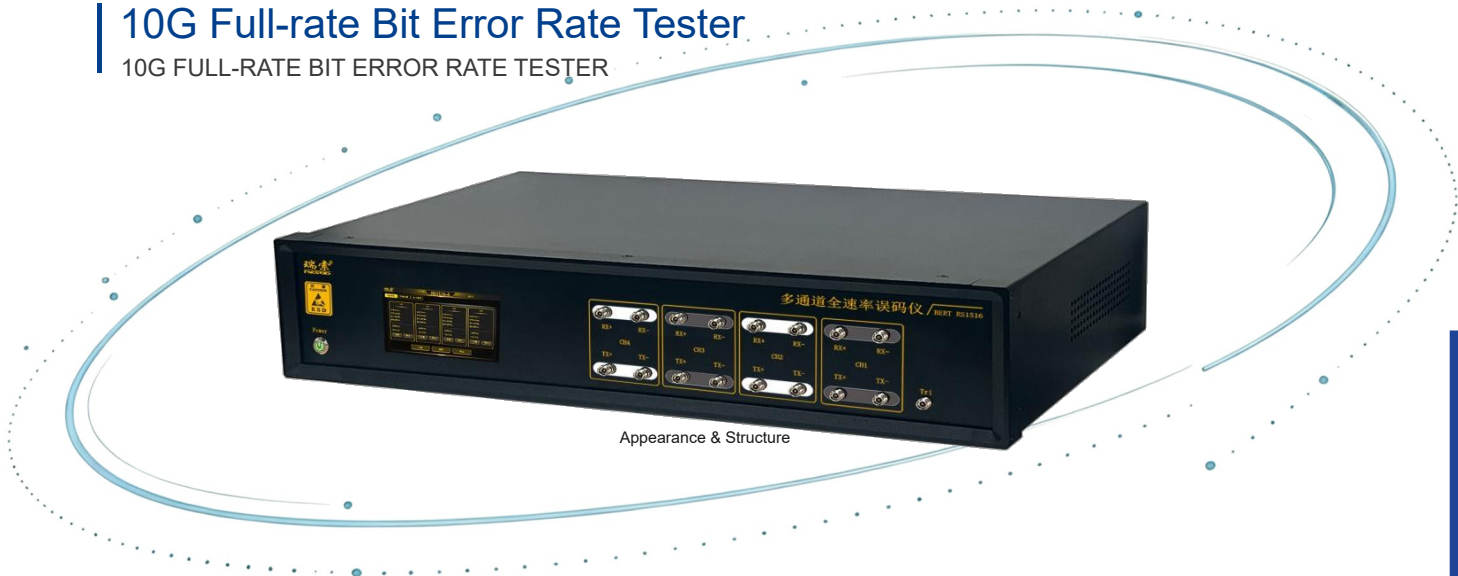
Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.	Remarks
Error generation section					
Channel	pcs		N		Differential output
Rate range	Gbit/s	9.953G~15G&23G~31G			
Freq. acc.	ppm	-50		50	
Out. ampl. (diff)	mV	100	500	1000	CML, 25G rate
Clk out ampl. (diff)	mV	100	500	1000	CML
Output level accuracy	%		5	8	
Output impedance	OHM	45		55	Single-ended
Trigger clock frequency	GHz	0.39		3.875	1/8 divider
Rise time (ps, 20%~80%)	CH0~CH(N)	8	15	20	
Fall time (ps, 80%~20%)	CH0~CH(N)	8	15	20	
Peak-to-peak jitter (ps)	CH0~CH(N)	0		15	
RMS jitter (ps)	CH0~CH(N)	0		2	
Crossing point (%)	CH0~CH(N)	40		60	
Pre-emphasis	CH0~CH(N)				(adjustable, optional)
Equalization	CH0~CH(N)				(adjustable, optional)
Error analysis section					
Channel	pcs	N		Differential input	
Rate range	Gbit/s	9.953G~15G&23G~31G			
Freq. acc.	ppm	-50		50	
In. ampl. (diff)	mV	100	500	1000	CML,25G Rate
Input impedance	OHM	45		55	Single-ended
SMA Interface	Trigger	Tri	BERT trigger output interface		
	CH0_CH(N)	TX+/-	Differential output interface		
		RX+/-	Differential output interface		
RF interface	/	SMA interface		2.92 mm female	
USB interface	pcs	USB2.0		Standard	
Ethernet interface	pcs	RJ45		Optional	
Serial port	pcs	RS232/RS485		Optional	
Power in	V	AC: 100 ~ 240V 50Hz/60Hz			
GND	pcs	BERT Grounding terminal			
Power	W	<30W			

Parameter	Unit	Spec.	Remarks
Op. temp.	°C	-10 _ +55	
Stor. temp.	°C	-40 _ +85	
Humidity	%RH	10%~95%	non-condensing
Stor. hum.	%RH	15%~90%	non-condensing
Size	mm	340*11 6*240	
Weight	KG	4	
Warm	Min	30 min	
Cooling	/	Min. 50 mm clearance on all sides	

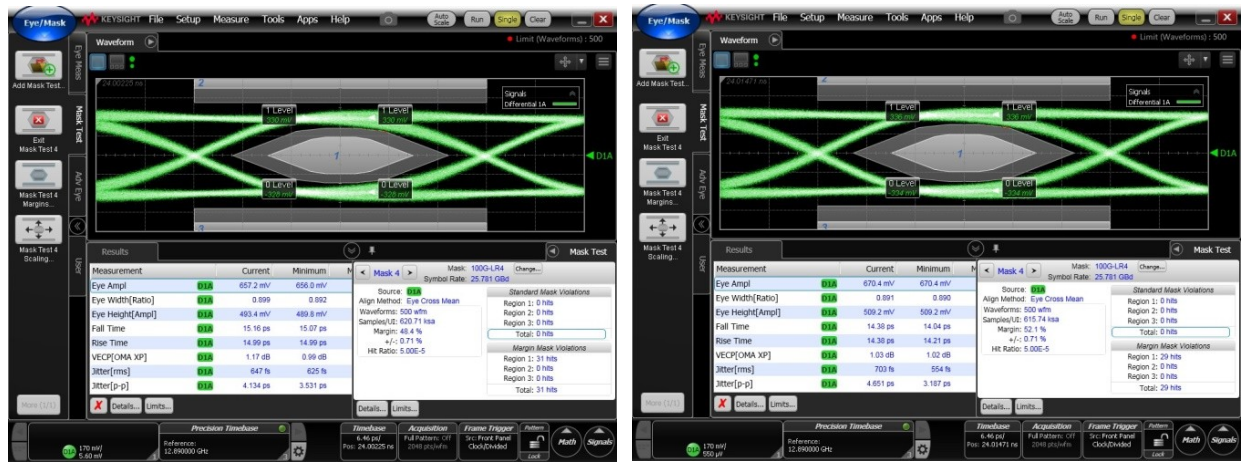
10G Full-rate Bit Error Rate Tester

10G FULL-RATE BIT ERROR RATE TESTER



Appearance & Structure

Output eye diagram examples



Product Introduction:

The RS1516 is a multi-channel, multi-rate, high-performance BERT with a pattern generator, clock generation/recovery circuits and an error analyzer, controlled via an integrated computer GUI.

