NETWORK AMPLIFICATION

Passive remotely pumped optical gain elements

In-span optical gain assemblies energized from terminal pump sources.

Applications to discuss: Long-span terrestrial links; Submarine optical links.

Selection points
No active electronics at the remote element / Transmit and receive configurations / Numerical gain specification to confirm

Configuration options

Configuration	Function	Numeric gain or noise limit
Transmit-side element	Remote optical gain	Not specified
Receive-side element	Remote optical gain	Not specified

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

Technical details

Parameter	Specification or condition
Electrical power at remote element	No local active electronics; energy is delivered optically
Gain and noise figure	Configuration-specific; no numerical values provided
Pump requirement	Terminal pump matched to the element and span

Integration and delivery

Item	Configuration detail
Installation	In-line fibre splice; splice-box integration depends on the selected assembly

Conditions and configuration notes

- Passive describes the absence of local electronics; this is still an optically pumped gain medium.
- No numerical gain, noise figure, environmental rating or fixed placement distance is inferred.