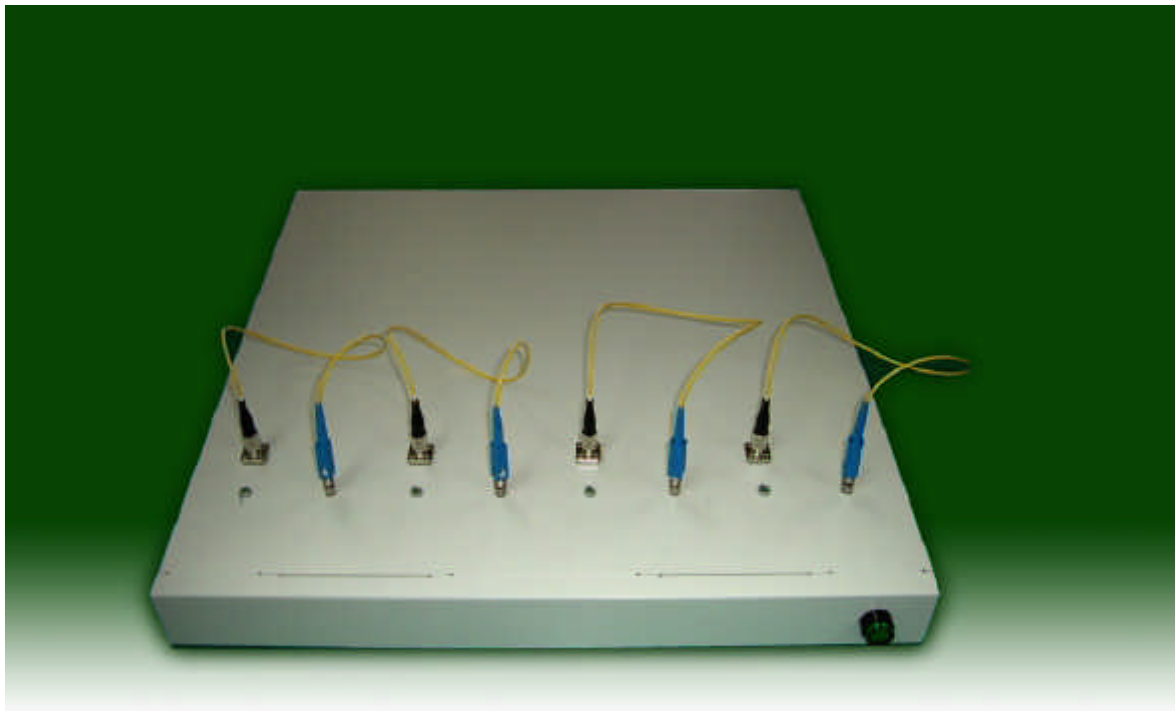


Preliminary

# FMTS

## TOSA/ROSA Tester

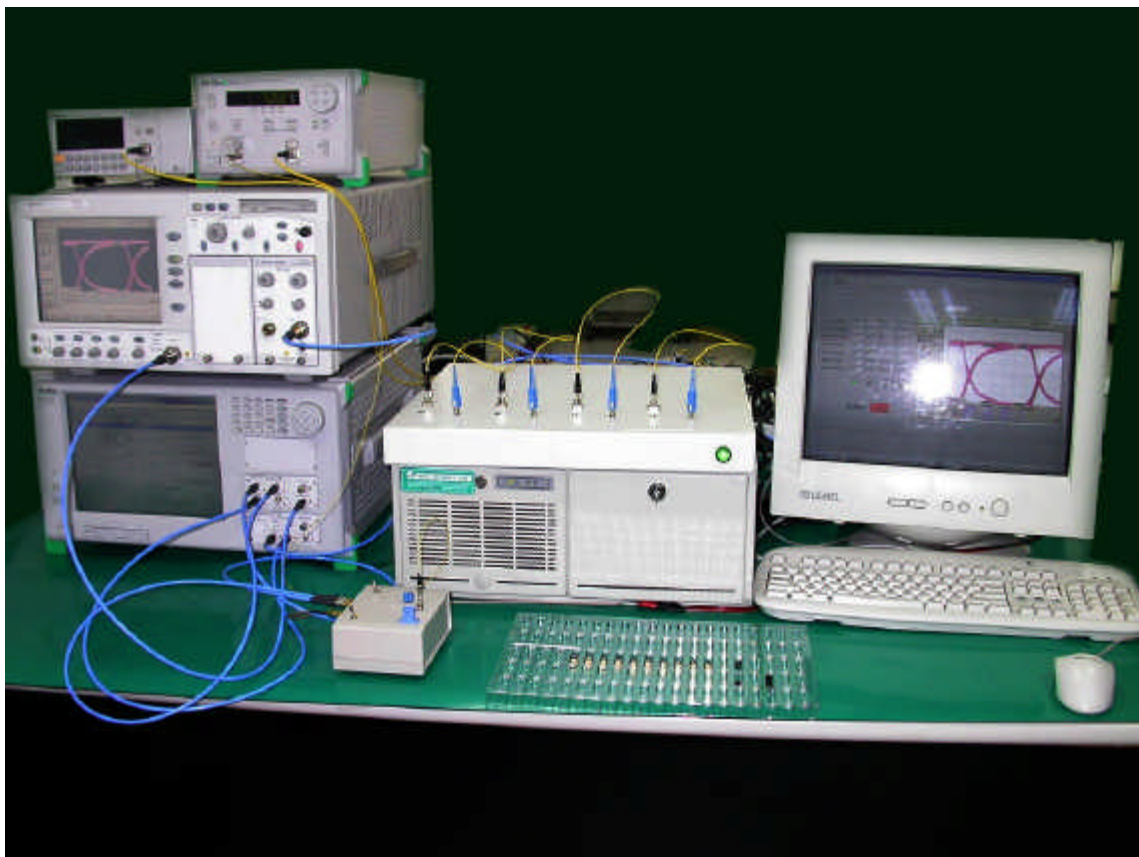
FMTS is the first instrument on the market, that is capable of full and complete all-parameters characterization of active optical components, especially for optical transceiver testing.



Preliminary

## FMTS-TOSA/ROSA

Faztec TOSA/ROSA testing system is design for FMTS system to test Transmitter OSA & Receiver OSA. These system can also upgrade single channel into multi-channel like others FMTS system. Through this method, customer can ascent the measurement speed to reduce measurement time to 70%.



Preliminary

## FMTS-TOSA Introduction



### Features:

- All AC parameter analysis.
- Multi-rate operation(data rate from OC-3 to OC-48)
- Multi-supply voltage (3.3/5V can be set by +/-5% tolerance )
- Auto turning by Extinction Ratio Setting.
- I bias-set measurement.
- Multi-Channel test(4Channel, 8Channel(under development), 16Channel(under development)).

### Applications:

- TOSA test for OC-3/STM-1 to OC-48/STM-16, GBE, 2XGBE, FC, 2XFC
- Transmitter Optical Subassembly (TOSA) manufacturing.
- Quality assurance and regression testing.
- Production engineering and failure analysis.
- Incoming inspection and product qualification.
- Optical Transmitter Module (TX) manufacturing