Optional DLL API for user programming; low power, compact size.

Features:

Typical rates: 155M, 622M, 1.25G, 2.125G, 2.488G, 2.5G, 2.67G, 3.125G, 4.25G, 6.144G, 6.25G, 8.5G, 9.95G, 10.3G, 10.71G, 11.1G, 11.3G, 12.5G, 14G, 15G, 16.5G;

Any rate from 155M to 16.5G;

Supported patterns:

Patterns: PRBS 2⁷-1, 2⁹-1, 2¹⁵-1, 2²³-1, 2³¹-1;

Interfaces:

Trigger output: single-ended, AC-coupled;

External clock input: external data can be synchronized to an external clock;

Electrical output: differential AC-coupled, data inversion supported;

Electrical input: differential AC-coupled, data inversion supported;

Single-ended input with 50 Ω termination;

Other interfaces:

Chassis grounding terminal

220V AC power input

1 × USB 2.0 port

Ordering Information

Model	Product Description
RS15100A/B/AB/C/D-N	Rate: 9.953-15 Gbit/s & 23-31 Gbit/s; A = electrical; B = optical; AB = combo; C = LCD touchscreen (optional); D = custom models; N = No. of channels;
Extended warranty	3-year extended warranty (optional);

ERROR RATE TESTER

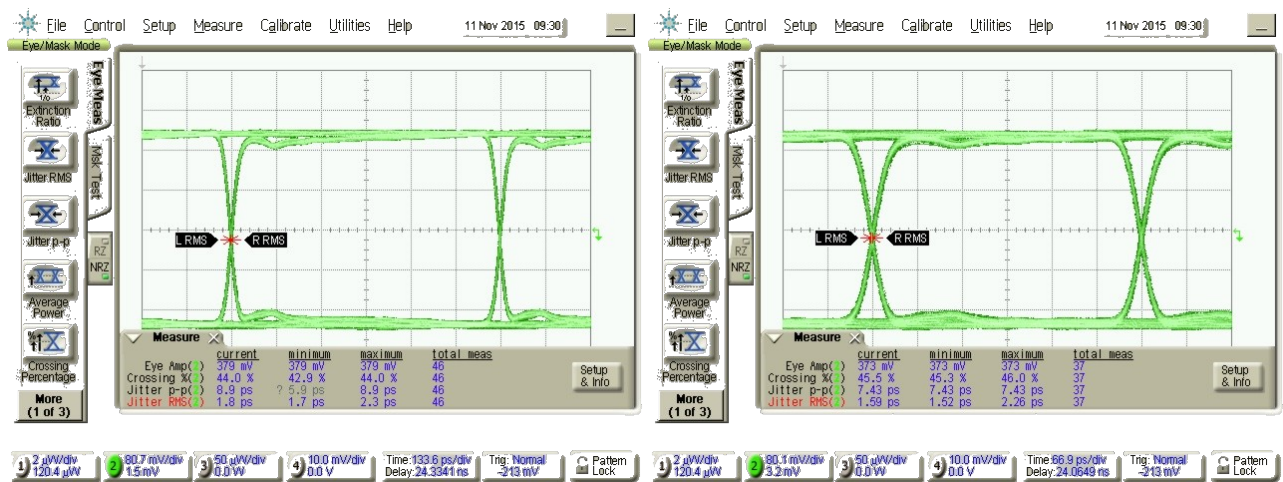
10G FULL-RATE BIT ERROR RATE TESTER

I Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.	Remarks
Pattern generator section					
Channel	pcs	N			Differential output;
Rate range	Mbit/s	155	/	16500	
Freq. acc.	ppm	-50	/	50	
Out. ampl. (diff)	mV	200	600	1200	
Clock output amplitude	mV	100	/	500	
Output level accuracy	%	/	5	8	
Output impedance	OHM	45	50	55	Single-ended
Trigger clock frequency	MHZ	77.76	/	3800	1/4 clock at 7.4 Gbps and above,
Rise time (ps, 20%-80%)	CH1~CH(N)	0	/	40	1/2 clock below 7.4 Gbps
Fall time (ps, 80%-20%)	CH1~CH(N)	0	/	40	Rate-dependent, except below 1G
Peak-to-peak jitter (ps)	CH1~CH(N)	0	/	20	
RMS jitter (ps)	CH1~CH(N)	0	/	3	
Crossing point (%)	CH1~CH(N)	40	50	60	
Error analysis section					
Channel	pcs	N			Differential output;
Rate range	Mbit/s	155M	/	16500	
In. ampl. (diff)	mV	200	600	1200	
Input impedance	OHM	45	50	55	Single-ended
Ext. ref. clock	MHZ	0		700	
Common section					
SMA interface	RCLin	Ext. ref. clock (custom)			
	Tri	BERT trigger signal output interface			
	CH1-CH(N)	TX+/-	Channel differential output interface		
		RX+/-	Channel differential input interface		
USB interface	pcs	USB2.0			
RF interface	/	SMA interface			3.5 mm female
Power in	V	100-240VAC 50Hz/60Hz			
GND	pcs	BERT grounding terminal			
Power	W	≤30W			
Op. temp.	°C	-10-+55			
Stor. temp.	°C	-40-+85			

Parameter	Unit	Spec.	Remarks
Humidity	%RH	10%-95% / non-condensing	
Stor. hum.	%RH	15%-90% / non-condensing	
Size	mm	360*105*240	
Weight	KG	4	
Warm	Min	30 min	
Cooling	/	Min. 50 mm clearance on all sides	

I Output eye diagram examples



I Ordering Information

Model	Product Description
RS1516A/B/AB/C/D-N	Rate: 155M-16.5 Gbit/s; A = electrical; B = optical; AB = combo; C = touchscreen (optional); D = custom models for specific requirements; N = No. of channels;
Extended warranty	3-year extended warranty (optional);

10M-11.3G Full-rate Bit Error Rate Tester

10M-11.3G FULL-RATE BIT ERROR RATE TESTER



Appearance & Structure

Product Introduction:

The RS1011 BERT is a high-precision bit error rate tester for BER testing of receiver signals in ROSA, BOSA and optical transceiver modules. Multiple rates, interfaces and channel configurations are available: SFP-P (optical) and SMA (electrical). Optional DLL API; low power, compact size.

