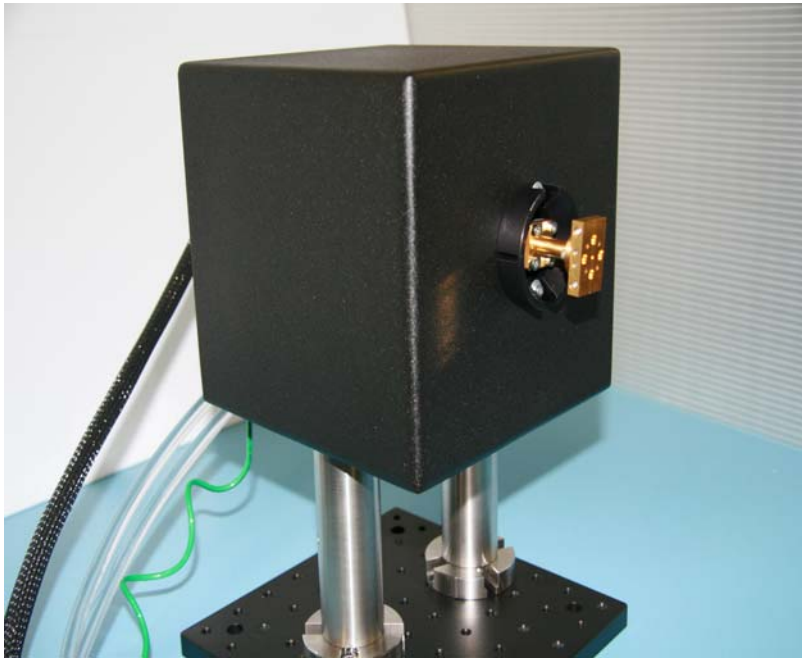


QS1-260-750 Quasi-Optical Source



Frequency Range	Power Range
155-260 GHz	Up to 100 mW
310-520 GHz	Up to 3 mW
550-750 GHz	Up to 1 mW

The QS1-260-750 is a quasi-optical source, tunable across 160-260 GHz, 310-520 GHz, and 550-750 GHz frequency ranges. The unit is rapidly configurable for any of those ranges. This makes it an excellent choice for a broad range of research and industrial applications.

The QS1-260-750 is a hybrid device composed of a QS1-260 (OV-24) backward wave oscillator (BWO), waveguide adapter and two Schottky diode frequency multipliers: one doubler and one tripler. In the baseline configuration, QS1-260 produces up to 100 mW of continuous wave tunable monochromatic power with a bandwidth of 2 MHz.

The Schottky diodes attach easily to the wave guide adapter for quick spectral range changes. Frequency doubler extends operating range of QS1-260 to 310-520 GHz, generating up to 3 mW of power. Frequency tripler converts QS1-260 output to 550-750 GHz range with power up to 1 mW. Spectral bandwidth of the multiplied output ranges from 4-6 MHz. Typical spectra of QS1-260-750 are shown on the next page.

The QS1-260 BWO can either be pre-packaged into MS-0.6 magnetic systems or used with any other MS-X.X system offered by Microtech Instruments Inc. Operation of QS1-260 also requires a high voltage power supply such as VR-6M and a water cooling system.