Preliminary

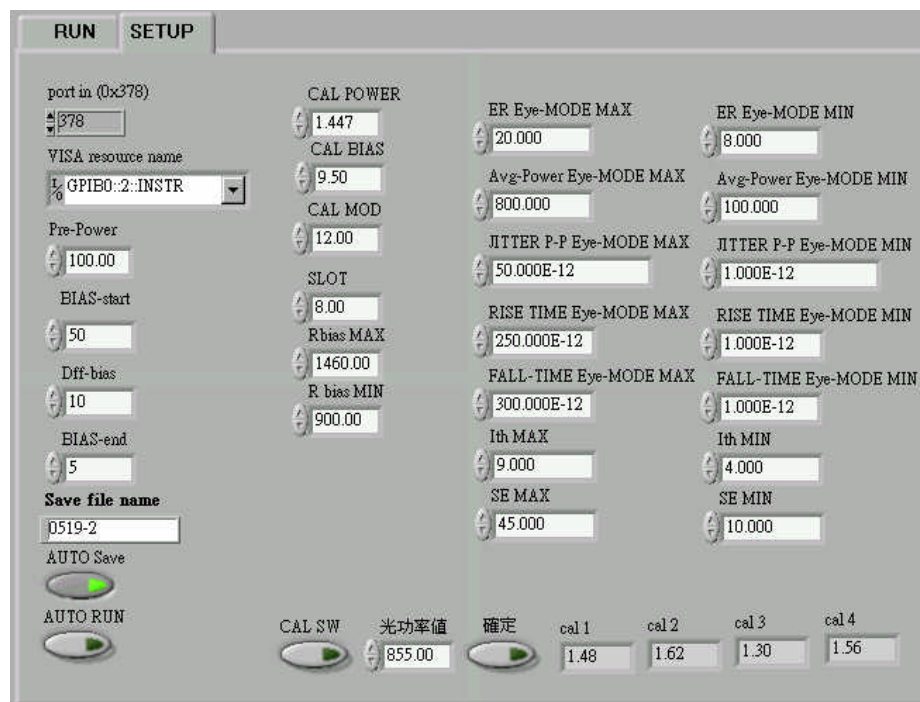
## Measurement Item:

Threshold Current (mA).  
Slope Efficiency (W/A).  
Optical Output Power ( $\mu$ W).  
Extinction Ratio (dB).  
Ibias (mA)  
Jitter (ps)  
Rise Time / Fall Time (ps).

## Specification

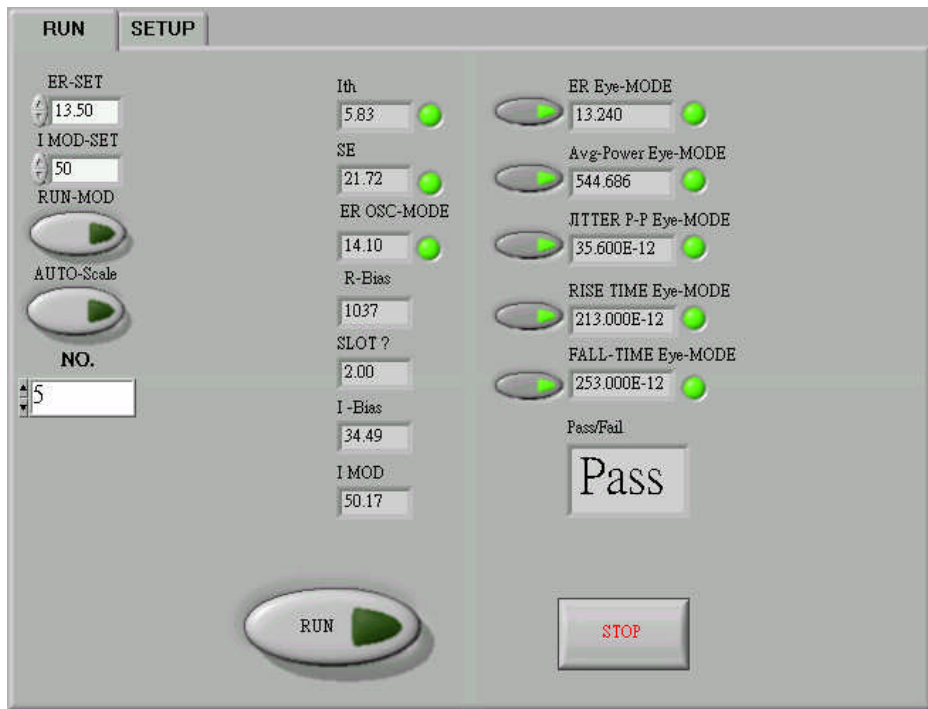
Throughput : 200pcs/hr.  
Measurement Time : 10~15 sec/pcs.  
Bit rates: 100Mbps to 2.5 Gbps.  
ER Setting Range: 8~18 dB.  
Modulation Current Setting range: 10~50mA.  
Tuning resolution: 330.