Features:

RS1011 BERT is more accurate than conventional single-chip solutions;
PRBS generated by on-board FPGA;
User-defined data (64 bytes / 512 bits);
Simple software operation;

Supported rates:

Supports SDH/SONET, ESCON, Fibre Channel, GbE, CWDM, DWDM, CPRI, OBSAI and more.

Full-rate support: 10M to 11.3G;

Supported patterns:

3 PRBS patterns available: 2^7-1, 2^15-1, 2^31-1;
User-defined data: up to 64 bytes (512 bits), long "0"/"1" runs supported;

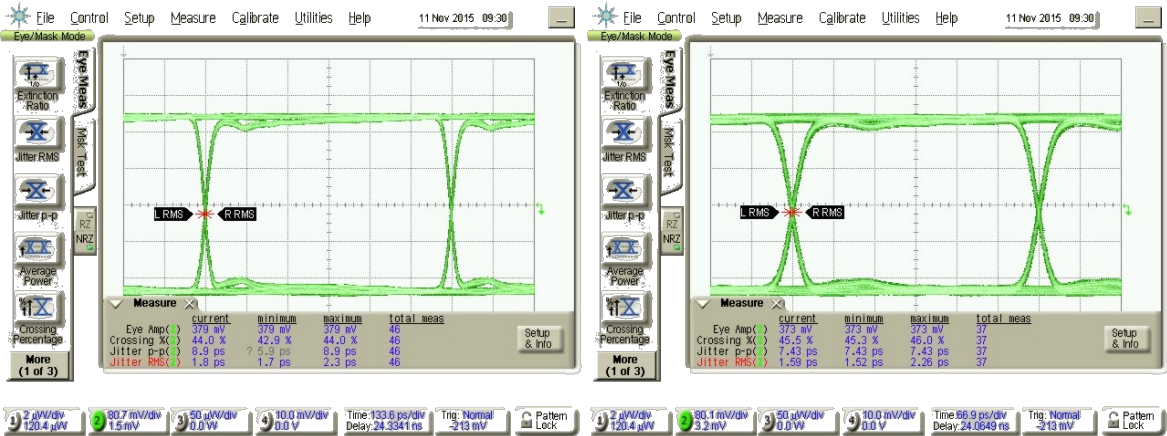
Other interfaces:

Chassis grounding terminal
220V AC power input
1 × USB 2.0 port
Electrical (differential data & clock): TX+, TX-, RX+, RX-, CLK+, CLK-
Optical ports (Rx & Tx) available;

Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.
Error generation section				
Channel	pcs	N		
Rate range	Mbit/s	10	/	11300
Freq. acc.	ppm	-100	/	100
Out. ampl. (diff)	mV	200	/	655
In. ampl. (diff)	mV	200	/	655
Error count display				9
Rise time (ps, 20%–80%)	CH1~CH(N)	/	70	85
Fall time (ps, 80%–20%)	CH1~CH(N)	/	70	85
Power in	V	100-240VAC 50Hz/60Hz		
GND	pcs	BERT grounding terminal		
Op. temp.	°C	-10—+55		
Stor. temp.	°C	-40—+85		
Humidity	%RH	10%–95% / non-condensing		
Stor. hum.	%RH	15%–90% / non-condensing		
Size	mm	340*115*240		
Weight	KG	4		
Warm	Min	30 min		
Cooling	/	Min. 50 mm clearance on all sides		

Output eye diagram examples



Ordering Information

Model	Product Description
RS1011A/B/AB/C/D-N	Rate: 10M-11.3 Gbit/s; A = electrical; B = optical; AB = combo; C = touchscreen (optional); D = custom models for specific requirements; N = No. of channels;
Extended warranty	3-year extended warranty (optional);

Clock Data Recovery

CLOCK AND DATA RECOVERY INSTRUMENT

Product Overview:

The CDR (Clock Data Recovery) is a core instrument for high-speed digital signal testing: it extracts a clean synchronous clock from distorted, jittery data streams, rebuilds the data signal and restores the original waveform, providing a stable reference clock and regenerated data for scopes and BERTs - solving the industry pain point of testing degraded links without a synchronous clock.

Built-in high-performance PLL, adaptive equalization and high-speed decision circuits; supports NRZ/PAM4 from 10M to 112G. Use standalone or with multi-channel BERTs and sampling scopes for complete signal-integrity testing of optical modules, high-speed cables and SerDes chips.

Working principle:

The CDR extracts the embedded clock via edge detection, PLL feedback and filtering, recovering a stable clock synchronized to the data, with loop-bandwidth filtering to optimize signal quality.

Applications:

Optical transceiver R&D and production; optical device/subsystem R&D and production; defense; electronics research institutes; medical.



Service creates value!

800G Clock Data Recovery (CDR)

800G CLOCK AND DATA RECOVERY INSTRUMENT



Appearance & Structure

Product Introduction:

The RS3410F is an adaptive, high-performance CDR with high bandwidth and low intrinsic jitter, supporting stable NRZ/PAM4 clock extraction at 24-30 GBaud and 48-60 GBaud with recovered synchronous clock and data. It provides reliable, high-precision test data for optical and electrical transceivers in data communications.

