

# TURBOTEST 500 OPTICAL LOSS TEST SET



- Single Fiber Bi-Directional Testing
- 1310/1550 nm Single Port
- Tests End to End Loss and Return Loss
- Dedicated Voice Port (optional)
- Optical Return Loss Range of 65 dB
- Stores Over 500 Fiber Tests
- PC Compatible
- +23 dBm Measurement



## DESCRIPTION

The TURBOTEST 500 by Noyes Fiber Systems offers the most sophisticated loss and return loss testing available today. Designed specifically for high fiber count systems, the TURBOTEST 500 provides the ability to perform various tests on fiber optic cable and components.

There are four versions of the TURBOTEST 500, all of which allow for quick and easy testing providing four test modes and a friendly prompt menu. The choices are the T503, T503-T with talk option and T504, T504-T with talk option. The T503 models are equipped with InGaAs detectors which provide a measurement range of +10 to -65 dBm. The T504 models have filtered InGaAs detectors which are primarily used for testing high output systems such as CATV and amplifiers.

When two TURBOTEST 500's are coupled together and operating in the "TURBO" test mode, both 1310 and 1550 nm link loss and return loss measurements are conducted. The TURBOTEST 500 utilizes single fiber bi-directional testing which provides the exchange of loss data and

references between units. The non-volatile memory capacity of the combined TURBOTEST 500's permits the storage of over 500 bi-directional fiber test results.

When performing tests in either of the four modes of operation (TURBO, OLTS, ORL, OPM) the stored results can be downloaded to a PC or printer for full fiber documentation.

The optional dedicated voice port allows for full time communication between test operators while testing other fibers in a bundle. Designed for use on spare singlemode fibers, the TURBOTEST 500 offers quick connection to terminated FC style connectors. The voice port feature is useful where other types of communication are not available or desirable.

The field rugged, fully portable TURBOTEST 500 is powered by the internal rechargeable batteries, alkaline batteries or directly from AC. These options allow the TURBOTEST 500 to be ready to test at any time!

## ORDERING INFORMATION

The TURBOTEST 500 comes with a soft carry case, instruction manual, warranty registration card, RS-232 serial transfer cable, Test software (3.5" Diskette), APC/UPC reference cable, mandrel, AC adapter/charger, hex key and flat blade screw drivers. A hands free head set and multiparty cable is included when ordering the TURBOTEST 500 with the talk set option.

### MODEL DESCRIPTION

T503.....Optical Loss Test Set  
T503T.... Test Set with Talk Option  
T504.....Optical Loss Test Set  
T504T.... Test Set with Talk Option

### AVAILABLE ACCESSORIES

Thermal Printer....OFL1-00-0901  
Thermal Paper.....2000-01-0002  
Recording Pads...8800-15-0200  
APC(FC)/UPC(FC) Cable..8700-00-0032  
APC(SC)/UPC(FC) Cable..8700-00-0033  
APC(SC)/UPC(SC) Cable..8700-00-0034

### ACCESSORY ADAPTER CAPS for UNIVERSAL ADAPTER INTERFACE

FC..... 8800-00-0200	Biconic..... 8800-00-0204	SC.....8800-00-0209
D4..... 8800-00-0201	Bare Fiber..... 8800-00-0206	DIN.....8800-00-0211
ST™ ..... 8800-00-0202	Radial PFO..... 8800-00-0212	

## SPECIFICATIONS

MODEL	T503 & T503-T	T504 & T504-T
<b>POWER METER SPECIFICATIONS</b>		
Detector Type	InGaAs	Filtered InGaAs
Display Range	+10 to -70 dBm	+23 to -50 dBm
Calibrated Wavelengths	1310, 1550 nm	
Accuracy <sup>1</sup>	±0.25 dB	
Resolution	0.01 dB	
Units Displayed	dB, dBm, Watts	
Connector Type	Universal Adapter Interface	
<b>INSERTION LOSS SPECIFICATIONS</b>		
Dynamic Range (typical)	40 dB	
Test Port Measurement Range	+1 to -83 dBm	
Calibrated Wavelengths	1310, 1550 nm	
Output Power	-10 dBm min.	
Output Stability	±0.1 dB / 8 hrs.	
Center Wavelength	1310, 1550 nm ±20 nm (±10 nm optional)	
Spectral Width	≤5 nm	
<b>RETURN LOSS SPECIFICATIONS</b>		
Measurement Range	65 dB	
Accuracy <sup>1</sup>	±0.5 dB @ 55 return loss	
<b>VOICE SPECIFICATIONS (for talk models only)</b>		
Dynamic Range	40 dB (full duplex / single fiber)	
Transmit Options	Call (rings adjoining set) / Talk (full duplex / single fiber)	
<b>GENERAL SPECIFICATIONS</b>		
Display Type	Dot Matrix Liquid Crystal Display with Backlight	
Fiber Type	Singlemode 10 / 125 μm nominal	
Standard Connector Type <small>(specify when ordering)</small>	SC / APC, FC / APC	
Laser Classification	Class 1, 21 CFR 1040	
Operating Temperature	0° to +50° C	
Storage Temperature	-20° to +60° C 95% rh	
Relative Humidity	0 - 90% non-condensing	
Size	Unit: 10 3/8"H x 4 3/4"W x 2"D (26 x 12 x 5 cm)	
Weight	Unit: 2 lbs. 4 oz. (1 kg)	
Power	4 AA Alkaline, NiMH rechargeable, 110V or 220V AC Chargers	
Battery Life	13 hrs with Alkaline & NiMH, >8 hrs. with NiMH only	

1. Specified at -10 dBm @ 25° C.

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