

**Electronics**, Optronics



# **HIGH-SPEED X-BAND TRANSMITTER**

X-band transmitter with variable output power for low-speed onboard/ground telemetry links

## Technological advantages

#### High-performance technology

Excellent radio performance levels at 8GHz thanks to innovative architecture Power levels can be adapted in flight to minimise energy consumption based on link budget Low consumption: < 45W for 10W in RF output In-orbit radiation tolerance: 10krad Heavy ion protection system

## A flexible system

Adjustable speeds up to 100Mbps Adjustable frequency plan between 8025 and 8450MHz at 400kHz increments Adaptable output power between 30 and 40dBm (10W) at 1dB increments Possible to set output power to 1W with extremely low consumption (<9W)

### Product is easy to integrate

Compatible with ECSS and CCSDS space recommendations Reduced dimensions: 160 x 115 x 46mm<sup>3</sup>

Low weight, in machined casing: 1kg

## Potential applications

- Orbital telemetry payloads
- Aerial drones
- Tactical data transmission

High-speed x-band transmitter



# **Commercial benefits**

#### A sound investment

Transmitter made almost exclusively of commercially-available components (off-the-shelf construction), meaning lower costs

Reuse of R&T technological modules developed by CNES

Can be manufactured in large-scale series by the manufacturer of the technology

Pre-industrialisation in progress

For further information

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Industrial applications and spin-offs of space technologies