

# Optical Comb Generator WTAS-01



WTAS-01 is a FP-EO\*1 type optical frequency comb generator with high frequency stability, low phase noise and low timing jitter. The components are all passive so that the comb stability and comb interval are equal to input laser and modulation (RF) frequency respectively. WTAS-01 adopted waveguide modulator to realize high performances and high reliability. This product is designed for precise optical measurement applications and also available as a optical pulse source.

\*1 FP-EO:Fabry Perot-Electro Optic

## Features

- High finesse FP cavity
- Low  $V\pi$
- Low power consumption
- High reliability
- Low jitter sub-ps pulse generation

\*2 Figure of merit= $V\pi$ /Finesse

## Applications

- WDM communications
- Optical Metrology
- Optical Coherence Tomography
- Phase-locked THz-wave synthesis

## Specifications

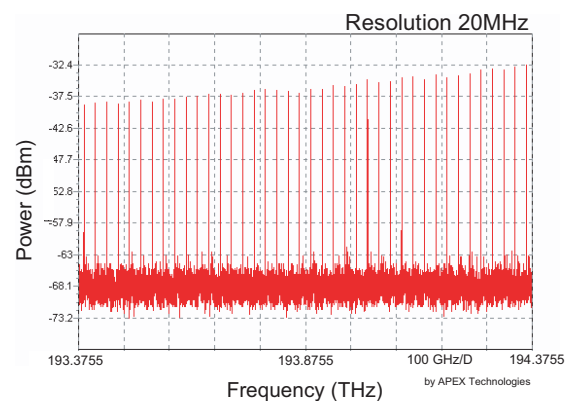
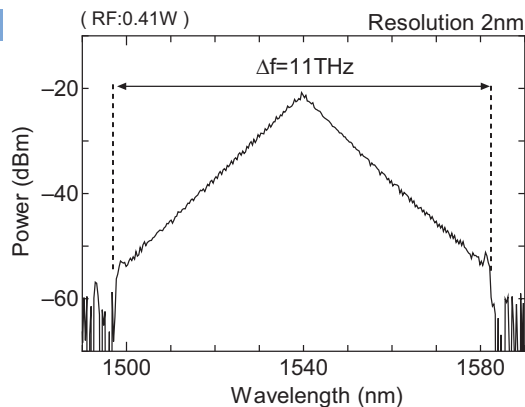
Item	Specification
Center Wavelength*3	1530 ~ 1565 nm
Modulation frequency*4	25 GHz
Comb stability*5	Same as reference
Optical Input Power	< 40 mW
$V\pi$	< 10 V @ 25GHz
Output efficiency	0.3 %
Finesse	> 50
Comb Span	> 10 THz
Flatness	-7 dB / THz
Optical pulse width	600 fs (calculated)
Pulse repetition rate	50 GHz
Dimensions	466W x 434.5D x 135H mm <sup>3</sup> (19 inch x 3U)

\*3 Laser input should be single mode and linewidth less than 10MHz is recommended. Optical isolator between input laser and this device is strongly recommended.

\*4 10 GHz is also available.

\*5 Standard  $10^{-7}$ , Option  $10^{-11}$ , or External is available.

## Comb Spectrum



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