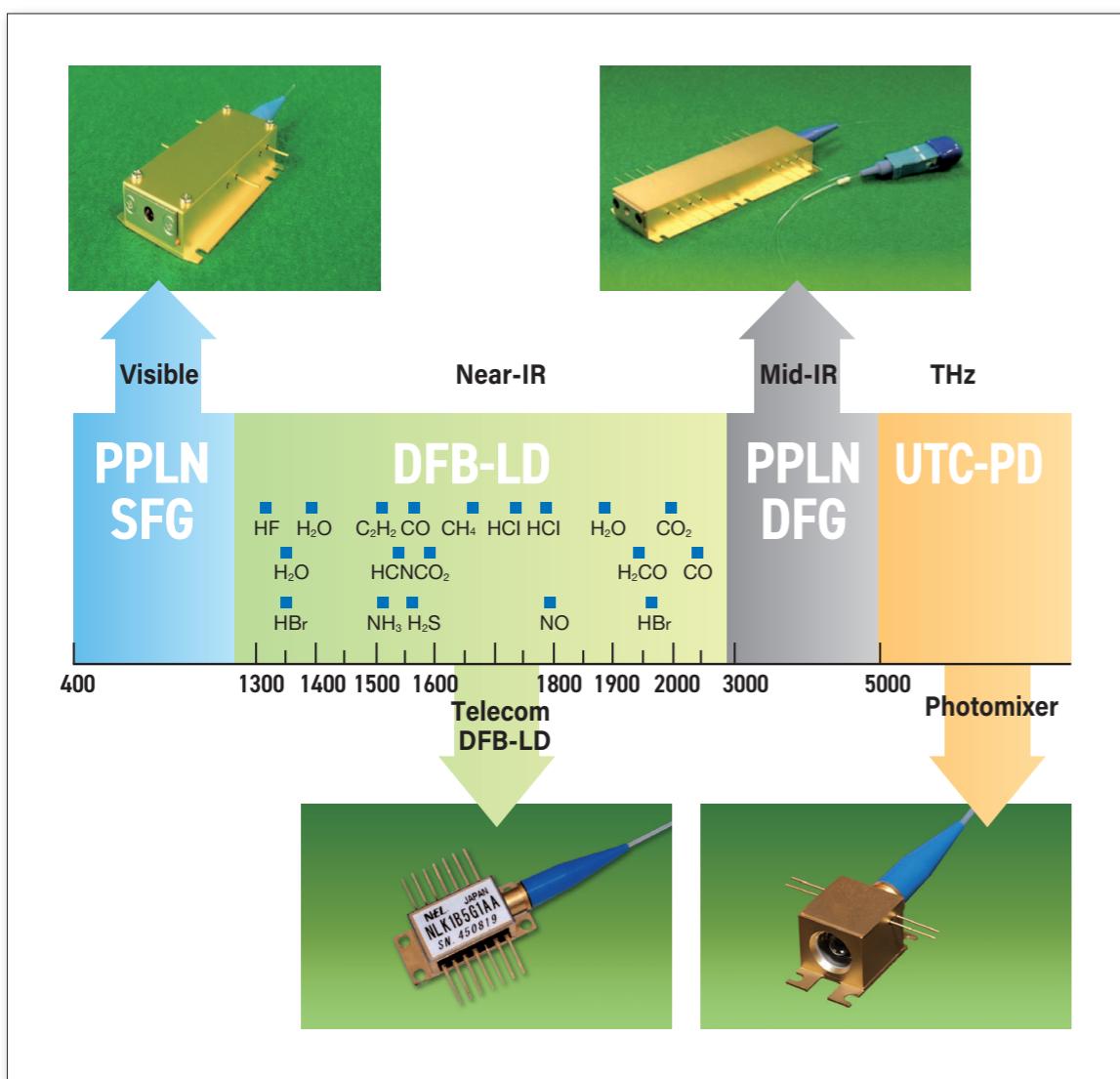


Laser lineup



- Our company may change specifications and the appearance for improvement that are incidental to the product without providing prior notice. At the purchase and the use of the product, please confirm the latest information.
- Please use our products in accordance with the instructions provided in the manual, user's guide or specifications attached.
- Exporting our products or technologies may be subject to the Foreign Exchange and Foreign Trade Law of Japan and export control acts and regulations of other related countries.
- Opti λ is a trademark of NTT Innovative Devices.