## Application software



## Set up

Preliminary



## Result



## Calibration

## FMTS-ROSA Introduction



### Feature:

- Multi-rate operation( data rate from OC-3 to OC-48)
- Multi-supply voltage (3.3/5V can be set by +/-5% tolerance )
- Auto measurement
- Multi-Channel test(4Channel, 8Channel(under development), 16Channel(under development))
- Optimal Sensitivity test or Go/No Go test
- Optimal Saturation test or Go/No Go test (under development)

### Application:

- ROSA test for OC-3/STM-1 to OC-48/STM-16, GBE, 2XGBE, FC, 2XFC
- ROSA analysis and manufacture test
- Production engineering and failure analysis.
- Incoming inspection and product qualification.
- Optical Receiver Module (RX) manufacturing

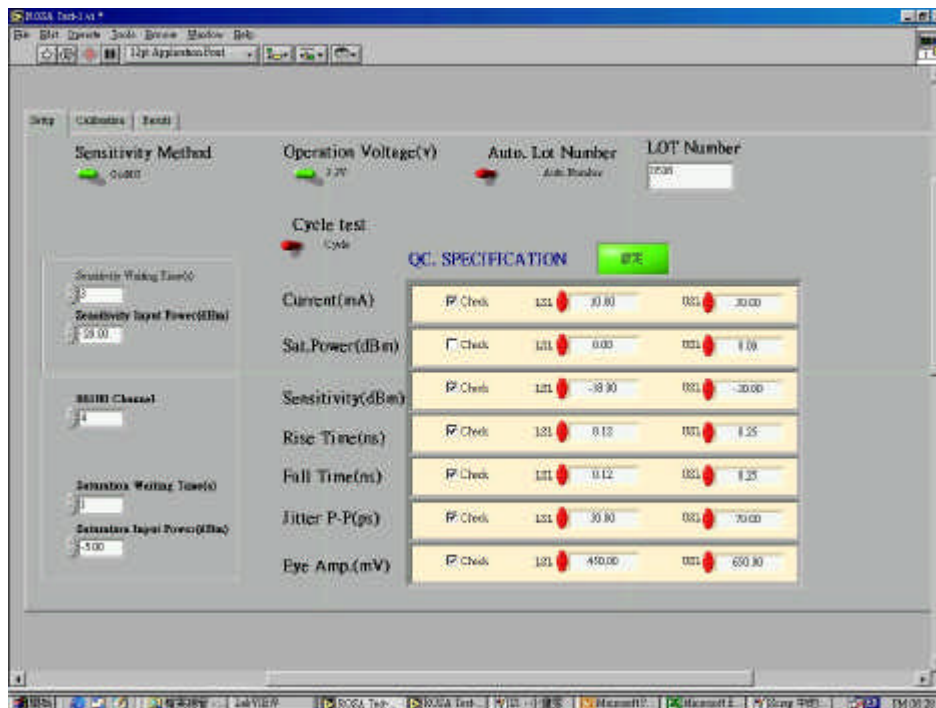
## Measurement Item:

- Operating Current (mA).
- Sensitivity (dBm).
- Saturation (dBm). (under development)
- Jitter (ps).
- Rise Time / Fall Time (ps).
- Eye Amplitude (mV).

