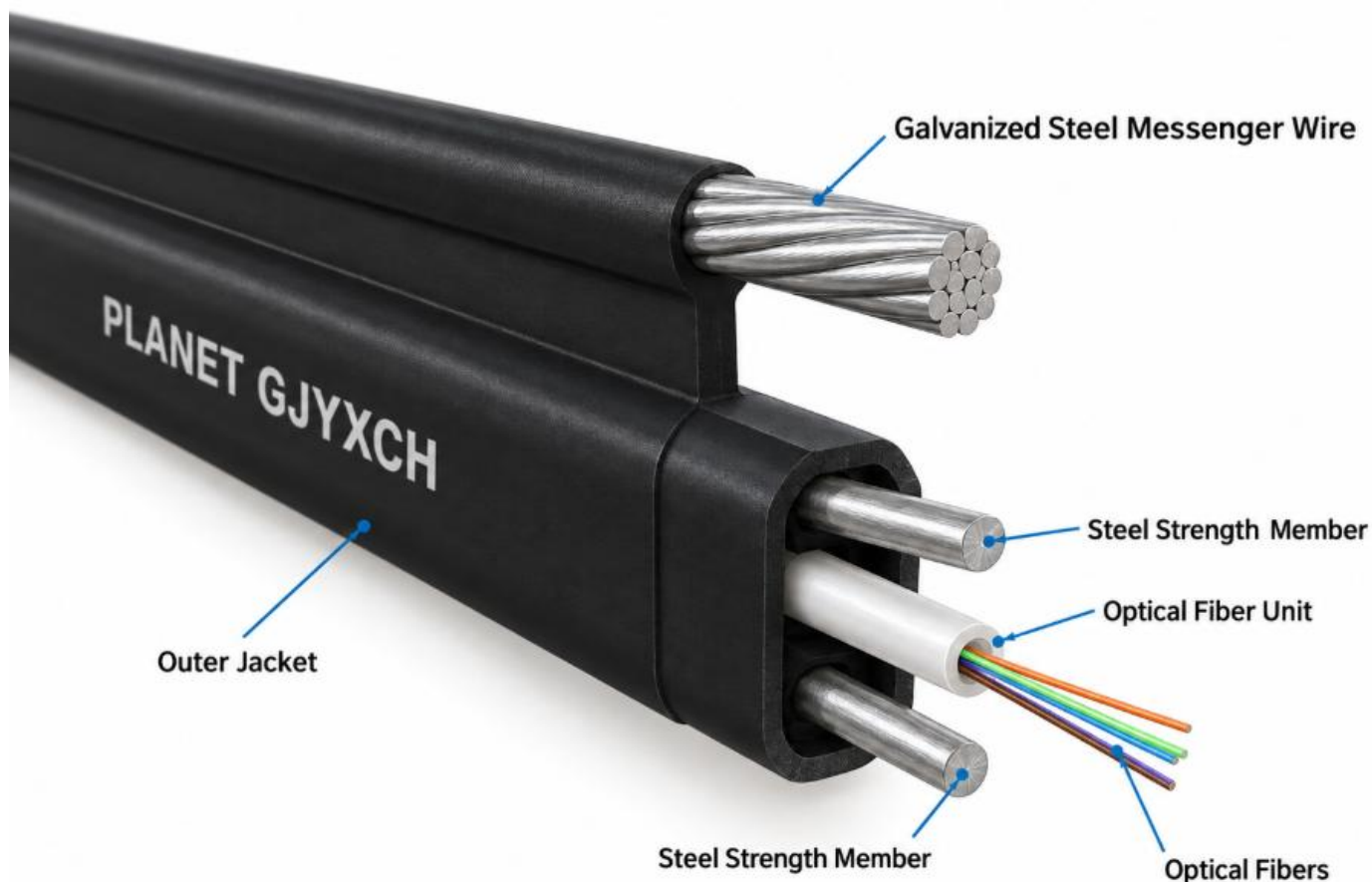


1. General Description

PLANET GJYXCH is a self-supporting indoor / outdoor FTTH drop cable for aerial last-mile links and controlled building-entry / protected indoor routes. The standard design uses OS2 G.657.A2 fiber in a flat bow-type body, two parallel steel strength members, an integrated galvanized steel messenger and a black UV-resistant LSZH jacket.

