NETWORK AMPLIFICATION

Compact network erbium optical amplifiers

Network-ready booster and preamplifier configurations in a compact rack format.

Applications to discuss: Optical network integration; Fibre-link engineering.

Selection points
Seven amplifier configurations / 10-21 dBm listed output limits / 1U network format

Configuration options

Configuration	Maximum output power	Input Power Range	Maximum noise figure
15 dBm booster	15 dBm	-5 to +10 dBm	5 dB
17 dBm booster	17 dBm	-5 to +10 dBm	5 dB
19 dBm booster	19 dBm	-5 to +10 dBm	5 dB
21 dBm booster	21 dBm	-5 to +10 dBm	5 dB
Single-channel preamplifier	10 dBm	-50 to -20 dBm	3.7 dB
Gain-flat booster	21 dBm	-8 to +7 dBm	6 dB
Gain-flat preamplifier	15 dBm	-50 to -15 dBm	4.3 dB

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

Technical details

Parameter	Specification or condition
Optical wavelength range	15 dBm booster, 17 dBm booster, 19 dBm booster, 21 dBm booster: 1529 to 1563 nm; Single-channel preamplifier, Gain-flat booster, Gain-flat preamplifier: 1530-1565 nm
Optical connectors	LC/PC
Maximum gain flatness	Gain-flat booster, Gain-flat preamplifier: 1.5 dB

Integration and delivery

Item	Configuration detail
Format	1U single or combined-function enclosure
Management	Web interface, command interface and SNMP; exact management interfaces to confirm

Conditions and configuration notes

• A value in dBm describes optical power; a value in dB describes gain, loss or an optical budget. A link budget is not a distance in kilometres.

• Performance depends on channel loading, fibre losses and the selected operating point; family limits do not automatically apply together.