

TEGU IMAGER

The Tegu multispectral imaging payload offers

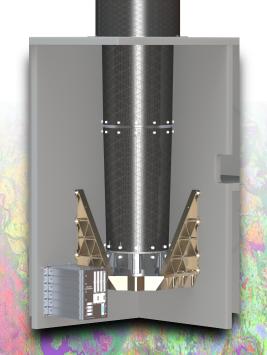
- Space-proven design and performance with operational heritage.
- Cutting edge high performace multispectral image plane.
- Visible to near-infrared coverage across
 8 customizable spectral channels.
- Large integrated high-speed data storage.

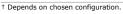
The Tegu imager is a lightweight multispectral imager. Its 200mm aperture space-proven optics are suitable to demanding microsatellite missions.

In-flight configurability allows for unparalleled mission-optimised data collection. Spectral bands will typically include Coastal, Blue, Green, Yellow, Red, Red Edge, NIR and PAN, and may be selected dynamically. Typical applications of these bands include environmental and vegetation monitoring, agricultural yield estimation, water resource management, disaster management, infrastructure monitoring and city planning.

Reliable operation is achieved by using proprietary hardware, spaceproven ruggedised hardware and ECSS-based systems engineering in an ESA-grade production facility using a full qualification lifecycle.

| TEGU IMAGER | |
|---|---|
| Spatial resolution @ 500km | 2.0 m GSD panchromatic 4.0 m GSD [†] multispectral |
| Swath @ 500km | 24 km |
| Spectral bands | 8 bands covering VIS-NIR (400 nm - 955 nm) |
| Signal to noise ratio | > 125 across all bands |
| Payload MTF | > 12.5 % at Nyquist (panchromatic) |
| Data format | 10-bit or 12-bit |
| Integrated data storage | 1 Terabyte non-volatile |
| Compression | RAW or J2K lossless or lossy |
| Data interfaces | LVDS, CAN |
| Physical dimensions | 782 mm x 280 mm x 280 mm |
| Mass (incl. control electronics) | < 24 kg |
| Power usage | < 35 W (imaging mode) < 20 W (configuration mode) 28 V supply (24V - 32V allowed) |
| Operating temperature | +10 °C to +30 °C |
| Survival temperature | - 10 °C to +60 °C |
| Qualification standards † Depends on chosen configuration. | Tested to 20 krad TID Designed to ECSS margins Full qualification lifecycle |







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