The approved dual-environment version combines outdoor UV / weather resistance with indoor flame, smoke and halogen performance. At building entry, the messenger shall be managed according to the installation design and local code. G.657.A1 and OM3 / OM4 / OM5 are project options; OS2 G.657.A2 remains the recommended FTTH configuration.

OS2 / OM3 / OM4 / OM5 G.657.A2 Standard	INDOOR / OUTDOOR FTTH Drop	SELF-SUPPORTING Steel Messenger	LSZH + UV Flame Retardant
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2. Construction

Parameter	Specification
Fiber Type	OS2 G.657.A2 bend-insensitive fiber standard / recommended. G.657.A1 optional. OM3 / OM4 / OM5 50/125 µm available only upon approved project request.
Fiber Count	1F, 2F or 4F standard family configurations.
Cable Profile	Flat bow-type FTTH drop body with integrated galvanized stranded steel messenger connected by a separable web; self-supporting aerial construction.
Strength Members	Two parallel phosphated or galvanized steel wires embedded symmetrically in the drop-cable body; metallic reinforcement.
Outer Jacket	Virgin black UV-resistant LSZH outdoor-grade jacket. The exact supplied construction shall have both outdoor UV/weather evidence and indoor LSZH / flame-test evidence.
Cable Marking	Sequential length marking and PLANET GJYXCH / fiber count / fiber type / production information according to approved artwork.

3. Mechanical & Environmental Characteristics

Parameter	Minimum Requirement
Operating / Storage Temperature	-40°C to +70°C
Installation Temperature	-20°C to +60°C
Minimum Bend Radius - Installation	20 × cable O.D. / approved flat-cable equivalent
Minimum Bend Radius - Static	10 × cable O.D. / approved flat-cable equivalent
Tensile Strength	≥ 1200 N short term / ≥ 600 N long term for approved self-supporting construction
Crush Resistance	≥ 1000 N/100 mm short term / ≥ 300 N/100 mm long term
Outdoor Protection	UV-resistant sheath for continuous outdoor exposure; no longitudinal leakage under applicable water-penetration test conditions
Installation Environment	Outdoor aerial / façade drop and protected indoor building-entry transition. Not for direct burial. Metallic elements are subject to local bonding, grounding and fire-route rules.

4. Optical Characteristics

Parameter	OS2 / G.657.A2	OM3 / 50/125	OM4 / 50/125	OM5 / 50/125
Attenuation @ 850 nm	—	≤ 3.0 dB/km	≤ 3.0 dB/km	≤ 3.0 dB/km
Attenuation @ 1300 / 1310 nm	≤ 0.35 dB/km @1310	≤ 1.0 dB/km @1300	≤ 1.0 dB/km @1300	≤ 1.0 dB/km @1300
Attenuation @ 1550 nm	≤ 0.21 dB/km	—	—	—
Effective Modal Bandwidth @ 850 nm	—	≥ 2000 MHz·km	≥ 4700 MHz·km	≥ 4700 MHz·km
Effective Modal Bandwidth @ 953 nm	—	—	—	≥ 2470 MHz·km
Fiber Standard	ITU-T G.657.A2 / IEC 60793-2-50	IEC 60793-2-10 A1a.2	IEC 60793-2-10 A1a.3	IEC 60793-2-10 A1a.4

5. Recommended Applications

- Pole-to-home / pole-to-building FTTH aerial drop installation
- FAT / FDB to subscriber-premises last-mile connection
- Residential, villa, MDU and commercial building access networks
- Outdoor façade / aerial routes and controlled indoor building-entry transition
- Protected indoor continuation where metallic elements and the specified LSZH construction are permitted

6. Typical Fiber Count and Dimensional Guide

The following values are design references for the indoor / outdoor GJYXCH family. Final drop-body dimensions, messenger diameter, cable weight, tensile rating and installation hardware shall be confirmed on the approved factory drawing before mass production.

