

## SDH-1620A



### Overview

The SDH-1620A is an advanced and handheld SDH/PDH transmission analyzer, which integrates on-line and off-line test of STM-1(155M) and E1 (2M) and tests of STM-4 (622M) , STM-16(2.5G) into one package. Being highly affordable, easy-to-use and scalable, this powerful unit is ideal for installation and maintenance testing over the SDH/PDH transmission and access networks.

### Functions

- BERT: BERT test for PDH and SDH and error performance analysis per G821、G826、G828、G829、M2100 and (or) M2101; directly and automatically compare the test results with standards.
- Anomaly/defect testing: Tx-end transmitting anomaly/defect events and Rx-end receiving anomaly/defect events with record and statistics; recorded events displayed in chart and/or graphics and supporting filter selection
- Real-time optical power testing
- Voice monitoring: able to select any channel of SDH/PDH
- Pointer monitoring: generate G.783 pointer and NDF pointer; display pointer value in real-time; record pointer adjustment events (positive, negative and NDF)
- APS timing measurement: measure the network switchover time
- Round trip delay testing: measure the signal transport time from Tx to Rx
- Tributary scan: auto scan each tributary with the range optional
- Timing and synchronization testing: frequency accuracy test; pull-in range and pull-out range test
- Overhead testing: overhead emulating transmission and receiving analysis; two parts: general part (including J0/J1/J2/S1/V5/C2) and extended part (all the remaining overhead bytes except A1/A2 B1/B2/B3 )

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**Features**

- Easy operation: 10.4" TFT touch screen, visible graphic display
- Simulated indicators: for current and history alarm and error status; indicator quantities and types can be automatically set based on tested signals and interface settings.
- Multi-task testing: multiple tasks can be created and deleted dynamically and freely.
- Clock interfaces: external clock Tx & Rx interfaces
- Events record: large capacity for recording bit error and alarm events; vents displayed in chart and graphics and supporting filter selection
- Data management: test results may be saved as HTML or TXT format or exported to U-disk or PC

**Configuration**

● Basic

Part No.	Description	Remarks
SDH-1620A SDH/PDH transmission test unit	E1 (2048kbit/s) electrical	
	2048KHz external clock	
	STM-1 (155M) electrical	
	STM-1 (155M) optical	requires separated SFP

● STM-N Test Module Options:

Type	Description	Remarks
STM-N	STM-4(622M)	requires separated SFP
	STM-16(2.5G)	requires separated SFP

● SFP Transceiver Options

Type	Description	Remarks
SFP Transceivers	155M SFP (S-1.1)	enable STM-1(155M) optical interface on chassis, one option at least
	155M SFP (S-1.2)	
	622M SFP (S-4.1)	enable STM-4(622M) test module on chassis, one option at least
	622M SFP (L-4.1)	
	622M SFP (L-4.2)	at least
	2.5G SFP (I-16)	enable STM-16(2.5G) test module on chassis, one option at least
	2.5G SFP (S-16.1)	
	2.5G SFP (S-16.2)	
	2.5G SFP (L-16.1)	
	2.5G SFP (L-16.2)	

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**Specifications**

General		
Spec	290×210×60 (mm)	
Weight	2.2KG	
Screen	TFT,10.4"LCD,640×480 pixel color	
Operation Mode	Touch	
Interfaces	USB, 10M network interface and power interface	
Battery	Rechargeable Li-ion battery	
Endurance Time	>3 hours	
Work Environment	Operation Temperature	-10℃~+45℃
	Storage humidity	-20℃~+70℃
	Operation humidity	10% ~ 90%
	Storage humidity	5% ~ 95%
Data Storage	512M	

Test Interfaces- Optical Transceiver Interfaces		
Nominal rate	STM-1: 155M	
	STM-4: 622M	
	STM-16: 2.5G	
Connector	SFP	
Optical Tx wavelength	1310nm & 1550 nm	
Optical Tx power	1310nm	-8~-15dBm
	1550nm	0~-5dBm
Rx sensitivity	-35dBm	
Optical over-load level	-2dBm	
Optical over-load level	1100nm~1580nm	

