



# AGILITY | INNOVATION | PERFORMANCE

## XTERA R2.0 REPEATER

Xtera's innovative SDM repeater uses a titanium housing to contain a number of hybrid Raman-EDFA amplifiers. Pumps within the repeater are used to create a conventional Erbium Doped Fibre Amplifier (EDFA) inside the housing and a Raman amplifier in the cable leading up to the repeater.

The main features of the Xtera repeater are:

- ✓ High reliability using specially selected components and both pump & controller duplication.
- ✓ SDM design allowing for 1-16 pairs.
- ✓ Active command-response supervisory, allowing rapid access to repeater data such as power levels, pump currents, temperature and more.
- ✓ Marine grade titanium ensures extremely high resistance to corrosion.
- ✓ Ultra compact and light, easily handled on a ship and can pass through a plough without lifting the depressor arm.
- ✓ Specialised circuitry to minimise the power needed for the Raman pumps.

## KEY PARAMETERS

|                  |                      |
|------------------|----------------------|
| Design Life      | 25 years             |
| Bandwidth        | Up to 70 nm          |
| Reliability      | <10 FIT per amp pair |
| Number of FP     | 1 – 16               |
| Maximum Pout     | +18.5dBm             |
| Effective NF     | ≤3dB                 |
| Max voltage      | 10kV                 |
| Tensile Strength | 600kN                |
| Supervisory      | Command Response     |
| Max water depth  | 8,000 metres         |