 **NTT Innovative Devices**

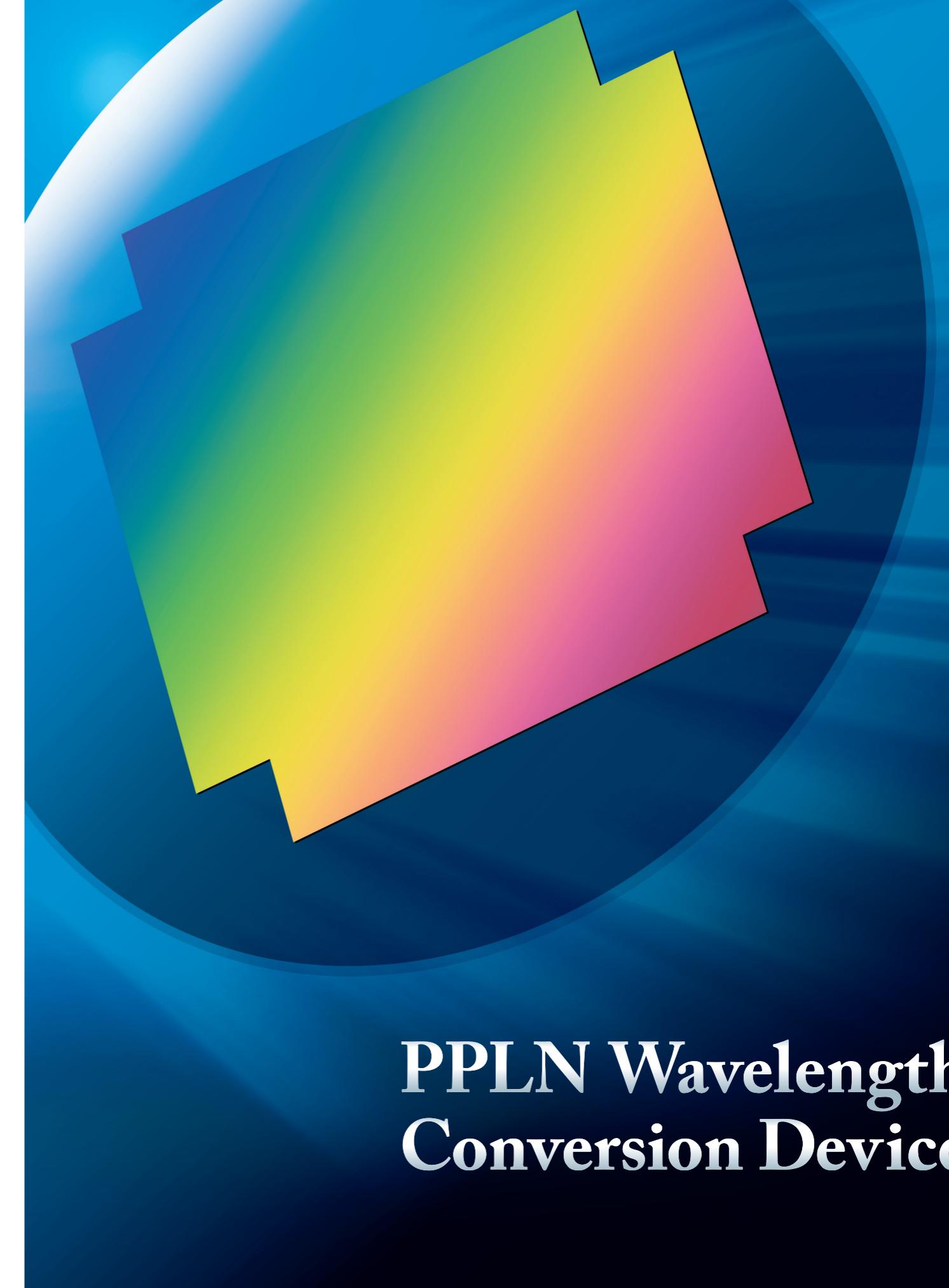
NTT Innovative Devices Corporation

Aquaria Tower Yokohama, 1-1-32 Shin-urashimacho,
Kanagawa-ku, Yokohama-shi, Kanagawa, 221-0031, Japan
E-mail: projectj-p@ntt-devices.com
<https://www.ntt-innovative-devices.com/en/>



