

FlexScan FS300

Quad OTDR

FEATURES

- All-in-one test capability - includes integrated VFL, power meter, and light source.
- High performance with up to 37dB dynamic range and best-in-class 25m PON deadzone.
- Pocket-sized - the FS300 may be small but it delivers 12 hours of battery and a 5-inch 800x480 pixel touchscreen display.



EMITTER TYPE [1]	Laser
SAFETY CLASS [2]	Class I
FIBRE TYPE	Multi-mode: compatible with OM1-OM5 Single-mode: compatible with all G.65x
WAVELENGTHS [3]	Multi-mode: 850/1300 ±20nm Single-mode: 1310/1550 ±20nm; 1650 ±20nm (Penta OTDR only)
CONNECTOR TYPE	User-specified APC or UPC ferrule with interchangeable UCI adapters
DYNAMIC RANGE [4]	Multi-mode: ≥29/29dB at 850/1300nm Single-mode: ≥37/36/37dB at 1310/1550/1650nm
EVENT DEAD ZONE [5]	Multi-mode: ≤0.8m at 850/1300nm typical Single-mode: 0.8m at 1310/1550nm typical
ATTENUATION DEAD ZONE [6]	Multi-mode: ≤3.0m Single-mode: ≤3.5m
PON DEAD ZONE [7]	Multi-mode: Not applicable Single-mode: ≤20m
PULSE WIDTHS	Multi-mode: 3, 5, 10, 20, 30, 50, 100, 200, 300, 500ns; 1µs Single-mode: 3, 5, 10, 20, 30, 50, 100, 200, 300, 500ns; 1, 2, 3, 5, 10, 20µs
RANGE SETTINGS	Multi-mode: 250m to 30km Single-mode: 250m to 240km
DATA POINTS	Up to 300,000
DATA SPACING	≤5cm to ≤8m
GROUP INDEX OF REFRACTION	1.3000 to 1.7000
DISTANCE UNCERTAINTY	±(1 + 0.0025% x distance + data point spacing) m
LINEARITY	±0.03dB/dB
LOSS RESOLUTION	0.001dB
REFLECTANCE RANGE	Multi-mode: 850: -20 to -58dB; 1300: -20 to -63dB Single-mode: 1310: -20 to -65dB; 1550: -20 to -65dB
REFLECTANCE RESOLUTION	0.01dB
REFLECTANCE ACCURACY	±2dB
ORL RANGE	20 to 60dB
ORL RESOLUTION	0.01dB
ORL ACCURACY	±2dB over range 30 to 55dB; ±4dB over range 20-30dB and 55-60dB
TRACE FILE FORMAT	.SOR, Telcordia SR-4731 Issue 2
OTDR RESULTS	Storage Internal or external USB memory
INTERNAL STORAGE	Minimum 4GB internal non-volatile memory (App SW + > 1000 traces)

INTERNAL LAUNCH FIBRE	≥30m internal MM launch fibre
OTDR MODES	Supports SmartAuto, Expert, Real-Time for PON & point-to-point networks
REAL-TIME REFRESH RATE	1 to 4Hz
LIVE FIBRE PROTECTION	No OTDR damage when connected to live fibre delivering ≤ +3dBm at wavelength(s) in range 825 to 1675nm
LIVE FIBRE DETECTION	Reports live fibre with input signal ≥ -35dBm for wavelength(s) in range 825 to 1675nm

NOTES

[1] All specifications valid at 25°C unless otherwise specified. [2] FDA 21 CFR 1040.10 & 1040.11, IEC 60825-1:2014. [3] Measured with laser in CW mode at 23°C ±3°C. [4] SNR=1, longest range and pulse width, 3-minute averaging. [5] Maximum distance between two points 1.5dB down each side of a reflective peak caused by an event with a -45dB (or smaller) reflectance. Test pulse width is 3 or 5ns. [6] Maximum distance from the start of a trace spike caused by an event with a -45dB (or smaller) reflectance, to the point where the trace returns to and stays within ±0.5dB of backscatter. Test pulse width is 3 or 5ns. [7] Recovery to within 0.5dB of backscatter after 1:16 splitter (≤13dB loss) using 100ns pulse width.