

**SDH/SONET ANALYZER**  
**ME3630A**

9953.28 Mb/s

**For Evaluating Transmission Characteristics of STM-64/OS-192 Network Repeaters**



Generation/measurement pattern	SDH/SONET Payload: PRBS 2 <sup>n</sup> -1 (n = 7, 9, 11, 15, 20, 23, 31) SOH (TOH): A1, A2, E1, F1, D1, D2, D3, K1, K2, E2 edits are possible. Scramble: ON/OFF CID pattern Consecutive 0/1 bit length: 1 to 8184 bits/1 bit steps (ITU-T G.958)
Error addition (transmitter)	Bit, B1, Section, F1 byte
Alarm addition (transmitter)	LOS, LOF, OOF, Sect. AIS, FERF
Error measurement (receiver)	B1, Bit (payload)
Alarm measurement (receiver)	LOS, OOF, LOF, Sect. AIS, Sect. FERF, Sync loss
Control	Interface: GPIB Parameter memory: 3.5-inch FD
Dimensions and mass	426 (W) x 221.5 (H) x 450 (D) mm, ≤30 kg/1 unit
Operating temperature	5° to 40°C
EMC	EN55011: 1991, Group 1, Class A EN50082-1: 1992
Safety	EN61010-1: 1993 (Installation Category II, Pollution Degree II)

The ME3630A is designed to make transmission performance tests for STM-64/STS-192 network repeater sections. It consists of separate transmitter and receiver units. The transmitter is used to generate STM-64/STS-192 signals and the receiver is used to analyze these signals. The ME3630A can insert seven kinds of pseudo-random patterns (2<sup>n</sup>-1 to 2<sup>31</sup>-1) into the payload of STM-64/STS-192 signals, and can select between 8 kinds of mark ratio (0/8 to 8/8).

All the errors and alarms essential for testing repeater sections, including B1 errors, AIS, and FERF can be added and measured.

Generation and measurement of CID patterns for clock recovery performance test of the optical modules is also provided. STM-1/STS-3 signals can be added into the output STM-64/STS-192 signal at the transmitter and dropped from the signal at the receiver. So, by using the ME3630A in combination with an STM-1 measuring instrument such as the MP1560A, STM-1/STS-3 and path layer tests can be performed.

**Features**

- Generation of STM-64/STS-192 patterns (9953 Mb/s)
- Add/drop for STM-1/STS-3 signals
- Generation and measurement of ITU-T G.958 CID patterns.

**Specifications**

Operating frequency	9953.28 MHz
Clock output/Data output (transmitter)	Output level: 0/-1 V, 0/-1.5 V, ECL Load impedance: 50 Ω Connector: SMA
Clock input/Data input (receiver)	Clock input level: 0.8 to 2.0 Vp-p Data input level: 0/-1 V, 0/-1.5 V, ECL Impedance: 50 Ω Connector: SMA Add/Drop STM-/STS-3 signal
Add/Drop	STM-1/STS-3 signal
Auxiliary input/output	Transmitter Sync output: 1/64 clock, 8 k frame 1/8 speed output: Clock 1 ch, data 8 ch Receiver Sync output: 1/64 clock, 8 k frame 1/8 speed output: Clock 1 ch, data 8 ch

**Ordering information**

Please specify model/order number, name, and quantity when ordering.

Model/Order No.	Name
ME3630A TX	<b>Main frame</b> STM-64/STS-192 Analyzer Transmitter
ME3630A RX	STM-64/STS-192 Analyzer Receiver
	<b>Standard accessories</b>
J0500A	Semi-rigid cable (SMA-P • SX-36 • SMA-P), 0.5 m: 4 pcs
J0775D	Coaxial cord (BNC-P • RG58A/U • BNC-P), 0.5 m (transmitter only): 2 pcs
J0776D	Coaxial cord (BNC-P • RG58A/U • BNC-P), 1 m (transmitter only): 2 pcs
J0126B	Coaxial cord (BNC-P • 3C*2V • BNC-P), 2 m: 6 pcs
J0127A	Coaxial cord (BNC-BNC)
J0008	GPIB cable, 2 m: 4 pcs
J0491	Power cord, 2.5 m: 2 pcs
J0638F	Semi-rigid cable (SMA-P • UT-85 • SMA-P) (transmitter only): 1 pc
F0071	Fuse, 8 A: 4 pcs
Z0168	3.5-inch floppy disk (2HD): 6 pcs
Z0249	Floppy case: 2 pcs
W0732AE	ME3630A transmitter operation manual: 1 copy
W0734AE	ME3630A transmitter GPIB operation manual: 1 copy
W0733AE	ME3630A receiver operation manual: 1 copy
W0735AE	ME3630A receiver GPIB operation manual: 1 copy
	<b>Options</b>
ME3630A-01	RS-232C interface (replace with GPIB interface)
ME3630A-02	PTA (with JIS keyboard)
ME3630A-03	PTA (without keyboard)
ME3630A-04	PTA (with ASCII keyboard)
ME3630A-05	FDD (for NEC PC-98)
W1036AE	ME3630A PTA operation manual
	<b>Optional accessories</b>
J0007	GPIB cable, 1 m
MC3305A	JIS type PTA Keyboard
MC3306A	ASCII type PTA Keyboard
MP9659B	E/O, O/E Converter