Main Characteristics

- Small diameter skin (41 mm), small bending radius, < 40 cm
- Very rugged harness made of Delrin spacers plus two 5 mm Kevlar ropes with > 3000 kg breaking strength
- Compact, stainless steel cable reel for easy and safe deployment
- Multi-Trace 24 A-D module integrated in cable reel, minimizing E-noise
- No connectors, all in one section
- Specially designed to capture the HF spectrum from the Geo-Source Sparkers
- Short 3-element active section of 50 cm minimizes spacial filtering
- Small group interval of 3,125 m allows detailed velocity analysis
- Classic analogue design, repairable in any cable shop

Streamer Outrigger

Too many times streamer performance is compromised by a bad towing configuration. The use of a 6-8 m outrigger is imperative to keep the streamer out of the prop wash.

24 channel data shot with 1 kJ Geo-Spark plus 200 tip Geo-Source Sparker in 15 m water depth. Multiple effectively removed by processing.
### Streamer Geometry (standard for 24 channels)

- **Group Length**: 50 cm
- **Group Spacing**: 3.125 m spacing between the groups  
  *Note: customized spacing available upon request*
- **Deck Lead**: 25 m armoured LAN
- **Tow Lead**: 75.0 m
- **Front-Stretch**: 12.5 m
- **Total Active Length**: 75 m
- **Tail-Stretch**: 12.5 m
- **Total Length streamer c/w tow lead**: 75 tow lead + 12.5 + 75 + 12.5 = 175 m

### Streamer Structure

- **Jacket size ID & OD**: 35 mm & 41.3 mm
- **Jacket material**: Unreinforced polyurethane, wall thickness 3.14 mm
- **Connectors**: none, all in one length
- **Spacing of spacers**: 24 cm
- **Stress members**: 2 x 5 mm Kevlar rope, breaking strength >3000 kg
- **Ballast fluid**: Shell Sol T (standard)
- **Buoyancy**: Slightly positive, must be zero balanced using lead
- **Wiring**: 32 twisted pair, super flexible, conductor diam 0.38 mm
- **Shielding**: 100% ground shielding all along

### Hydrophone

- **Type**: AQ 2000 or Sensor
- **No of hydrophones per group**: 3 (three)
- **Frequency response**: 1 Hz to 10,000 Hz ± 3.0 dB
- **Sensitivity**: 201 dBV re 1 uPa @ 20°C
- **Sensitivity Change vs. Frequency**: ±0.25 dB from 1 Hz to 1 kHz, ±2.00 dB 1 kHz to 10 kHz
- **Sensitivity Change vs. Temperature**: < 0.03 dB per 1°C change
- **Capacitance hydrophone**: 4.5 nF @ 20°C

### Pre-Amp

- **Type**: GEO, High imp, low noise, differential pre-amplifier
- **Gain**: 26 dB
- **Size**: 60 x 16 mm
- **Gain**: 26 dB
- **Ground reference**: Single-ended
- **High-pass**: -3 dB : 3 Hz
- **Low-pass**: -3 dB : 13 kHz
- **ESD handling**: conform IEC 61000-4 norm

### Tow-Cable

- **Length**: Standard 75 m
- **Diameter**: 18 mm
- **Type**: 31 or 62 screened twisted pair extra flex 26 AWG
- **Insulation**: Polyurethane
- **Strain member**: Double reverse spiral Kevlar, 25 kg breaking strength
- **Termination**: 62 pin ITT D connector compatible with Multi-Trace 24

### Manual Cable Reel for 24 Channel

- **Manual SS Cable reel with integrated Multi-Trace footprint 120 x 70 cm, height 120 cm, weight 280 kg LAN deck lead to acquisition PC**

### Electric Winch for 48 Channel

- **Footprint 160 x 170 cm, height 180 cm, weight 480 kg LAN deck lead to acquisition PC**

### Depth Control

- **Lead-in depth controller, AIS-GPS option**