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<b>Test Interfaces - STM-1 Electrical Interface</b>	
nominal rate	155.520 Mbit/s
Code	CMI
Impedance	75Ω
Connector	siemens L9, unbalanced
Standard	Accord with ITU-T G.703

<b>Test Interfaces – PDH Interface</b>		
Support Rate		2048 kbit/s
Code		HDB3
Impedance	Output	75Ω
	Input	75Ω or high impedance (>1kΩ)
Connector		siemens L9, unbalanced
Standard		Accord with ITU-T G.703

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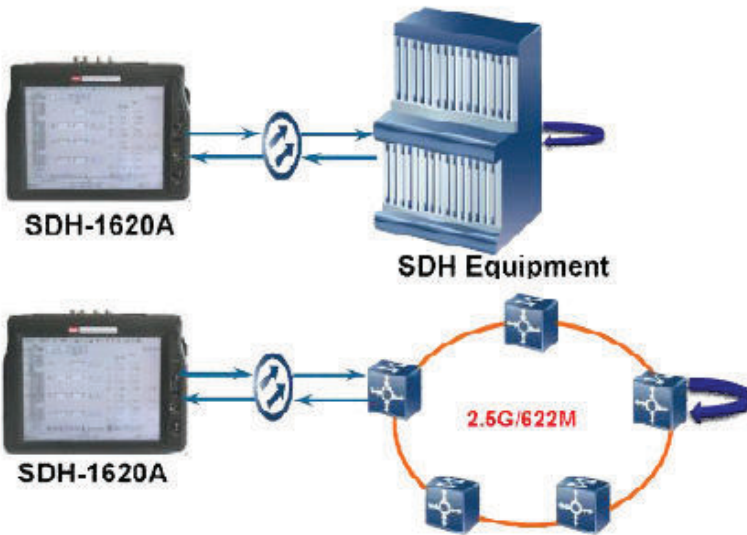
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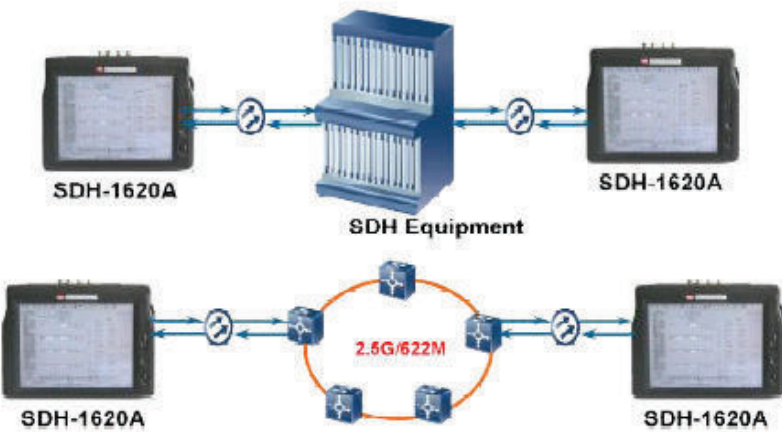


Applications

Offline Service Test: Remote Loopback Test



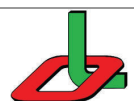
Offline Service Test : End-to-end Test



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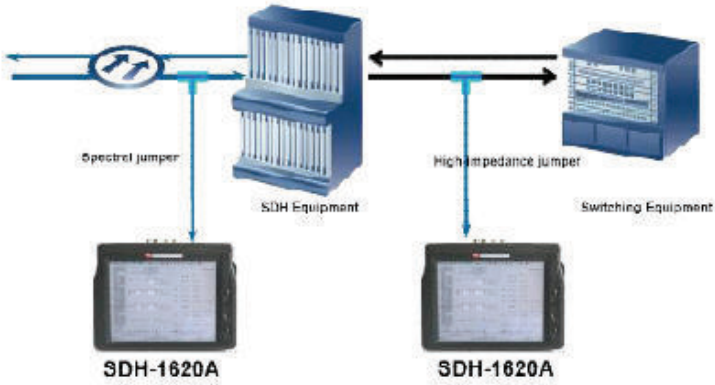
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## Online Test: Through Splitter and High-impedance Jumper

### Test



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