NETWORK AMPLIFICATION

S-, C- and L-band Raman counter-pump modules

Multi-wavelength Raman pumping for gain and power-tilt control across extended signal bands.

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

Selection points
1390, 1405 and 1430 nm pump lines / 1460-1610 nm signal passband / Power limits apply per wavelength

Configuration options

Configuration	Pump wavelength	Maximum pump power per wavelength
1390 nm pump	1390 nm	500 mW
1405 nm pump	1405 nm	550 mW
1430 nm pump	1430 nm	300 mW

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

Technical details

Parameter	Specification or condition
Signal passband	1460 nm to 1610 nm
Signal-passband insertion loss	1.6 dB
Degree of polarization	4%
Supervisory-channel wavelength	1624.01 nm
Supervisory-channel optical budget at 1624 nm, pump off	40 dB
Inter-unit pump connection	via front panel E-2000 PS High Power Connectors
Pump-to-line interface	via front panel E-2000 PS High Power Connectors
Other optical connectors	LC/PC

Integration and delivery

Item	Configuration detail
Control	Web interface and SNMP; automatic fibre-integrity shutdown/restart
Connection	Front-panel high-power optical pump connections; other connectors as specified

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.

• The 40 dB supervisory-channel budget is stated with the Raman pumps off and span loss evaluated at 1624 nm.