

*„For more than a decade, we have trusted the large THz sources of the HZDR, which are there under the direction of Dr. Stephan Winnerl, manufactured in the highest quality.“*

**Dr. Gregor Klatt**

**Business Development Manager in the Precision  
Medicine and Manufacturing group within Novanta**

## CONTACT

**Dr. Stephan Winnerl**  
Latera@hzdri.de

HZDR Innovation GmbH  
Bautzner Landstraße 400  
01328 Dresden, Germany



**More information:**

[www.hzdr-innovation.de/en/products/  
terahertz-emitter/](http://www.hzdr-innovation.de/en/products/terahertz-emitter/)



# LA TERA

**Large Area  
Terahertz Antenna**

**up to 1 cm<sup>2</sup>**



Developed by

**HZDR**  
HELMHOLTZ ZENTRUM  
DRESDEN ROSENDOERF

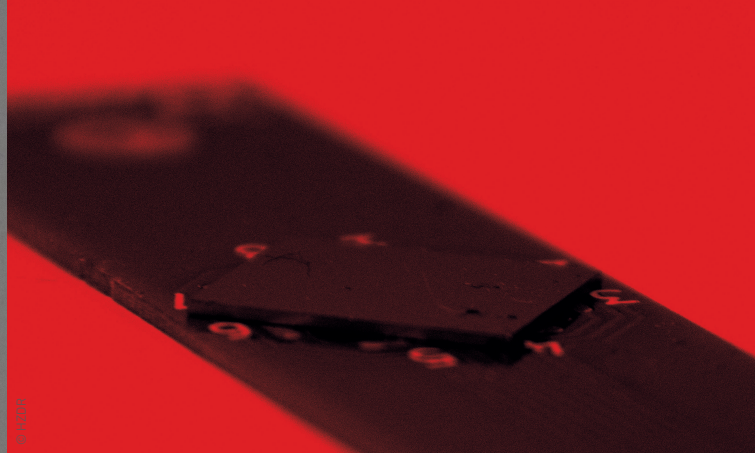
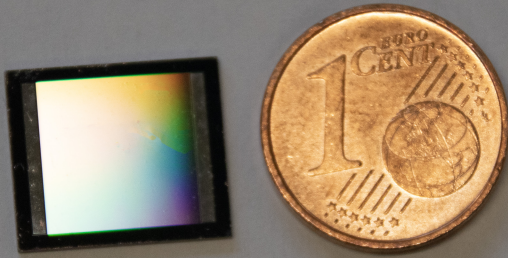
Licensed and distributed by

**HZDR**  
INNOVATION

**HZDR**  
INNOVATION

#FUTURETECHNOLOGIES

#FUTURETECHNOLOGIES



## Technical Product Specifications

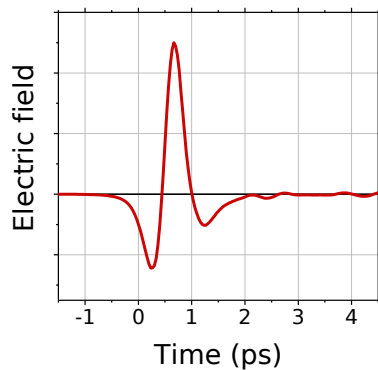
SPECIFICATION	VALUE
Active area	10 x 10 mm <sup>2</sup>
Bias voltage	< 25 V
Electrical modulation	Up to MHz
Excitation wavelength	800 nm
Spectral range	0.2 - 3 THz
Peak fields (for different laser pulse energies)	Guaranteed value (measured in optimised setup)
For 10 nJ	0.1 kV/cm (0.3 kV)
For 4 μJ	5 kV/cm (17 kV/cm)
For 0.2 mJ	50 kV/cm (200 kV/cm)

The HZDR Innovation GmbH has in-depth expertise on THz radiation sources and detectors as well as spectroscopic methods, which we provide as a consulting service. We also offer on-demand radiation sources for use with short-pulse laser sources that differ in their electrode geometry and area and can therefore be optimally adapted to the respective application. For example, we offer THz sources for radially polarized radiation featuring longitudinal field components.

## Highlights & Advantages

- Spectral range 0.2 - 3 THz
- High fields for nonlinear spectroscopy
- Easy alignment

THz time trace



Power Spectrum

