CubeCT - Small laser communication transmitter

Reference: TD-DE-1035

TECHNOLOGY DESCRIPTION

The technology consists of an ultra-light optical terminal that is currently the smallest device of its kind in the world.

The device allows for very fast data transmission (up to 100 megabits per second) from LEO (Low Earth Orbit) satellites to Earth.

The reduced mass of approximately 350 g and the small volume of approximately 0.3 U (9 x 9.5 x 3.5 cm^3), combined with a power consumption of 8 W, make it particularly suitable for small satellites.

INNOVATIVE ASPECTS

The size of the product is its main advantage: it represents the smallest Laser Communication Terminal (LCT) worldwide that is nonetheless very powerful in transmitting data.

This makes it extremely advantageous for applications where small size, reduced weight and low power consumption matter, e.g., cubesats and UAVs.

TECHNOLOGY READINESS (in space application)

TRL 9 (2024)

COUNTRY OF ORIGIN

Germany

LATEST UPDATE

06/2024

TAGS #laser #optical #transmitter #compact #small satellites #low power

APPLICATION AREAS

Aviation | Health | Electrical & Electronic Engineering | Data Processing, Software & AI | Maritime & Aquatic | Safety & Security | Space technologies

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