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C1Or1A-04: Northrop Grumman Next Generation MiniCooler Plus Performance

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Northrop Grumman Aerospace Systems (NGAS) has expanded its cryocooler product line with the introduction of the Mini Cooler Plus. The NGAS Mini Cooler Plus is a split cooler with a coaxial cold head connected through a transfer line to a vibrationally balanced back to back linear compressor. The mini compressor plus is designed for Space and non-Space applications. It is scaled from NGAS flight proven TRL9 family of compressors and contains non-wearing pistons suspended on flexure bearings. Designed for greater than 10 years of operation, the 2.6 Kg mini cooler plus can cool payloads at temperatures down to 45K while rejecting heat over a wide range of temperatures. This paper reports on the performance of NGAS mini cooler plus.

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