Features:

High bandwidth: NRZ and PAM4, up to 120 Gbps.
Integrated OE and clock recovery design.
Supports SM and MM optical signals; sensitivity < -10 dBm.
Ultra-low random jitter < 230 fs RMS.
Multiple control options: GUI and remote control;

Interfaces:

Chassis grounding terminal
220V AC power input
SMA clock output and FC optical input

Main Performance Specifications

Electrical specifications

Clk out ampl. (diff)	700 mVpp @ 26.56GHz
Clk divider	1/2, 1/4, 1/8, 1/16, 1/32, 1/64
Rec. jitter	<230 fs @13.28GHz
Loop BW	4MHz
Std. signal	±100 ppm
Auto lock	Yes
Int. clk out	Yes
Diff clk out	Yes

Optical specifications

Clock recovery rate range	24~ 60 GBaud
Receiver sensitivity	-12 dBm @ 53.125 GBaud PAM4 SM
	-10 dBm @ 53.125 GBaud PAM4 MM
Optical signal type & mode	SM & MM
Input wavelength range	820~1650 nm
Optical port return loss	<16 dB
Optical connector type	SM:FC/PC 9/125µm MM:FC/PC 50/125 µm

Other specifications

Op. temp.	10 °C to +40 °C
Power in	AC:100-240V 50Hz/60Hz
Max. relative humidity	95%
Comm.	USB, LAN
Max. power	6W

Ordering Information

Model	Product Description
RS3410F	Supports 24-30 and 48-60 GBaud, NRZ/PAM4, SM/MM optical CDR:
Extended warranty	3-year extended warranty (optional);

25G Clock Data Recovery (CDR)

25G CLOCK AND DATA RECOVERY INSTRUMENT



Product Description:

The RS3310F CDR is an adaptive, high-bandwidth, high-performance instrument that automatically extracts and recovers the synchronous clock required by optical scopes (DCA) - no manual or program control needed. Compact design, unique power-optimization algorithm and a large LCD display. It provides reliable, high-precision test data for optical and electrical transceivers in data communications.

Features:

Supports 25.78 Gbit/s;
Integrated OE and clock recovery design.
Supports SM and MM optical signals; sensitivity < -10 dBm.
Ultra-low random jitter < 230 fs RMS.
Multiple control options: GUI and remote control;

Interfaces:

Chassis grounding terminal
220V AC power input
SMA clock output
Optical input: FC/UPC SM & MM fiber

Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.	Remarks
Optical input/output					
Optical signal rate	Gbit/s	/	25.78G	/	
Input wavelength	nm	1270	1310	1330	Single-mode fiber
	nm		850		Multi-mode (50/125um)
Input optical power	dBm	-8	0	+4.5	NRZ signal
		-5	0	+4.5	
Input/output interfaces	Standard FC/UPC interface				

Parameter	Unit	Min.	Typ.	Max.	Remarks
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Clock & data output

Freq. acc.	ppm	-50		50	
Clock divider		8	16	256	Supports 8, 16, 64, 256
Jitter	ps		9	12	pk-pk
Output impedance	Ohm	45		55	Single-ended
Output swing	mVppd	200	800	1200	Differential
Output I/F	SMA connector				

Common section

Power in	V	AC:100-240V 50Hz/60Hz			
Power	W	<10W			
Op. temp.	°C	-10 ~ +55°C			
Size	mm	280*170*80&340*115*240			
Weight	KG	3			

Ordering Information

Model	Product Description
RS3310F	Rate: 25.78 Gbit/s;
Extended warranty	3-year extended warranty (optional);

10G Clock Data Recovery (CDR)

10G CLOCK AND DATA RECOVERY INSTRUMENT



Product Description:
The RS3010 CDR is an adaptive, high-bandwidth, high-performance clock data recovery instrument that extracts and recovers synchronous clock and data from data signals. It supports optical input, electrical input, or both simultaneously, providing reliable, high-precision test data for optical and electrical transceivers in data communications.

Features:
Any rate from 10 Mbit/s to 11.3 Gbit/s;
Integrated OE and clock recovery design.
Supports SM and MM optical signals; sensitivity < -10 dBm.
Ultra-low random jitter < 230 fs RMS.
Multiple control options: GUI and remote control;

Interfaces:
Chassis grounding terminal
220V AC power input
SMA clock output
Optical input: SFP & FC/UPC

Main Performance Specifications

Parameter	Unit	Min.	Typ.	Max.	Remarks
Rate range	Mbit	10		11300	Any-rate adaptive
Freq. acc.	Ppm	-50		50	
Jitter	Ps		9	12	pk-pk
Output impedance	OHM	45		55	Single-ended
Input impedance	OHM	45		55	Single-ended
Data in ampl. (diff)	mv	200	800	2000	
Data out ampl. (diff)	mv	200	800	2000	
Clk out ampl. (diff)	mv	200	1000	2000	
SFP & FC/UPC interfaces	Standard SFP and FC/UPC interfaces; rate and wavelength selectable per application				

Parameter	Unit	Spec.
Common section		
Power in	V	AC:100-240V 50Hz/60Hz
Power	W	<10W
Op. temp.	°C	-10 ~ +55°C
Size	mm	280*170*80&340*115*240
Weight	KG	3

Panel interface description

ID	Definition	Level (mV)	Remarks
Electrical section			
IN+	Data+ input	0~500	10Mbps~8.5Gbps
IN-	Data- input	0~500	8.5 Gbps~11.3Gbps
E-CLK-	CLK- output	CML	1/4
E-CLK+	CLK+ output		
E-OUT-	Data- output	CML	Same as input signal rate (optional)
E-OUT+	Data+ output		

Optical section			
OP_in	Optical input/output FC/UPC	1270nm~1610nm	155Mbps~8.5Gbps
OP_out		1270nm~1610nm	8.5 Gbps~11.3Gbps
SFP	Optical signal input	N/A	10Mbps~8.5Gbps
O-CLK-	CLK- output	CML	1/4
O-CLK+	CLK+ output		
O-OUT-	Data- output	CML	Same as SFP optical signal rate
O-OUT+	Data+ output		

Rear panel	
Power in	100-240VAC 50Hz/60Hz
GND	CDR GND

Ordering Information

Model	Product Description
RS3010F/S/E	Rate: 10 Mbit/s-11.3 Gbit/s; F = FC flange; S = SFP optical; E = electrical;
Extended warranty	3-year extended warranty (optional);

RS2010 Programmable Attenuator

RS2010 PROGRAMMABLE OPTICAL ATTENUATOR



Appearance & Structure

Product Description:
The programmable optical attenuator series is designed for integrated testing of today's optical transceivers and networks. Multiple independent attenuator channels with rich communication interfaces integrate with RESOO instruments - the best solution for sensitivity, BER and attenuation testing of 40G/100G/400G/800G/1.6T modules and networks. Optional power monitoring displays input/output power per channel in real time, sets constant output power, and shows current attenuation, wavelength, step size and more on the LCD, switchable via keypad; Optional DLL API for user programming; low power and compact size.

