

FFM – Flip-Flop Mechanism

The FFM is a compact, light and precise mechanism. It is used to mechanically switch between primary and redundant laser sources. For this purpose it positions a prism into the light path or not.



The prism is moved by a stroke length of 11.4 mm. A binary latching paraffin actuator enables the two required stable positions, where no power is required at either end.

RUAG Space designed the FFM for use on Aladin for the ADM-Aeolus programme. ADM-Aeolus will be launched 2014 and its operational life is 3 years.

Performances

11.4 mm stroke length

Binary latching paraffin actuator

No shock, slow movement

Quasi-isostatic mounting

Adjustable mirror interfaces

Mass 0.64 kg

Power consumption 9.34 W for < 8 min

Actuations 500

Change time < 8 min

