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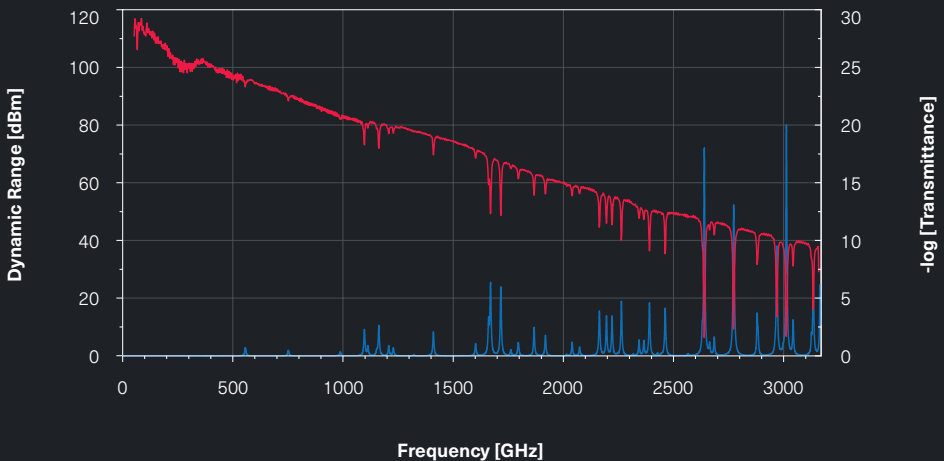
Frequency selection and tuning

TeraScan

Frequency-domain
terahertz platform



- Tunable, monochromatic emission up to 3 THz
- Single-MHz frequency resolution
- Rh:InGaAs receivers, > 10 dB signal improvement



learn more...



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TeraScan 1550



CLASS 1 LASER PRODUCT, ACCORDING TO EN 60825-1:2014 +A11:2021 / IEC 60825-1:2014

Specifications	
Difference frequency tuning	1.2 THz (up to 2.7 THz with Tuning Range Extension)
Tuning speed	Up to 0.1 THz/s
Frequency accuracy	< 2 GHz
Minimum frequency step size	< 10 MHz
Terahertz emitter	PCA-FD-1550-100-TX-1, InGaAs photodiode
Terahertz receiver	PCA-FD-1550-130-RX-1, InGaAs photomixer
Receiver option	THz PCA / HF cw: Use of Rh:InGaAs receiver instead of standard RX, signal improvement > 10 dB
Antenna type	Bow-tie
Terahertz polarization	Linear
Emitter and receiver package	Cylindrical, $\varnothing$ 25 mm Integrated Si lens and SM/PM fiber pigtail
Terahertz power (typ.)	100 μ W @ 100 GHz, 10 μ W @ 500 GHz
Terahertz dynamic range (300 ms integration time)	90 dB @ 100 GHz 70 dB @ 500 GHz
Laser size (H x W x D) and weight	Two DFB pro BFY laser heads, each with dimensions 60 x 120 x 165 mm ³ (H x W x D), weight 1 kg
Control unit	DLC smart
Controller size (H x W x D) and weight	50 x 480 x 290 mm ³ , 4 kg
Computer interface	Ethernet
Software	Control software with GUI + Remote command interface
Key advantages	High terahertz power, compact laser units