Applications:
Telecom engineering maintenance
CATV engineering & maintenance
Structured cabling systems
Optical device production & research
Optical communication teaching & experiments
Other fiber-optic projects

Features:
Rich software protocols for easy system integration;
Fast attenuation adjustment;
Good linearity, high accuracy;
Low insertion loss;
Attenuation positioning;

Interfaces:
Chassis grounding terminal
220V AC power input
1 × USB 2.0 port

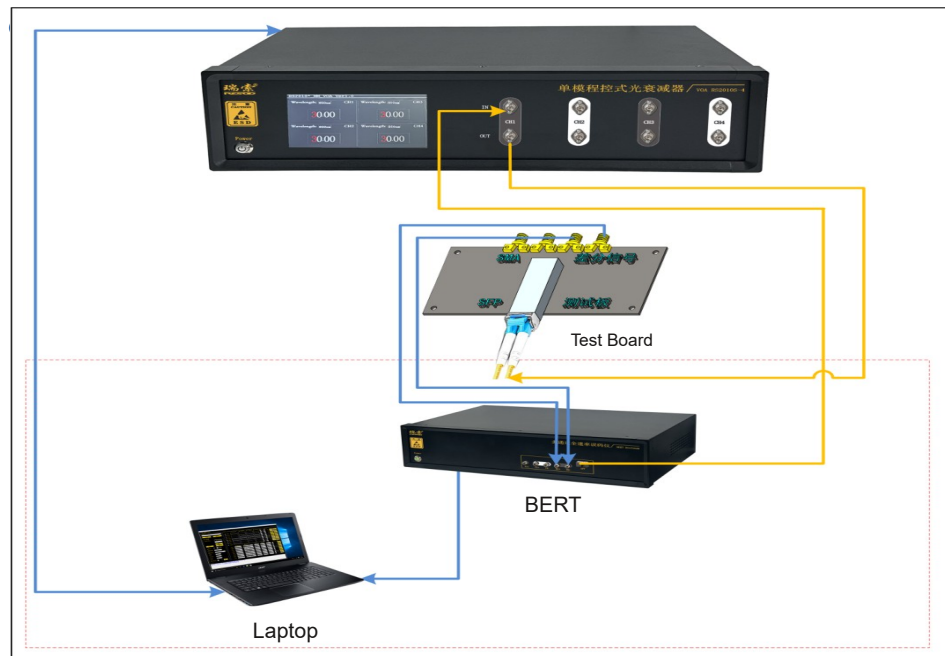
Working principle

As an optical signal travels, path-length changes directly affect power loss. A mechanical attenuator adjusts mirror or fiber alignment via mechanical structures to lengthen or shorten the optical path. A movable shading element inserted in the path varies the transmitted light to control attenuation.

Main Performance Specifications

Item	Unit	Parameter	Parameter
Fiber type	mm	SM	MM
Interface	-	FC/UPC	FC/UPC
Channels	-	N	N
Wavelength	nm	1270nm~1650nm	850nm
Max. attenuation	dB	≥40.0	≥40.0
Insertion loss	dB	<1.3	<1.0
Attenuation step	dB	0.01	0.01
Accuracy	dB	<0.2	<0.2
Stability	dB	<0.2	<0.2
Response time	ms	<50ms/dB	<50ms/dB
Op. temp.		0-50°C	
Stor. temp.		-20~+70	
Control		USB Type-B & serial port	
Humidity		<95%	
Power supply		AC :180~260V, 50~60Hz, 20W	

Typical application



Ordering Information

Model	Product Description
RS2010M/S/D-N	M = MM; S = SM; D = custom models; N = No. of channels
Extended warranty	3-year extended warranty (optional);

RS5010 Desktop Power Meter

RS5010 BENCHTOP OPTICAL POWER METER



Appearance & Structure

Product Description:

The RS5010 series benchtop optical power meter offers excellent dynamic range and linearity with RS232/USB interfaces for direct PC communication. The streamlined command set greatly speeds PC communication while standard commands maximize reliability. Multi-channel power meters serve burn-in monitoring and device testing of PLC, WDM, AWG, MPO and multi-fiber applications, and support secondary development for optical device makers, research institutes and universities. Applications: production coupling and testing of WDM, GFF, AWG and PLC devices; fiber sensors and fiber cable testing; fiber communication R&D laboratory testing; PMD and PDL measurement. Features: settable wavelength; sampling rate up to 10 ksps, configurable; wide dynamic range +5 to -70 dBm; PDL measurement; optional power detection range; rich command set with demo software; wavelength editing; wavelength setting memory;

Applications:

For coupling and testing of WDM, GFF, AWG and PLC devices.
Fiber sensors and fiber cable testing.
Fiber and communication R&D laboratory testing.
PMD and PDL measurement.

Features:

Adjustable wavelength;
Sampling rate up to 10 ksps, configurable;
Wide dynamic range +5 to -70 dBm;
PDL measurement;
Optional power detection range;
Rich command set with demo software;
Wavelength editing;
Wavelength setting memory;

Main Performance Specifications

Parameter		Spec.
Channels	N	
Wave range	850~1700nm	
Cal. wave.	850, 1300, 1310, 1490, 1550, 1625nm	
Probe	InGaAs	
Detector	Φ 2mm	
Range	+5~-70dBm/+25~-50dBm	
Linearity	±0.04 dB (+5 to -50 dBm); ±0.08 dB (-50 to -75 dBm)	
Sampling	10Ksps	
Uncertainty	±3%	
Resol.	0.1/0.01/0.001 dB	
Unit	dB/dBm/mW , μ W , nW	
Comm.	RS232/USB	
Op. temp.	-5~+40°C	
Stor. temp.	-25~+70°C	
Power supply	AC 220V 50Hz	

Ordering Information

Model	Product Description
RS5010/D-N	Wavelength: 850-1700 nm; D = custom models; N = No. of channels;
Extended warranty	3-year extended warranty (optional);

Rack-mount Optical Switches

RACK-MOUNT OPTICAL SWITCH SERIES

Product Overview:

The rack-mount optical switch is an optical-path control device that switches light paths. Paths can be selected manually via the front-panel keypad, or switched through the RS232 serial port and Ethernet port, or automatically scanned at a set frequency for monitored paths. In optical communication projects it is mainly used for: multi-channel optical monitoring in transmission systems; automatic switching of LAN multi-source/detector and multi-point dynamic monitoring in optical sensing; testing of fiber, optical devices, networks and field cables in optical test systems; and assembly and alignment of optical devices.

