

# Optical Delay Line System

## Radiation-resistant Optical Fibre Delay Lines

Taking advantage of optical fibre and fibre process technology, YOFC's radiation-resistant optical fibre delay lines feature high-precision true time delay, and different levels of radiation resistant can be achieved. The experienced design have been proved with a high mechanical performance and environmental reliability. Small diameter fibre can be selected to reduce the volume for special application. Optical fibre and connector is customized.

### Characteristics

- Large delay range
- Smooth phase change
- Compact structure
- High stability
- Strong vibration resistance

### Applications

- Radar monitoring/calibration
- Signal processing
- Phased array antenna
- Phase noise processing



### Specifications

Product Type	FOD652-a-b-c* <sup>①</sup>
Fibre Type	Radiation-resistant Fibre
Delay Range (μs)	0.1 - 280
Delay Accuracy	±0.01μs@0.1 - 10μs
	±0.1%@10 - 280μs
Insertion Loss (dB)	0.1 (dB/μs) × Delay(μs) + 1.0
Relative Delay Time with Temperature (ppm/°C)	≤ 6.5
Dimensions (mm)	Typ. 152.4 × 152.4 × 100 or can be customized
Operating Temperature (°C)	-40 to +85
Storage Temperature (°C)	-60 to +85

\*<sup>①</sup>FOD652-a-b-c, a means delay time, b means connector type, and c means sheath type