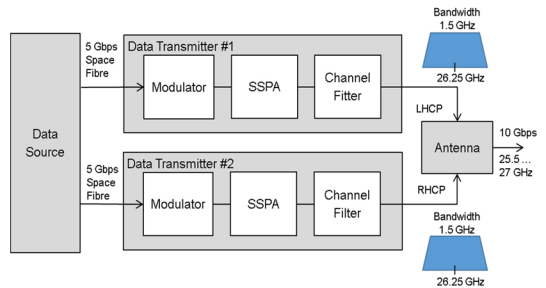


RF DATA LINK TRANSMITTER

The Hi-SIDE RF data link transmitter targets improvements in the symbol rate and modulation method used in previous RF data links to provide significantly higher data rates. The link uses dual polarization to give two channels with an overall data rate of 10 Gbps.

Each channel has a symbol rate of 1000 MBaud and up to 6 bits per symbol, giving a net data rate of around 5 Gbps. The high symbol rate allows the downlink to fully employ the available bandwidth assigned by the ITU for earth observation missions in the upper Ka-Band (25.5 – 27 GHz).



TARGET

DOWNLINK DATA RATE:
5 GBPS PER POLARIZATION,
10 GBPS WITH 2 POLARIZATIONS



USE CASES



- Data downlinks from LEO earth observation satellites.
- Data downlinks from GEO earth observation satellites.
- Data downlinks from near earth scientific satellites.
- Data relay applications (LEO-to-GEO-to-ground).



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