



Common Instrument Interface (CII) Level 1 Guidelines

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Design Goals



- The CII guidelines are provided to increase instrument compatibility with spacecraft so that the maximum number of Missions of Opportunity (MoO) can be realized
- The CII guidelines are designed to allow both the instrument and the spacecraft providers to work independently through the early phases of the applicable design processes
- Final implementation details will still require some resolution between the instrument and the spacecraft once paired in an MoO via the Spacecraft to Instrument ICDs



Level 1 Interface Guidelines



Requirement ID	Function	Guideline
LEVEL 1-1	Priority	The instrument should be classified as a secondary payload
LEVEL 1-2	Operational Lifetime	The instrument design operational lifetime should be ≤ 2 years (based upon a mission risk classification of Class C or D and NPR 8705.4)
LEVEL 1-3	Power	The orbital average power required by the instrument should be ≤ 200 Watts
LEVEL 1-4	Mass	The mass of the instrument should be ≤ 200 Kg
LEVEL 1-5	Data Rate	The instrument data rate should be ≤ 1.5 Mbps
LEVEL 1-6	Electrical Ground	The instrument should electrically ground to a single point on the spacecraft
LEVEL 1-7	Software Classification	The instrument software should be Class C
LEVEL 1-8	Thermal	the instrument should be thermally isolated from the spacecraft