## **Cryocooler Drive Electronics, Paper No. 13.1**

## Specifying Cryocooler Electronics for Space Based Missions

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Specifying cryocooler electronics (CCE) for space based missions is often a perplexing exercise for system integrators. In this presentation, Iris Technology will explain the basic architecture of space based CCEs and how to decide which features are necessary to drive the selected cryocooler in the mission environment. The configuration of the CCE will be defined by the cryocooler, the spacecraft bus, and the flight environment. Primary considerations are the power bus interface, the data interface, the sensors being used, and the form of power required by the cryocooler. In addition to selecting the performance requirements of the CCE, specifying the class of parts acceptable for the mission may have a significant effect on the cost and delivery schedule for the CCE.