

Frequency-Division-Multiplexed Coherent OTDR

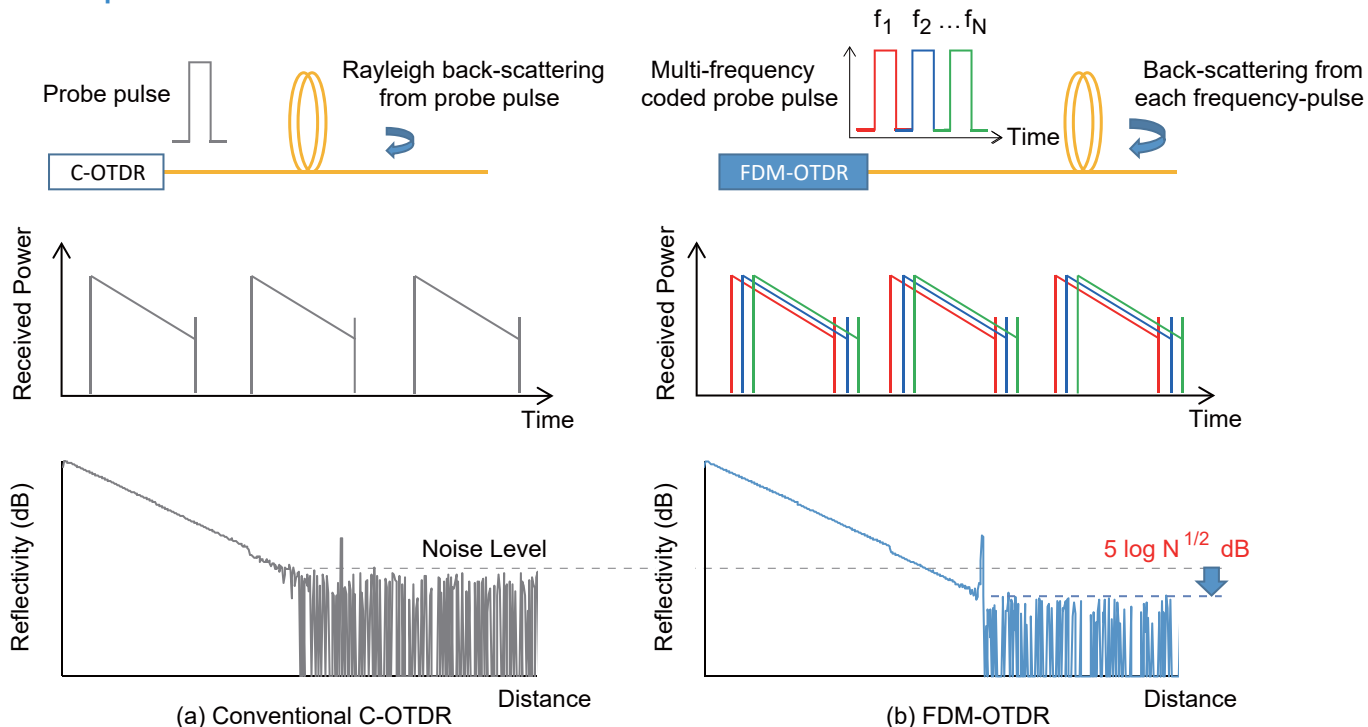
FOTDR-300

- High dynamic range > 23dB
- 10 ~ 40 times faster measurement than conventional C-OTDRs
- Characterize up to 12,000km long submarine optical cables

1, 10 or 40 Freq MUX	>23dB Dyn. Range	Up to 40x faster	Remote
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Principle



Fast,
High Dynamic Range

The FDM-OTDR encodes multiple probe pulses at different frequencies, in the same time frame that conventional C-OTDRs send out a single pulse. This frequency-division-multiplexing enables larger data acquisition in the same measurement time compared to C-OTDRs. As a result the FDM-OTDR can achieve higher dynamic range with the same measurement time, or a significantly reduced measurement time with the same dynamic range.

Specifications

		unit
Center wavelength (OTDR)	1535.03 ~ 1565.08 (ITU-Grid, fixed at time of order)	nm
Center wavelength (dummy)	Center wavelength (OTDR) +/- 3	nm
Pulse width	2.5, 5, 10, 30, 60, 100	µs
Output power	0 ~ +13 (0.2 dB step)	dBm
Dynamic range ¹	> 23	dB
Rayleigh dead zone ²	< 0.5	km
Optical connector	FC, SC, LC, ST (PC/APC, other types can also be specified)	
Distance range	100, 500 ~ 12,000 (500 km step)	km
Frequency mux	1, 10, 40	
Averaging	2 ⁸ ~ 2 ²⁴	
IOR (Index of refraction)	1.300000 ~ 1.700000	
Mode	Normal / High resolution	
Display	10.1inch VGA(1024x600), color LCD, touch panel	
PC interface	USB (3 ports), RJ-45 (1 port), VGA (1 port)	
Power supply	AC 100-240 (50 / 60 Hz)	Vac
Electricity consumption	220	W
Inrush current	25	A
Dimension (W x H x D) ³	450 x 240 x 440	mm
Weight	< 20	kg
Operating temperature	10 ~ 40	°C
Storage temperature	-10 ~ 50	°C
Humidity	40 ~ 80	%
EMC	CISPR22, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6	
Shock	IEC C60068-2-27	
Vibration	IEC C60068-2-6	

1. With the setting: Pulse width 10 µs, Average 2¹⁶, Distance range 1,000 km, with added ASE, Frequency MUX 40;
 2. With the setting: Pulse width 10 µs, Frequency MUX 40;
 3. Width is 480 mm including 19" rack fixture;
- The above specifications may change without prior notice.

User Interface



Ordering Information

FOTDR - 300

