DATA SHEET

FlexScan FS200
OTDR

FEATURES

- All-in-one test capability - includes integrated VFL, power meter and light source.
- High performacne with up to 37dB dynamic range and best-in-class 25m PON deadzone.
- Fast - completes dual wavelength tests 10x faster than conventional OTDRs.



OTDR	-50 | -60 | -100 | -300 | -300 | -304
EMITTER TYPE	Laser
SAFETY CLASS [1]	Class I
FIBRE TYPE	Single-mode
WAVELENGTHS (NM)	1550 | 1650 | 1310 / 1550 | 1310 / 1550 | 1310 / 1550 / 1625 | 1310 / 1550 / 1650
CENTRE TOLERANCE [2]	1310/1550/1650: ± 20 nm; 1625 +30/-5 nm
DYNAMIC RANGE (DB) [3]	28 | 37 | 32 / 30 | 37 / 36 | 37 / 36 / 37 | 37 / 36 / 37
EVENT DEAD ZONE (M) [4]	3 | 3.5 | 3.6 | 3.5 | 3.5 | 3.5
ATTEN. DEAD ZONE (M) [5]	3 | 3.5 | 3.6 | 3.5 | 3.5 | 3.5
PON DEAD ZONE (M) [6]	N/A | 30 | N/A | 25 / 25 | 25 / 25 / 30 | 25 / 25 / 30
PULSE WIDTHS	3, 5, 10, 20, 30, 50, 100, 200, 300, 500 ns; 1, 2, 3, 10 µs; 20 µs (FS200-300/300/304 only)
RANGE SETTINGS	250m to 240km
DATA POINTS	Up to 300,000 (Expert mode .SOR file)
DATA SPACING	5cm to 16m
INDEX OF REFRACTION	1.3000 to 1.7000
DISTANCE UNCERTAINTY	±(1 + 0.003% x distance + data point spacing)m
LINEARITY (DB/DB)	±0.05
TRACE FILE FORMAT	Telcordia SR-4731 Issue 2 compatible .SOR
TRACE STORAGE MEDIUM	4 GB internal memory (> 5000 traces typical); External USB memory stick
DATA TRANSFER TO PC	USB cable or Bluetooth® (option)
OTDR MODES	SmartAuto, Expert, Real-time
FLEXPRESS FAST TEST	FS200-300/303/404
DISPLAY MODES	LinkMap Summary, LinkMap Events, Trace
REFRESH RATE	Up to 4Hz (real-time mode)
LIVE FIBRE PROTECTION	No OTDR damage with input power ≤ +15 dBm for wavelength(s) in range 1260 to 1675 nm
LIVE FIBRE DETECTION	Reports live fibre with input signal ≥ -35 dBm for wave-length(s) in range 1260 to 1675 nm
PON FILTER ISOLATION	>50 dB for 1260nm ≤ wavelength ≤1600nm
LIVE PON OTDR TEST	1625 or 1650nm using filtered detector
SIZE (IN BOOT)	86mm x 160mm x 43mm
WEIGHT	0.4kg
OPERATIONAL TEMPERATURE [7]	-10°C to 50°C, 0 to 95% RH (non-condensing)
STORAGE TEMPERATURE	-40°C to 70°C, 0 to 95% RH (non-condensing)

POWER	Rechargeable Li-Pol or AC adapter
BATTERY LIFE	>12 hours, Telcordia test conditions
DISPLAY	4.3-inch colour touchscreen LCD, 480x272, backlit
USB PORTS	1 host; 1 micro-USB function
BLUETOOTH (OPTIONAL)	Compatible with Windows PC, Android
VISUAL FAULT LOCATOR	
OTDR	-50 | -60 | -100 | -300 | -300 | -304
EMITTER TYPE	Visible red laser, 650 ±20nm
SAFETY CLASS	Class II
OUTPUT POWER	0.8mW into single-mode fibre (-1dBm ±0.5dB)
MODES CW	2Hz flashing
OPTICAL POWER METER (OPM - OPTIONAL)	
CALIBRATED WAVELENGTHS	1310, 1490, 1550, 1625, 1650nm
DETECTOR TYPE	InGaAs, 1mm diameter
MEASUREMENT RANGE	+23 to -50dBm
TONE DETECT RANGE	+3 to -35dBm
ACCURACY	±0.25dB
RESOLUTION	0.01dB
MEASUREMENT UNITS	dB, dBm or Watts (nW, µW, mW)
OPTICAL LASER SOURCE (OLS - OPTIONAL)	
EMITTER TYPE	Laser
SAFETY CLASS	Class I
FIBRE TYPE	Single-mode
WAVELENGTHS	1550 | N/A | 1310 / 1550 | 1310 / 1550 | 1310 / 1550 | 1310 / 1550
CENTRE TOLERANCE	±20nm (CW mode)
SPECTRAL WIDTH (FWHM)	5nm (maximum)
INTERNAL MODULATION	270 Hz, 330 Hz, 1 kHz, 2 kHz, CW, Wave ID
WAVE ID	Compatible with AFL OPM/OLS
OUTPUT POWER STABILITY	≤±0.1dB (15 minutes); ≤±0.15dB (8 hours)
OUTPUT POWER	-3dBm ±1.5dB

NOTES
[1] FDA 21 CFR 1040.10 & 1040.11, IEC 60825-1: 2014. **[2]** Using 10ns pulse width. **[3]** SNR=1, longest range and pulse width, 3-minute averaging. **[4]** Maximum distance between two points 1.5dB down each side of a reflective peak caused by an event with reflectance ≤-45dB using 3 or 5ns pulse. **[5]** 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. **[6]** Recovery to within 0.5dB of backscatter after 1:16 splitter (≤13dB loss) using 100 ns pulse width. **[7]** Max temperature while charging is 45°C.

FIBERARC
equipment for telecom

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