

On the Mechanical Structure of the FIMS

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The FIMS consists of 2 spectrographs and the electronic system. The optical part and the electronic part are independently assembled in two different boxes. The electronic box contains a card cage, an LVPS box, an amplifier box, a delay line box and a STIM-IMON box and a contamination door. The optical box contains a grating assembly, a mirror assembly, baffles, a detector box, an HVPS, a contamination door, a vacuum room and a shutter module. The size of the FIMS box is 450x450x155 mm and the maximum allowed weight is 18.5kg. The primary material for the FIMS structure is Aluminum. The current state of the design for the electronic part is nearly finished. But there are many things to design for the optical part. We are just finished the schematic for the detector box including the MCP body and the mirror mounting system. And the test piece of the shutter module is under the work.