Working principle:

- Mechanical switch: physically moves optical elements to switch the light path
- Principle: mechanical motion (rotation, translation, swing) repositions optical elements to redirect the signal.
- MEMS optical switch: micro-mirror arrays reconfigure optical paths
- Principle: micron-scale movable mirrors on a silicon chip, driven electrostatically, magnetically or thermally, redirect light among ports.

Applications:

1. Automated testing in optical module production
2. In-line fiber monitoring systems
3. Data center & optical network R&D
4. Passive optical device testing
5. Fiber sensing & laboratory research

RS810 Optical Switch



Appearance & Structure

Product Description:

The RS810 optical switch is a key optical-path control device providing precise on/off switching and dynamic routing. Applications: multi-channel optical monitoring in transmission systems, automatic switching of LAN light sources/detectors, multi-point dynamic sensing systems; fiber, device, network and field cable testing in optical test systems; and optical device alignment.

Features:
Direct optical switching: no O/E conversion, parallel processing of multi-wavelength channels;
Low insertion loss: minimal signal attenuation;
High isolation: >45 dB, effectively suppressing crosstalk for signal purity;
Fast response: MEMS switching <10 ms, electro-optic down to nanoseconds, for dynamic networks;
MEMS: highly integrated (8×8 / N×N matrix support), compact;
All-optical: no electrical conversion, no timing jitter, for high-reliability scenarios;
Interfaces:
Chassis grounding terminal
220V AC power input
1 × USB 2.0 port

Main Performance Specifications

Item	Single-mode specifications		Multi-mode specifications
Operating wavelength	1260nm~1650nm	800nm~1300nm	
Test wavelength	1310nm /1490nm/1550nm	850nm	
Channels	N	N	
Insertion loss	<1.2dB	<1.2dB	
Return loss	≥50dB	≥30dB	
Isolation	≥55dB	≥30dB	
Repeatability	≤±0.05 dB	≤±0.05 dB	
Wavelength-dependent loss	≤0.25	≤0.2	
Polarization-dependent loss	≤0.05	≤0.05dB	
Switching time	≤10ms	≤10ms	
Fiber type	SM (9/125um)	MM (50/125um)	
Lifetime	10^7	10^7	
Connector type	FC/UPC	FC/UPC	
Monitor port	USB/RS-232/LAN	USB/RS-232/LAN	
Operating current	50mA~100mA	50mA~100mA	
Operating voltage	AC:110~250V, 50Hz/60Hz	AC:100-240V 50Hz/60Hz	
Size	440 × 50 × 240 mm (depth)	440 × 50 × 240 mm (depth)	

Ordering Information

Model	Product Description
RS810M/S/D-N	800-1650 nm; touchscreen; M = MM; S = SM; D = custom models; N = No. of channels;
Extended warranty	3-year extended warranty (optional);

Electrical Switch RS1812SP

RS1812SP ELECTRICAL SWITCH



Product Introduction:
The RF switch routes and expands high-speed RF channels using multiple switch devices with an embedded processing platform. Optional DLL API; low power, compact size.

Applications:

- Optical module and optical device/subsystem R&D and production;
- EMC testing;
- ATE systems;
- WLAN, Wi-Fi, LTE and wireless system testing;
- Channel expansion for high-speed electrical signals & instruments;

Features:

- High bandwidth: up to 22G;
- Low insertion loss: <0.20 dB min.;
- High isolation: up to >80 dB;
- Flexible: supports any rate and pattern;
- Local LED indicators on RF boards;
- Multiple control options: GUI and remote control;

Main technical specifications:

Parameter	Spec.				
Frequency range	DC-3GHZ	3-6GHZ	6-12GHZ	12-18GHZ	18-22GHZ
VSWR	<1.20	<1.30	<1.40	<1.50	<1.60
Insertion loss	<0.2dB	<0.3dB	<0.4dB	<0.5dB	<0.8dB
Isolation	>80dB	>70dB	>60dB	>60dB	>60dB
Switching time	15ms				
Interface type	SMA				
RF impedance	50Ω				
Comm.	USB				
Op. temp.	0—+50°C				
Stor. temp.	-20—+50°C				

Ordering Information

Model	Product Description
RS1812SP	0-18G (optional rates), 12 channels (optional count);
Extended warranty	3-year extended warranty (optional);

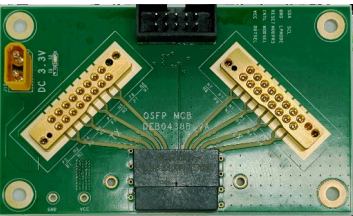
Test Board

TEST BOARD

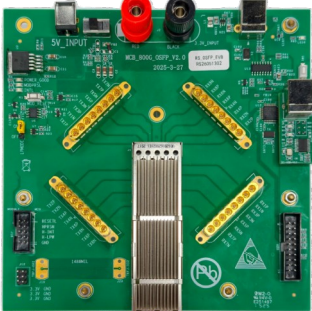
Product Description:

A full range of optical module test boards tailored for module manufacturers and end users, covering SFP, SFP+, XSFP, QSFP, QSFP28, OSFP and QSFP-DD evaluation boards for testing 100 Mbps to 1.6T optical modules;

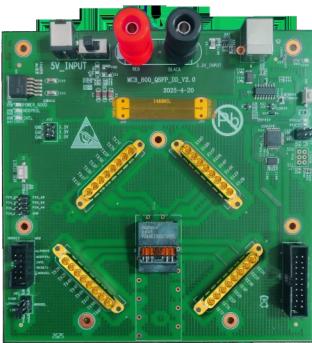
- Dedicated to optical module test and evaluation: module power supply, external programmable control interface, TX/RX bidirectional data channel breakout, module status;
- Display functions; ensures a reliable platform for module performance testing;
- General performance evaluation and testing of optical modules;
- Module supply voltage (3.3 V);
- Voltage and current monitoring, stability detection, status LEDs;
- USB or I2C bus communication;
- Manual or I2C bus control;



