CubeLCT — LEO TO GROUND DATA TRANSMISSION WITH LOWEST SWAP

### Application
CubeSat LEO to ground laser communication solution based on TESAT’s longterm industrial experience and DLR Institute of Communications and Navigation’s research knowledge.

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<th>Data Relay Constellation Direct-to-Earth</th>
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### Range
LEO to ground

### Channel Data Rate
100 Mbps LEO to ground; 1 Mbps TC Channel ground to LEO

### Mass
360 gr

### Size
9 x 9.5 x 3.5 cm³ (~ 0.3 U)

### Power Consumption
8 W

### Field of Regard
S/C body pointing +/- 1° & integrated Fine Steering Mirror

### Lifetime
5 years in LEO orbit

### Data Interface
LVDS

### Available
1st Mission PIxL in 2019, FM available

### Roadmap
Expandable for Optical Intersatellite Links

### Transmit Power
100 mW

### Technical Features
Laser communication terminal for lowest size, weight and power consumption; optimized for 60 cm aperture optical ground station with uplink beacon; 1550 nm IM DD technology; 10 minutes communication time per ground station pass; CCSDS compatible.

*Typical values, depends on applications. Subject to change without notice.*