



PLT

Main Features

- Two optical channels
- OOK and PPM16 modulation
- Compact & low mass design

Lusospace PLT (Pulsed Laser Transmitter) has two independent optical channels for LEO to ground free-space telecommunication (OOK, PPM16). This equipment offers 2x 1Gbit data rate (two independent channels operating at different wavelengths), a digital interface with telemetry for the status and control of the lasers.

This is a highly compact solution, with a small footprint and low mass.

Performance Specifications	
Optical Output Power	Up to 40 mW
Extinction Ratio_	
OOK	11 dB
PPM	20 dB
Startup time	Up to 40 s

Electrical Specifications	
Supply Voltage	+/- 12V and 5V
Power consumption	< 5.5 W
Modulation Freq. Range	From 100 KHz to 10 GHz
pi-Voltage	Up to 5.8V

Mechanical Specifications	
Mass	950 grams
Dimensions (LxWxH)	212 x 78 x 58 mm
Mounting I/F	6 x M5

Environmental Specifications	
Operating Temperature	0 to +30 deg
Non-operating Temperature	-30 to +50 deg
Radiation Hardness	22 Krad
EMC	CE (Conducted Emissions) RE (Radiated Emissions) RS (Radiated Susceptibility)

Qualification

Qualified for space applications according to ECSS (ESA) standards and MIL standards.

Heritage

Reference missions: OPTEL-μ