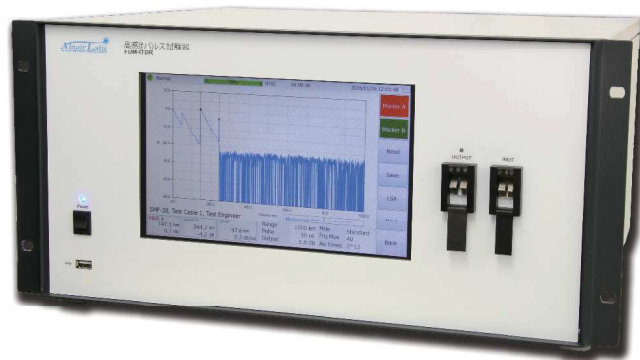


# Frequency-Division-Multiplexed Coherent OTDR

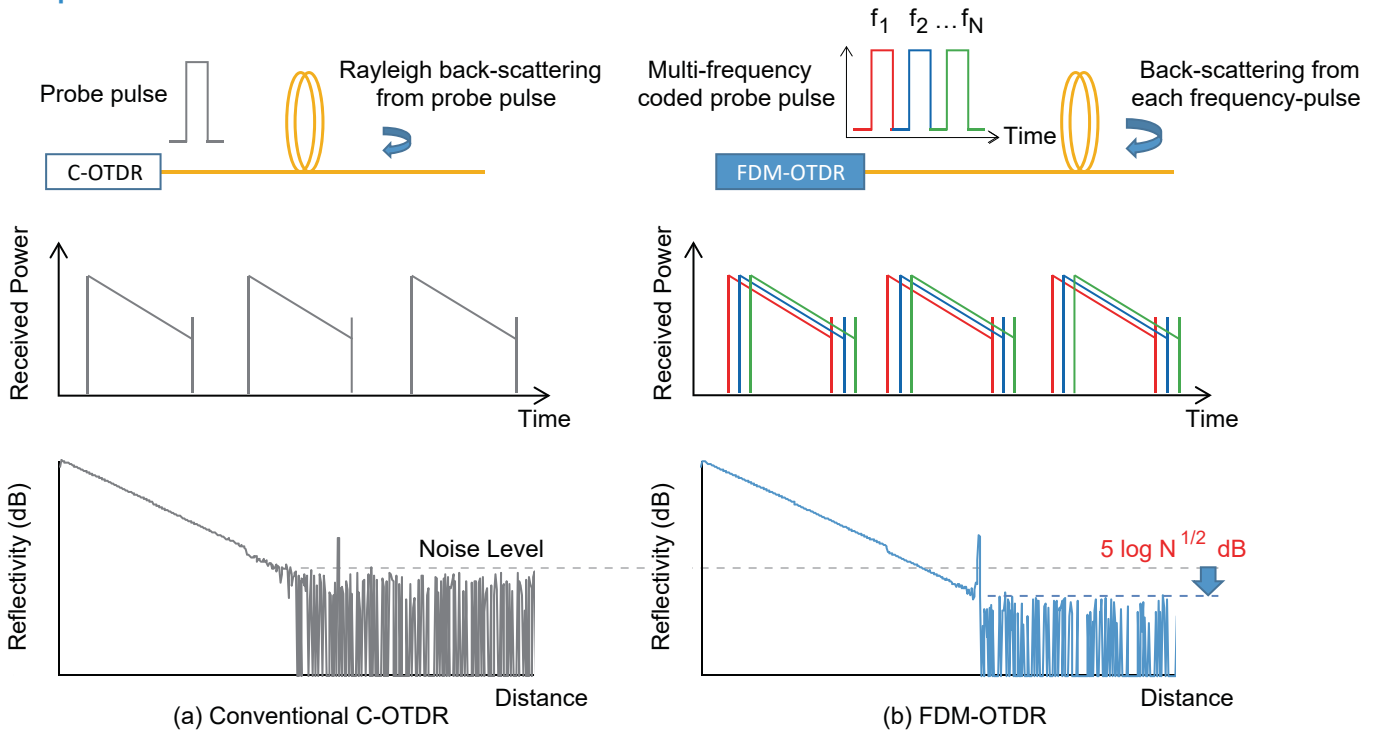
FOTDR-300

- 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.

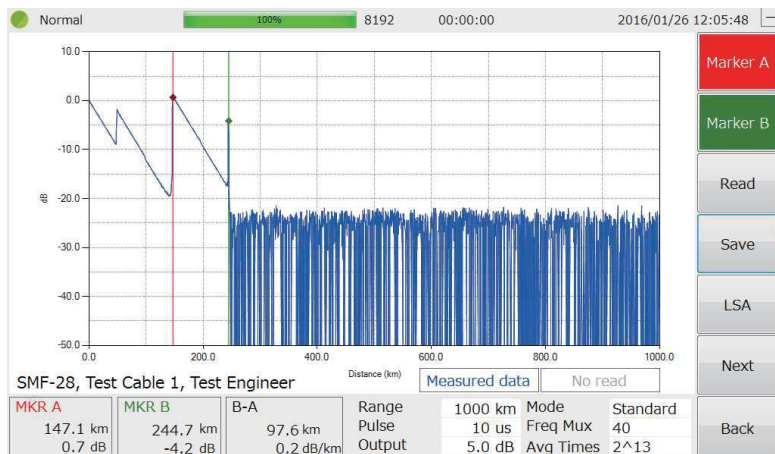
## Specifications

Category	Parameter	Unit	
Optical	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 <sup>1</sup>	> 23	dB
	Rayleigh Dead Zone <sup>2</sup>	< 0.5	km
Operation	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 <sup>8</sup> ~ 2 <sup>24</sup>	
Electrical	IOR (Index of refraction)	1.300000 ~ 1.700000	
	Mode	Normal / High Resolution	
	Display	10.1inch VGA(1024x600), Color LCD, Touch Panel	
	Interface	USB (3 ports), RJ-45 (1 port), VGA (1 port)	
	Power Supply	AC 100-240 (50/60 Hz)	Vac
	Electricity Consumption	220	W
Physical	Inrush Current	25	A
	Dimension (WxHxD) <sup>3</sup>	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	

**Note:**

1. With the setting: Pulse width 10µs, Average 2<sup>15</sup>, Distance range 1,000km, with added ASE, Frequency MUX 40;
  2. With the setting: Pulse width 10µs, Frequency MUX 40;
  3. Width is 480mm including 19" rack fixture;
- The above specifications may change without prior notice.

## User Interface



## Ordering Information

**FOTDR - 300**