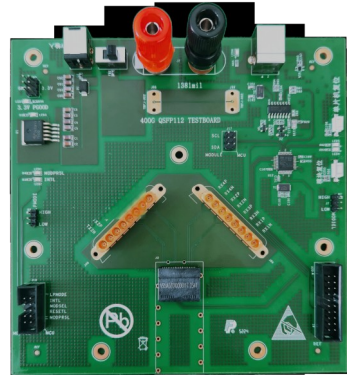
PN:1.6T OSFP MCB
Supports 1.6T signal interface with 1.85 mm 67 GHz RF connectors
Power supply: DC 3.3V
Control: I2C with CMIS; GUI host software for full OSFP module verification
For testing 800G/1.6T OSFP optical modules



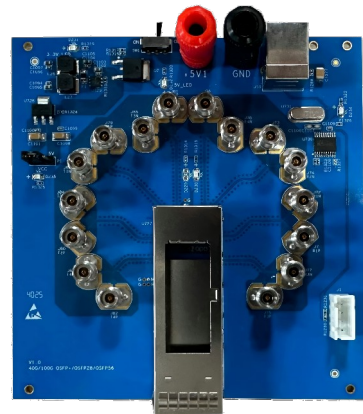
PN:800G OSFP MCB
Supports the 800G signal interface with 1×8 quick-connect for efficient operation at up to 60 GHz
Power supply: DC 3.3V/5.0V
Control: I2C/USB, CMIS standard; GUI host software for full OSFP verification
For testing 800G OSFP modules, AOC, AEC



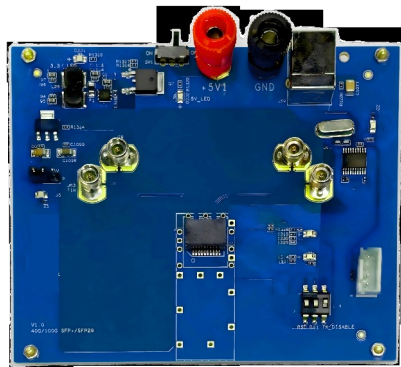
PN:800G QSFPDD MCB
Supports the 800G signal interface with 1×8 quick-connect for efficient operation at up to 60 GHz
Power supply: DC 3.3V/5.0V
Control: I2C/USB, CMIS standard; GUI host software for QSFP28/QSFP-DD full performance verification of the modules
For testing 400G/800G modules, AOC, AEC



PN:400G QSFP112 MCB
Supports the 400G signal interface with 1×8 quick-connect for efficient operation at up to 60 GHz
Power supply: DC 3.3V/5.0V
Control: I2C/USB, CMIS standard, GUI host software for full performance verification of QSFP28/QSFP-DD/QSFP112 modules
For testing 400G optical modules, AOC, AEC



PN:100G QSFP28 MCB
Supports 100 Gbps interface with 2.92 mm RF connector at up to 40 GHz
Power supply: DC 5.0V
Control: I2C/USB, SFF-8636 standard, GUI host software for full performance verification of QSFP/QSFP28 modules
For testing QSFP/QSFP28 modules, AOC, AEC



PN:25G SFP28 MCB
Supports 10 Gbps signal interface with 2.92 mm 40 GHz RF connector
Power supply: DC 5.0V
Control: I2C/USB, SFF-8472 standard, GUI host software for full performance verification of SFP/SFP28 modules
For testing SFP/SFP28 modules, AOC, AEC

Coaxial Cable

COAXIAL CABLE

Product Description:

- A full range of high-speed RF cables tailored for BERT and attenuator users: 18G, 28G, 40G, 56G and 67G cables, mainly for 4.25G-1.6T BERT test platforms and optical module production testing;
- Wide bandwidth, low loss;
- Good uniformity and flexibility;
- Low VSWR;
- Low signal delay;
- Stable insertion loss with little variation;
- Excellent high-speed performance;
- Phase stability;
- Frequency range: DC to 40 GHz;
- Dielectric withstand voltage: ≥ 1000 V;
- Insulation resistance: ≥ 5000 M Ω ;
- VSWR: ≤ 1.5 ;
- Insertion loss: 0.06 dB per connector; 0.189 dB per connector at 10 GHz;



RS 50MF316BLH Coaxial Cable
1. Electricals data
1.1 Impedance: 50 Ω
1.2 Frequency range: DC to 50 GHz
1.3 Return loss: > 14 dB
1.4 Insertion loss: $\leq 5.72/1000 \cdot L + 1.0$ dB
1.5 Phase mating: $+2$ ps

2. Mechanical data
2.1 Mechanical life: 500 cycles min.
2.2 Cable Dim.: 2.4mm, Grey
3. Environment data
3.1 working temperature: -55 °C to $+125$ °C
3.2 RoHS: Compliant



RS 40MF308ZY Coaxial Cable
1. Electricals data
1.1 Impedance: 50 Ω
1.2 Frequency range: DC to 40 GHz
1.3 Return loss: > 15 dB
1.4 Insertion loss: $\leq 5.72/1000 \cdot L + 0.9$ dB
1.5 Phase mating: $+2$ ps

2. Mechanical data
2.1 Mechanical life: 500 cycles min.
2.2 Cable: 02.65mm, Blue
3. Environment data
3.2 RoHS: Compliant
3.1 Working temperature: -40 °C to $+120$ °C



RS 70MF308ZYH-600
1. Electricals data
1.1 Impedance: 50 Ω
1.2 Frequency range: DC to 67 GHz
1.3 Return loss: > 12 dB
1.4 Insertion loss: $\leq 6.7/1000 \cdot L + 1.2$ dB
1.5 Phase mating: $+2$ ps

2. Mechanical data
2.1 Mechanical life: 500 cycles min.
2.2 Cable: 02.4mm, Grey
3. Environment data
3.1 working temperature: -55 °C to $+125$ °C
3.2 RoHS: Compliant



RS 90MF116-150
 1. Electricals data
 1.1 Impedance: 50 Ω
 1.2 Frequency range: DC to 110 GHz
 1.3 Return loss: > 12 dB, DC to 70 GHz;
 > 10 dB, 70 GHz to 90 GHz;
 > 8 dB, 90 GHz to 110 GHz
 1.4 Insertion loss:
 ≤ 11.8/1000*L+1.25 dB, DC to 70 GHz

≤ 13.5/1000*L+1.45 dB, 70 GHz to 90 GHz
 ≤ 15.0/1000*L+1.60 dB, 90 GHz to 110 GHz
 2. Mechanical data
 2.1 Mechanical life: 500 cycles min.
 2.2 Cable Dim.: 2.4mm, Grey
 3. Environment data
 3.1 working temperature: -55 °C to +125 °C
 3.2 RoHS: Compliant