Fiber Count	Drop Body	Messenger	Typical Weight	Typical Use
1F	2.0 × 5.0 ± 0.2 mm	Galvanized steel wire, Ø1.0–1.2 mm	20 ± 10% kg/km	Single-subscriber indoor / outdoor FTTH drop
2F	2.0 × 5.2 ± 0.2 mm	Galvanized steel wire, Ø1.0–1.2 mm	22 ± 10% kg/km	Standard FTTH service drop / building entry
4F	2.0 × 5.5 ± 0.2 mm	Galvanized steel wire, Ø1.2 mm typical	25 ± 10% kg/km	Spare-fiber / small access drop

7. Standards Compliance

- IEC 60794 series - optical fibre cables and applicable mechanical / environmental test methods
- ITU-T G.657.A2 standard / G.657.A1 optional for bend-insensitive OS2 single-mode fiber
- IEC 60793-2-10 for OM3 / OM4 / OM5 multimode fiber when supplied as a project-specific option
- IEC 60332-1-2 flame propagation; IEC 60754-1/2 and IEC 61034-2 for the approved LSZH indoor / outdoor construction
- RoHS / REACH according to approved production declaration; CPR / EN 50575 and additional UV / weather classifications only when separately tested and documented

8. Ordering Information

Typical ordering description: PLANET GJYXCH - 2F - OS2 G.657.A2 - Indoor/Outdoor Self-Supporting FTTH Drop Cable - Two Parallel Steel Strength Members - Galvanized Steel Messenger - Black UV-Resistant LSZH Jacket

Fiber type options: OS2 G.657.A2 standard; G.657.A1, OM3, OM4 and OM5 available upon approved project request. Fiber count, steel strength-member specification, messenger construction, LSZH / UV performance, jacket marking, reel length and approved installation scope shall be identified in the quotation and final production release.

9. Enhanced Factory Requirements (Binding to Manufacturer)

Control Item	Binding Requirement
Raw Materials	Use only approved optical fiber, qualified steel strength members, qualified galvanized stranded steel messenger and virgin UV-resistant LSZH jacket compound. Recycled or reprocessed jacket material is not allowed.
Indoor / Outdoor Sheath Evidence	The exact supplied construction shall have documented UV / weather suitability for outdoor exposure and valid IEC 60332-1-2, IEC 60754-1/2 and IEC 61034-2 evidence when LSZH / flame / smoke claims are made for indoor routing.
Optical Testing	100% fiber continuity and attenuation verification before shipment; OTDR traces shall be available upon request for production lots.
Dimensional Control	Fiber position, steel-wire symmetry, messenger diameter / lay, web geometry, drop-body dimensions and jacket thickness / concentricity shall be controlled within the approved production drawing.
Traceability	Each production lot / reel shall be traceable by production date, lot number, fiber batch, steel / messenger batch and final inspection record for minimum 15 years.
Quality Assurance	Factory shall maintain in-process and final inspection. PLANET reserves the right to audit production records and verify the approved indoor / outdoor construction.
Change Control	No change in fiber brand/type, steel-wire material, messenger construction, LSZH compound, UV performance, dimensions, mechanical rating or labeling is permitted without prior written approval from PLANET.
Messenger & Steel Control	The approved GJYXCH design shall use two parallel metallic steel strength members plus an integrated galvanized steel messenger for self-supporting aerial service. Non-self-supporting or FRP-only constructions shall not be supplied as GJYXCH.

25-Year System Warranty

Subject to proper installation and certified components usage.

Part Number	Description
PL- GJYXCH-xxS2	FTTH Drop Fiber Optic Cable Single Mode OS2
PL- GJYXCH-xxM3	FTTH Drop Fiber Optic Cable Multi Mode OM3
PL- GJYXCH-xxM4	FTTH Drop Fiber Optic Cable Multi Mode OM4
PL- GJYXCH-xxM5	FTTH Drop Fiber Optic Cable Multi Mode OM5

XX: Number of Core