

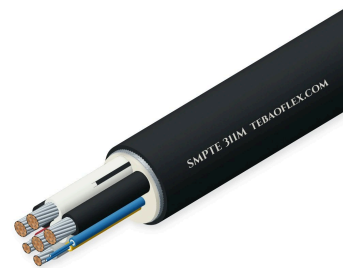


fiber optic cable series

SMPTE 311M

Hybrid Fibre-Optic and Power HD Broadcast Camera Cable

Hybrid 2-SM-fibre + 4-power + 2-control HD/4K/8K broadcast studio & OB camera cable



SMPTE ST 311M

2 SM + 4 Power + 2 Signal

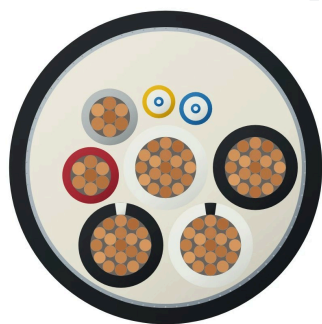
LEMO 3K.93C Compatible

Application

SMPTE 311M Hybrid Fibre-Optic and Power HD Broadcast Camera Cable combining 2 ITU-T G.657.A2 single-mode optical fibres, 4 × 20 AWG auxiliary camera power conductors, 2 × 24 AWG control/intercom wires, central steel strength member.

Typical uses: 4K / 8K UHD Broadcast Studios, Outside Broadcast (OB) Trucks & Sports, Stadium, Arena & Concert Hall Pre-Rig, Robotic PTZ & Rail Camera Systems, Remote Surgical & Defense Video Links

Construction



Cross-section, not to scale

1 2 × SM optical fibres + 6 copper conductors

2 Central steel wire strength member

3 High-dielectric PE / TPE core insulation

4 Overall tinned copper braid shield

5 Non-reflective matte broadcast jacket

Exact SMPTE ST 311M /
ARIB B29 hybrid geometry

1,750 V rms dielectric test
between power cores

Technical data

Typical values

Auxiliary power cores	4 × 20 AWG (19/0.18 mm tinned Cu, ≤ 35.8 Ω/km @ 20 °C)	Signal / control cores	2 × 24 AWG (7/0.20 mm tinned Cu, ≤ 91.0 Ω/km @ 20 °C)
Rated voltage & test	600 V AC rms (power) · 1,750 V rms 1 min test	Braid shield resistance	≤ 10 Ω/km (≥ 95 % tinned copper coverage)
Operating temperature	-40 °C to +75 °C (-50 °C on PUR OB variant)	Installation / reeling temp.	-25 °C to +60 °C
Storage temperature	-40 °C to +80 °C	Nominal outer diameter	9.2 mm ± 0.3 mm (lightweight 6.8 mm & 7.8 mm opt)
Max. tensile load	≥ 700 N on central steel strength member	Min. bend radius	6 × OD (55 mm static) · 10 × OD (92 mm reeling)
Crush resistance	1,500 N / 100 mm	Optical fibre type	2 × 9/125 µm ITU-T G.657.A2 bend-insensitive SM
Attenuation @ 1310 / 1550 nm	≤ 0.40 dB/km @ 1310 nm · ≤ 0.25 dB/km @ 1550 nm	Macro-bend loss	≤ 0.1 dB (10 turns @ R = 15 mm, 1550 nm)
Flame retardancy	UL 1666 Riser / IEC 60332-1-2 / IEC 60332-3-24 (LSZH)	Abrasion & oil (PUR)	EN 60811-404 oil & OB truck wheel-over resistant
Studio floor handling	Low-friction, non-glare matte finish resists kinking	Standards	SMPTE ST 311 & ARIB STD-B29

Sizes

4 standard constructions

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

Order designation	Jacket type & application	Outer Ø mm	Weight ≈ kg/km	Max. pull N	20 AWG R Ω/km
SMPTE ST 311M Hybrid Fibre + Copper Camera Cables 4 sizes					
☐ SMPTE 311M-STD-92	Matte Flexible TPE-PVC · Studio & OB	9.2	132	700	35.8
☐ SMPTE 311M-PUR-92	Matte Polyether PUR · Heavy Mobile Reel	9.2	126	850	35.8
☐ SMPTE 311M-LSZH-92	Halogen-Free LSZH · Stadium Fixed Conduit	9.2	138	700	35.8
☐ SMPTE 311M-LW-78	Lightweight TPE-PUR · Steadicam & jib	7.8	92	500	58.0

– All 9.2 mm variants fit standard LEMO FMW/FXW.3K.93C and Neutrik opticalCON DUO/MTP termination kits.

Standards and approvals

- ✓ SMPTE ST 311M & ARIB STD-B29
- ✓ ITU-T G.657.A2 & IEC 60332-3
- ✓ RoHS 2 & REACH Compliant

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/smp-te-311m-hybrid-fibre-optic-and-power-hd-broadcast-camera-cable



Typical values for this cable type, based on SMPTE ST 311 / ARIB STD-B29 / IEC 60794-2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.