Sensing application website

January, 2026

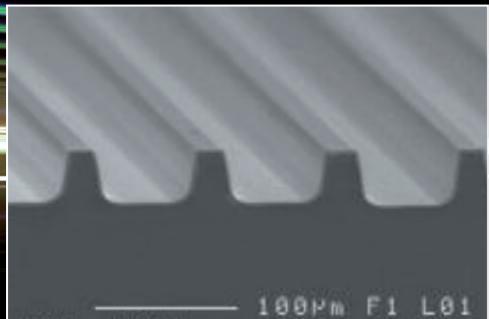


 **NTT Innovative Devices**

PPLN Waveguide & Module

Mid-IR 3 micron Laser

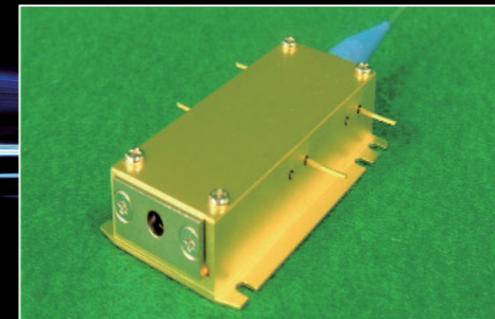
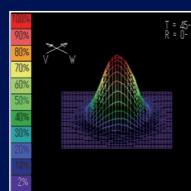
Custom design tailored to your laser system is available.



Waveguide

Characteristics

- Periodically Poled Zn-doped Lithium Niobate
- Direct bonding technique
- High resistance to photo-refractive damage
- High efficiency
- High beam quality



Module

Application

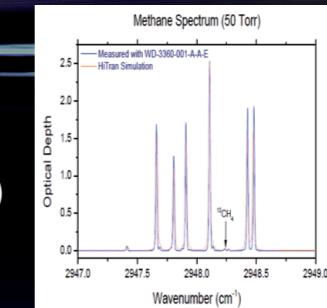
- Atomic cooling
- Quantum cryptograph
- Fiber comb
- Telecom
- TEC integrated
- Lens coupling

