TEST INSTRUMENTS

O-band bismuth-doped fibre amplifiers

O-band optical gain for laboratory and production measurements around 1300 nm.

Applications to discuss: O-band component testing; Optical research.

Selection points
1270-1340 nm amplification range / 25 dB nominal gain at -20 dBm input / 16 dBm nominal output at 0 dBm input

Configuration options

Operating point	Input signal power	Nominal result
Gain measurement	-20 dBm	25 dB gain
Output-power measurement	0 dBm	16 dBm output

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

Technical details

Parameter	Specification or condition
Amplification bandwidth	1270-1340 nm
Noise figure	5 dB maximum at -20 dBm input
Polarization response	Polarization-insensitive gain; numerical dependence to confirm

Integration and delivery

Item	Configuration detail
Format	Compact laboratory package with touchscreen
Monitoring	Input and output optical-power monitoring

Conditions and configuration notes

- The gain and output-power entries are nominal results, not simultaneous guaranteed limits at one input condition.
- Confirm saturation behaviour, gain ripple, connector type and control interfaces for the selected band.