



LEO Ku-BAND COMMUNICATION PAYLOAD

#SatelliteandSpace



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LOCUS LEOKu is a Ku-Band Bendpipe (Transparent) payload developed for LEO Satellites. The payload bandwidth is 50MHz and can be changed upon request and can support multiple user terminals. It can support up to 4 user terminals simultaneously and a min. 3 Mbps data rate for each user terminal. Payload can be manufactured with requested frequencies by tuning operating frequency range within Ku-Band. Thanks to the Beacon feature in Ku-Band, terminals and gateway antennas can perform satellite tracking.

Technical Specifications

- Receive frequency range: 13.75 - 14.50 GHz
- Transmit & beacon frequency range: 10.95 - 12.75 GHz
- Circular polarization
- 110dB to 140dB adjustable gain (0.5 dB adjustment step)
- EIRP: 18 dBW (@ $\theta=55^\circ$)
- G/T: -20 dB/K (@ $\theta=55^\circ$)
- CAN communication interface
- Telemetry/telecommand (TM/TC) and power interface
- Automatic level control mode (ALC)
- Fixed gain mode (FGM)
- Operating temperature: -20°C - +50°C
- Storage temperature: -40°C - +85°C
- Transmitter/receiver unit dimensions: 30cm x 25cm x 8cm
- Transmitter/receiver unit mass: 3500g
- Payload total envelope dimensions: 80cm x 40cm x 23cm
- Payload total mass: 4800g

Specifications are subject to change without any notice. | All tolerances are within $\pm 10\%$.