## Specification:

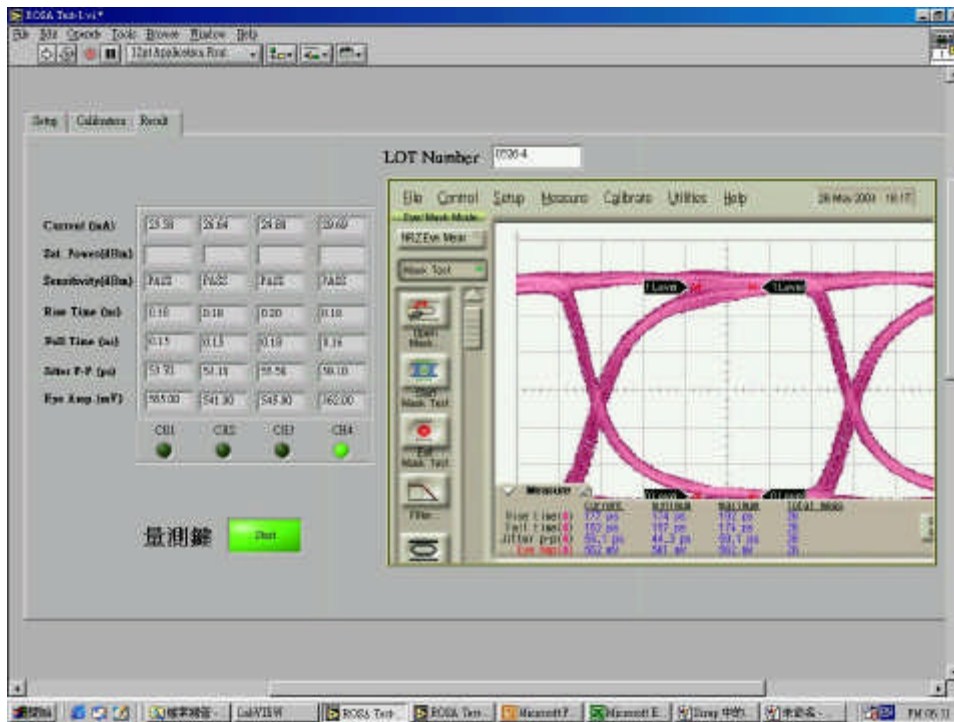
- Throughput : 100pcs/hr.
- Bit rates: 100Mbps to 2.5 Gbps.

## Application software

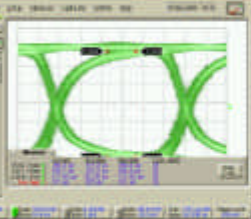
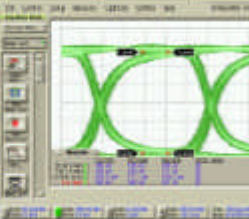
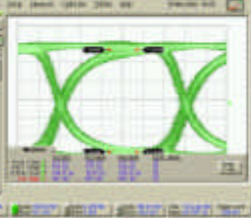
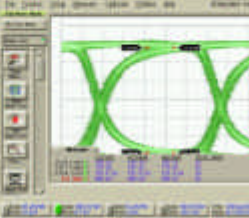


## Set up

Preliminary



## Result

	A	B	C	D	E	F	G	H	I	I
1	1.25G SC SM 3.3V									
2	Data	Time	Serial No.	Current (nA)	Sensitivity(dBm)	Rise Time(ns)	Fall Time(ns)	itter(pe)	Eye Amplitude(mV)	Result
3	2004/5/25	PM 02:12:42	1.25G-1	25.803	-29.105	0.201	0.161	117.62		571 PASS
4	2004/5/25	PM 02:14:49	1.25G-2	25.124	-28.962	0.198	0.168	104		546 PASS
5	2004/5/25	PM 02:15:42	1.25G-3	24.361	-29.294	0.213	0.178	106.6		551 PASS
6	2004/5/25	PM 02:15:44	1.25G-4	23.366	-29.312	0.198	0.17	101.9		568 PASS
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19	1.25G-1					1.25G-2				
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31	1.25G-3					1.25G-4				
32										
33	All eyediagrams to get in input ROSA power at -28dBm									

## Report generator

## **WARRANTY**

All equipment is fully warranted for one year. This includes hardware repair or replacement, at customer site or Faztec factory, and software Updates.



All specification are subject to change without notice



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