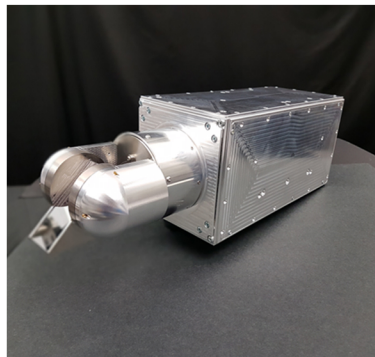


OPTICAL DATA LINK

The Hi-SIDE optical data link is a third-generation system developed within DLR's OSIRIS (Optical Space Infrared Downlink System) programme. OSIRIS aims to develop experimental free space optical (FSO) communication systems optimized for small satellites.

The Hi-SIDE optical terminal system supports data link rates of up to 8Gbps with optical downlink rates of 10Gbps. Furthermore, the system is compatible with the SpaceFibre Standard and is a reference design for the emerging O3K CCSDS Standard for optical downlinks.



TARGET AND SCALABILITY

DATA LINK DATA RATE:

8 Gbps



**DESIGN SCALABLE USING
DENSE WAVE DIVISION
MULTIPLEXING (DWDM)**

ACHIEVEMENTS



Support of SpaceFibre for integration in high speed intra spacecraft networks.



On-Board-Computer (OBC) for TM/TC and implementation of CCSDS Reference Design for Free Space Optical (FSO) Communications Systems.



A coarse-pointing assembly (CPA) for satellite-independent beam steering.



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