Characteristics

- TEC integrated
- Lens coupling

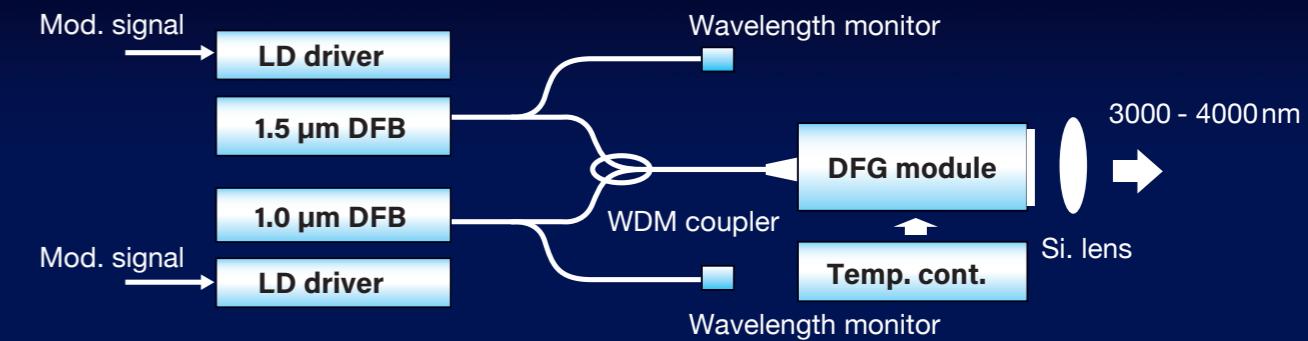
Application

- CH₄ monitoring
- Trace gas sensing

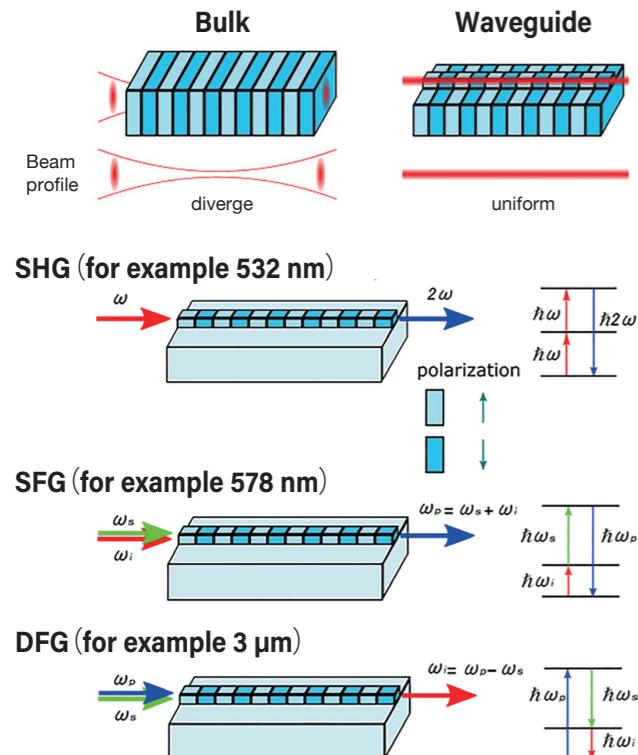


Characteristics

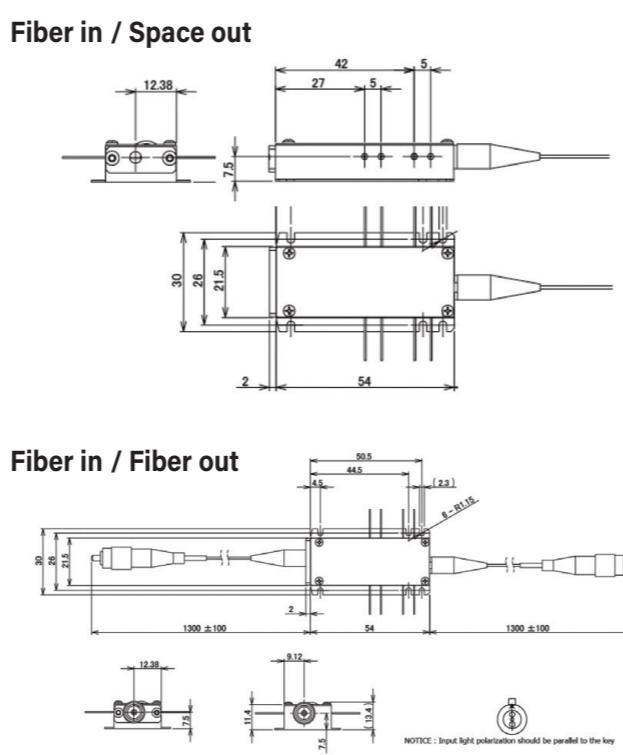
- Single mode
- Tunable $\sim 26\text{nm}$ (22cm^{-1})
- Analog modulation



Principle

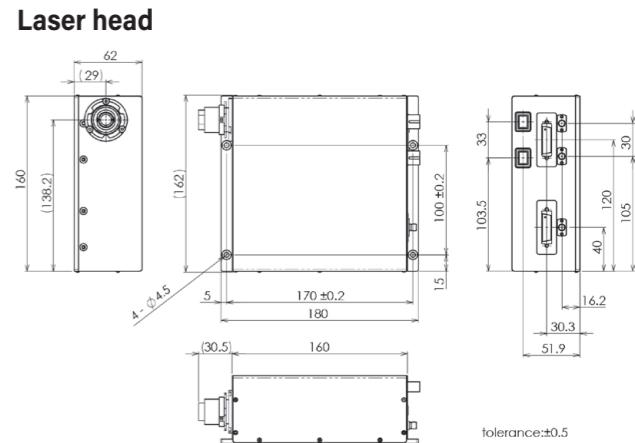


Outline dimensional diagrams (mm)



Item	Specification
Model	WD-XXXX*-001-A-A-E
Mode of operation	CW
Wavelength	3000 - 4000 nm Pump : 1.0 μm, Signal : 1.5 μm
Maximum output power	50 μW
Tuning range per one unit	26nm (22cm ⁻¹) @ 3360 nm LD's temperature tuning is required
Linewidth (FWMH)	< 30 MHz
Beam mode	TEM00
Power supply	5 VDC
External modulation input	0 - 1 V (Analog)
Modulation bandwidth	Up to 100 kHz
Dimensions (W x D x H)	Laser head : 162 x 200.5 x 62 (mm) Laser Controller : 130 x 130 x 50 (mm)
Interface	RS-232C serial interface (USB type -B)

* xxxx is wavelength in nm unit



Laser controller