RS 28-BMDM01-500
 1. Electricals data
 1.1 Impedance: 50 Ω
 1.2 Frequency range: DC to 40 GHz
 1.3 VSWR: ≤ 1.3
 1.4 Insertion loss: ≤ 5.06/1000*L+0.8 dB
 1.5 Phase mating: +2 ps (If requested)

2. Mechanical data
 2.1 Mechanical life: > 500 cycles
 2.2 Cable Dim.: 2.4mm, Grey
 3. Environment data
 3.1 working temperature: -55 °C to +125 °C
 3.2 RoHS: Compliant



RS 30-CMCM01-600
 1. Electricals data
 1.1 Impedance: 50 Ω
 1.3 VSWR: ≤ 1.3
 1.2 Frequency range: DC to 50 GHz
 1.4 Insertion loss: ≤ 3.285/1000*L+0.7 dB
 1.5 Phase mating: +2 ps (If requested)

2. Mechanical data
 2.1 Mechanical life: ≥ 500 cycles
 2.2 Cable Dim.: 3.6mm, Blue
 3. Environment data
 3.1 working temperature: -55 °C to +125 °C
 3.2 RoHS: Compliant



RS 27-BMYM01-300
 1. Electricals data
 1.1 Impedance: 50 Ω
 1.2 Frequency range: DC to 67 GHz
 1.3 Return loss: > 14 dB
 1.4 Insertion loss: ≤ 5.93/1000*L+1.0 dB
 1.5 Phase mating: ≤ +2ps

2. Mechanical data
 2.1 Mechanical life: > 500 cycles
 2.2 Cable Dim.: 2.4mm
 3. Environment data
 3.1 working temperature: -55 °C to +125 °C
 3.2 RoHS: Compliant



RS 12-DMDM01-1000
 1. Electricals data
 1.1 Impedance: 50 Ω
 1.2 Frequency range: DC to 30
 1.4 Insertion loss: ≤ 2.19/1000*L+0.6 dB
 1.5 Phase matched: +2 ps (If required)

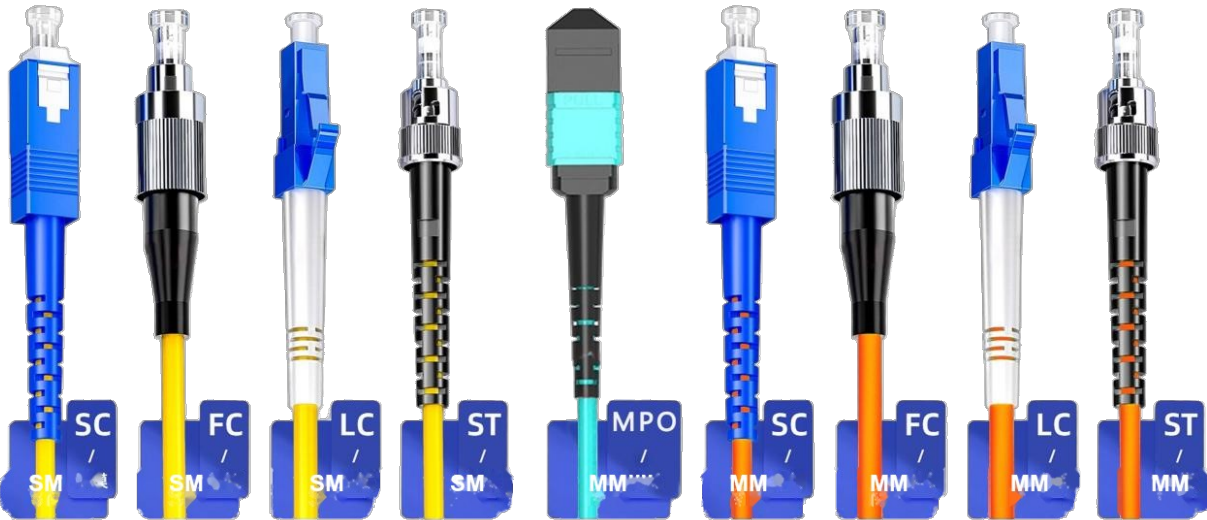
2. Mechanical data
 2.1 Mechanical life: > 500 cycles
 2.2 Cable Dim.: 3.9mm, Grey
 3. Environment data
 3.1 working temperature: -55 °C to +125 °C
 3.2 RoHS: Compliant

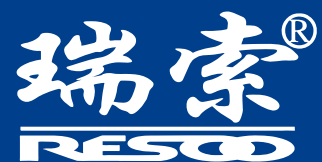
Test-grade Fiber Connectors

Product Description:

A full range of test-grade fiber connectors tailored for BERT and attenuator users, including single-mode, multimode and MPO connectors, customizable in any length with any connector type (FC, SC, LC, ST...); widely used in 4.25G-1.6T BERT test platforms and optical module production testing.

- PC, UPC and APC polish options; duplex and simplex cables;
- High reliability and stability;
- High return loss;
- Low insertion loss;
- Ferrule end-face inspected at 400×; excellent interchangeability; SM or MM fiber optional;
- Interface: PC, UPC, APC;
- Fiber type: SM, MM; cable diameter: Ø0.9, Ø2.0, Ø3.0;
- Insertion loss: SM (PC, UPC, APC) ≤0.20 dB;
MM (PC, UPC) ≤ 0.20 dB;
- Return loss: PC ≥45 dB, UPC ≥50 dB, APC ≥60 dB;
- Operating temp.: -40 °C to +75 °C; storage temp.: -40 °C to +85 °C;
- Repeatability: ≤0.2 dB (1000 matings); mating cycles: ≥1000;





Professional solutions for global
optical communication customers

RESOO holds full import and export qualifications, with complete customs filing and export declaration procedures, independently undertaking global export business for all types of instruments and meters. Our products are certified to multiple international standards - stable, accurate and reliable.

With a mature overseas bonded after-sales chain, we provide one-stop export services covering customs declaration, sea and air freight, clearance consultancy and certificate of origin. We support bulk foreign-trade orders and overseas project supply, with products exported to Southeast Asia, the Middle East, Europe and the Americas - smooth, compliant customs clearance and a stable supply of high-quality industrial instruments for customers worldwide.

Focused,

hence professional

Persistent,

hence innovative

Sichuan RESOO Electronics Co., Ltd.

Chengdu RESOO Intelligent Technology Co., Ltd

