SPACE DEVELOPMENT

# High-power space-link amplifier development

Development targets for next-generation spaceborne and terrestrial optical amplifiers.

Applications to discuss: Future satellite optical networks; High-power ground terminals.

**Development targets; not released specifications**

| Selection points |
| --- |
| 100 W spaceborne development target / 1000 W terrestrial development target / No released acceptance limits |

## Configuration options

| Development direction | Target optical power | Status |
| --- | --- | --- |
| Spaceborne amplifier | 100 W | Development target |
| Terrestrial amplifier | 1000 W | Development target |

Each row is a separate configuration. Limits from different rows must not be combined.

## Technical details

| Parameter | Specification or condition |
| --- | --- |
| Optical band, noise and gain | Not specified for these targets |
| Link capacity | System-level terabit communication objective; no guaranteed throughput assigned |
| Mission qualification | Development and qualification evidence required |

## Integration and delivery

| Item | Configuration detail |
| --- | --- |
| Integration | Optical, electrical, mechanical and thermal interfaces under development |

## Conditions and configuration notes

- Do not interpret development targets as available output-power specifications.
- No delivered size, mass, electrical power, passband, reliability or radiation rating is assigned to these targets.