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NASA Awards Micro Harmonics SBIR Contract to Develop Cryogenic mmWave Isolators

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NASA has awarded **Micro Harmonics** a Phase II SBIR contract to develop cryogenic mmWave isolators, a follow-on to a Phase I program. The Phase II effort will enable Micro Harmonics to expand its product line to add cryogenic options for every standard waveguide band from WR-15 (50 to 75 GHz) to WR-3.4 (220 to 330 GHz).

This SBIR program, which began in June and is scheduled to complete in June 2021, also funds the development of room temperature isolators for WR-2.8 (260 to 400 GHz) and WR-2.2 (330 to 500 GHz), as well as several voltage variable attenuators covering WR-15 through WR-8 (90 to 140 GHz).

Micro Harmonics specializes in ferrite-based mmWave components and offers isolators and circulators designed for NASA instruments. Through Phase I and II SBIR programs, NASA funded Micro Harmonics to develop the company's initial mmWave isolators and circulators. The company says their isolators and circulators are the most technologically advanced on the market and can be used in point-to-point radio links, portal security systems and instrumentation for radio astronomy, plasma diagnostics, chemical spectroscopy and biomaterial analysis.