subsea umbilical, ROV tether & oceanographic tow cable

M508 64-Ch Array

M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Digital Tow

M508 64-Ch Towed Array · 48 V DC · Subsea umbilical, rov tether & oceanographic tow cable



M508 64-Ch Towed Array | **48 V DC (-30 to +75 °C)** | **Ø 45 mm Neutrally Buoyant PUR Array**

Application

M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Digital Towed Array Cable (Ø 45 mm) (M508 64-Ch Towed Array) engineered for 48 V DC service across -30 to +75 °C (min. bend radius 10 × OD).

Typical uses: Oceanographic CTD, ADCP & Deep-Tow Surveys, Work-Class & Observation ROV / AUV Systems, Side-Scan Sonar, SAS & Towed Hydrophone Arrays, Marine 2D/3D/UHR Seismic Streamers & OBC

Construction





Cross-section, not to scale

1. 64-Channel Acoustic & Gigabit Ethernet B
2. 48V DC Array Power Conductors
3. Internal Aramid Tensile Strength Core
4. Ø 45 mm Neutrally Buoyant PUR Array Hose

Technical data

Typical values

Rated voltage / transmission duty	48 V DC (M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Towed Array Specification)	**Core / conductor construction**	64-Channel Acoustic & Gigabit Ethernet Bus — Polyolefin-insulated screened pairs for real-time digital sonar data
Primary dielectric / buffering	48V DC Array Power Conductors — Stranded tinned copper power cores feeding array hydrophone preamps	**Continuous operating temperature**	−30…+75 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Towed Array Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Ø 45 mm Neutrally Buoyant PUR Array Hose — Acoustically impedance-matched yellow polyurethane array tube	**Minimum bending radius**	10 × OD
Armour, strength member & mechanical duty	Internal Aramid Tensile Strength Core — High-modulus aramid core integrated with 50 m neutrally buoyant tow cable	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Towed Array Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Towed Array Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Towed Array Specification		

Sizes

3 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Net weight ≈ kg/km	Breaking / tensile kN ≈	Min. bend R mm
M508 64-Ch Array Construction Schedule (−30…+75 °C) 3 sizes						
☐ **M508 64-Ch Array Coax / Cat5e**	Coax (39/40/50/75 Ω) or 4Pr Cat5e + Power	Stranded SnCu + Foam PE/FEP + Armour/Aramid	8.2	245	42.7	120
☐ **M508 64-Ch Array Composite B**	Heavy Coax / 64-Ch Digital Bus + Power	Stranded SnCu + Low-Loss Dielectric + Strength	11.5	485	71.2	170
☐ **M508 64-Ch Array Array / Trunk C**	Multi-Ch Digital Streamer / 255-Ch Bus	Redundant Telemetry + Aramid + PUR Jacket	44.5	1,620	95.0	445

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Towed Array Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
Coax (39/40/50/75 Ω) or 4Pr Cat5e + Power	18.50	48 V DC (High-Speed)	−30…+75 °C
Heavy Coax / 64-Ch Digital Bus + Power	11.20	48 V DC (Deep-Tow/Array)	−30…+75 °C
Multi-Ch Digital Streamer / 255-Ch Bus	6.80	48 V DC (Full Array)	−30…+75 °C

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- M508 64-Ch Towed Array Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/m508-64-ch-digital-towed-array-48vdc

Typical values for this cable type, based on M508 48 V DC 64-Channel Gigabit Ethernet Neutrally Buoyant Towed Array Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.