

# QS2-1000



## Terahertz Generator

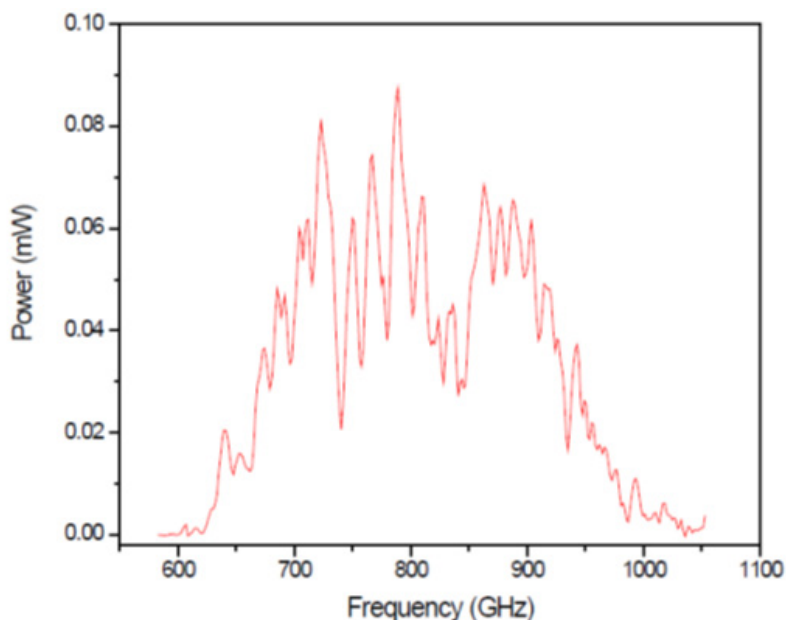
### Product Description:

The QS2-1000 is a quasi-optical source composed of a QS2-180 (OV-76) backward wave oscillator (BWO) combined with various Schottky diode multipliers. It is tunable across the 100-1000 GHz frequency range.

#### Key features include:

- Spectral range: 100-1000 GHz
- Spectral resolution: 1 - 20 MHz
- Air cooled system
- Compact magnet

### Transmission Setup:



### Product Specifications:

Model	Highest Spectral Range (GHz)	Output Power (mW)
QS2-180	100-180	up to 20
QS2-350	200-350	up to 2.0
QS2-500	300-500	up to 1.0
QS2-1000	600-1000	up to 0.1
QS2-1000	1000-1000	up to 0.01

# QS2-1000



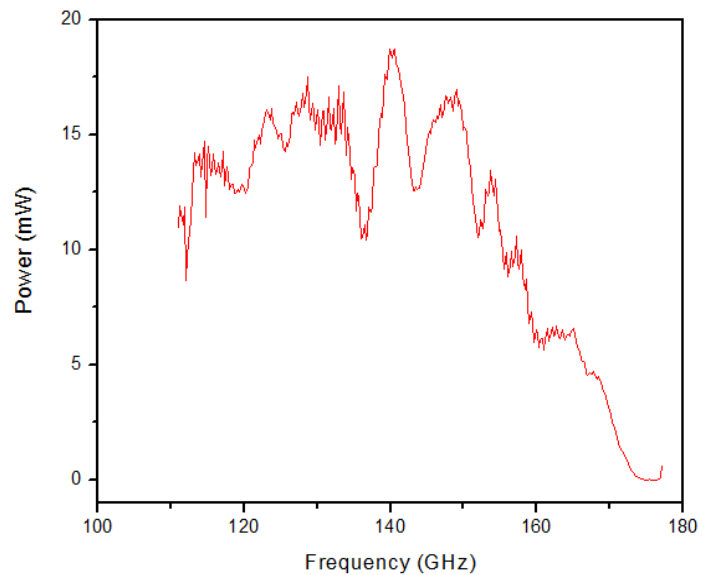
## Terahertz Generator

### Product Details:

The QS2-1000 is a quasi-optical source composed of a QS2-180 (OV-86) backward wave oscillator (BWO), a Schottky diode frequency doubler, a low frequency tripler and one high frequency tripler. It is tunable across the 100-180 GHz, 200-350 GHz, 300-500 GHz, and 600-1000 GHz freq.

Operation of the QS2 BWO system requires the use of a VR3 high voltage power supply. This power supply provides a voltage of up to 3 kV with very low line ripple. The power supply also has the option of adding a small modulating voltage to broaden the spectral line in order to help prevent standing waves in the optical setup.

Use of the QS2 system is greatly enhanced through the use of Microtech's DAU control device. This data acquisition unit controls the power supply voltage, allowing the user to control the frequency output of the system. It also includes an interface for THz detectors, a large aperture chopper, and software which can be used to analyze frequency spectra to calculate dielectric constants of a material.



### Additional components:



VR3 power supply for powering QS2 systems



Data Acquisition Unit (DAU) for controlling BWO spectrometer systems.