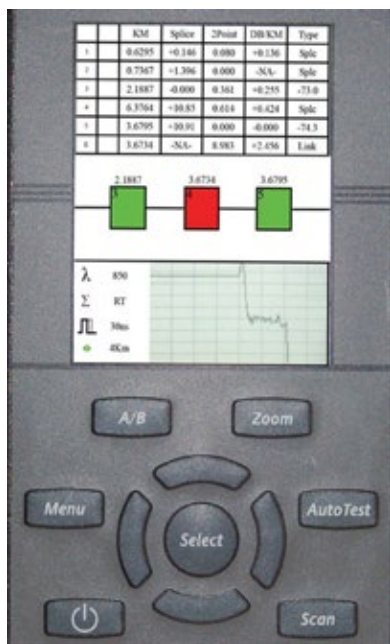# OTR 500/700
OPTICAL TIME DOMAIN REFLECTOMETER

Features

- ▷ Event table with PASS/FAIL analysis

- ▷ Bi-directional averaging – unit automatically performs all necessary calculations

- ▷ Short event dead zones (1 meter for OTR 700, 2 meter for OTR 500) make both units ideal for short link installations

- ▷ Bluetooth compatibility for precision control with Android Bluetooth-enabled smartphones and tablets

- ▷ Schematic view (OTR 700 only)

Event summary reading on 7-inch tablet

OTR 700 with schematic view

Description

The ODM OTR 500 and OTR 700 give test technicians and contractors all the tools necessary for testing optical reflection and loss in fiber networks. The optional video scope allows for extensive options in endface inspection, ensuring industry acceptable optical connections.

The units come in single mode (1310/1550nm), multi-mode (850/1300nm), or quad wavelength configurations, making the OTR500 or OTR 700 the perfect options for both single mode and multimode installations.

Power Meter and/or Light Source are optional with all OTR 700 units. With these add-ons, technicians can test for dB loss in trunk and sector fibers to confirm that each fiber is functioning correctly.

Both OTRs offer an event table with PASS/FAIL analysis for each reflective event, and the 1 or 2 meter dead zone provides accurate reflective event testing in all fiber systems. Each event can be inspected manually using the event selection feature or automatically with the device's built-in pass/fail function. The OTR 700's schematic trace view allows technicians to see just the most important parts of each trace with pertinent data attached.

With ODM's OpTrace app for smartphones and tablets, users can control their OTR device, view/save test results, and save data wirelessly via Bluetooth. While both OTRs boast a color screen (3.5" for OTR 500, 4" touch-screen for OTR 700) and allow for up to 1,000 trace saves, screen size and save capacity are limited only by your smartphone or tablet when connected via Bluetooth.

Specifications

	OTR 500	OTR 700
Wavelength	850nm, 1300nm, 1310nm,1550nm, +-20nm	850nm, 1300nm, 1310nm, 1550nm, +-20nm
Dynamic Range	27/26dB MM, 32/30dB SM	27/26dB MM, 36/35dB SM
Pulse Width	20 - 10,000 ns	5 - 20,000 ns
Units of Measurement	km, kf, mi	km, kf, mi
Event Dead Zone	2m	1m
Attenuation Dead Zone	5m	4m
Resolution	0.25-64m	0.125-32m
Distance Uncertainty	+-(0.75 + 0.005% x distance + sampling resolution)	+-(0.75 + 0.005% x distance + sampling resolution)
Full Scale Distance Range	1-64km MM, 1-240km SM	1-64km MM, 1-240km SM
Typical Real-Time Refresh Rate	4 Hz	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048	1.024 - 2.048
Linearity	+- .05 dB/dB	+- .05 dB/dB
Memory Capacity	1,000 traces	1,000 traces
Memory Type	Internal	Internal
Power Supply/Charger	Universal	Universal
Battery	6hr	6hr
Storage Temperature	-20 to 60 C	-20 to 60 C
Operating Temperature Range	-10 to 50 C	-10 to 50 C
Dimensions (w/out rubber boot)	7.62" L x 3.88" W x 1.56" H (194mm L x 99mm W x 40mm H)	7.75" L x 4.5" W x 2.25" H (197mm L x 114mm W x 57mm H)
Weight	1.6 lbs.	2.0 lbs.
Communications ports	USB/Bluetooth	USB/Bluetooth
Connector Styles	FC, ST, SC Interchangeable	FC, ST, SC Interchangeable

Options

MODEL	INCLUDES
OTR 500-S	1310/1550nm single mode OTDR with Bluetooth connect to Android OS
OTR 700-S	1310/1550nm long-range single mode OTDR with Bluetooth connect to Android OS
OTR 700-M	850/1310nm long-range multimode OTDR with Bluetooth connect to Android OS
OTR 700-Q	Quad 850nm, 1300nm, 1310nm, 1550nm SM & MM OTDR with Bluetooth connect to Android OS

All models are available with the optional VIS 300 Connector Inspection Scope (add -P to model number)

OTR 500 with VIS 300

OTR 500 with accessories in hard carry case

Optical Design Manufacturing, Inc.
143 Lake Street, Suite 1E, Laconia, NH 03246
Phone: (603) 524-8350   FAX: (603) 524-8332
www.odm-inc.com
sales@odm-inc.com