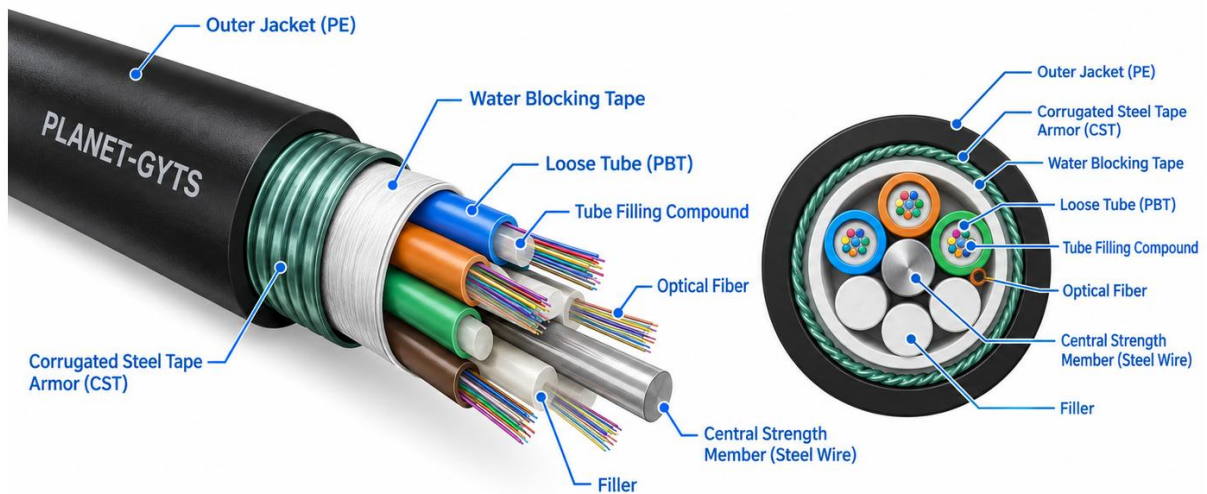


1. General Description

PLANET GYTS is a metallic armored outdoor fiber optic cable family based on stranded loose tube construction. The GYTS code is used as a family reference; project approval shall be based on the actual cable structure, fiber type, armor, sheath and mechanical values stated in the approved product specification. Standard fiber selection is OS2 single-mode, while OM3, OM4 and OM5 multimode versions can be supplied upon project request.

Typical construction: color-coded optical fibers inside PBT loose tubes stranded around a central steel strength member, with longitudinal water blocking, corrugated steel tape mechanical protection and a black outdoor-grade PE outer sheath. Fiber type may be OS2 G.652.D as standard or OM3 / OM4 / OM5 depending on the approved project requirement.

OS2 / OM3 OM4 / OM5	STRANDED Loose Tube	ARMORED Metallic	OUTDOOR PE Jacket
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2. Construction

Parameter	Specification
Fiber Type	OS2 Single Mode 9/125 μm (ITU-T G.652.D standard; G.657.A1 / G.657.A2 optional) or Multimode 50/125 μm (OM3 / OM4 / OM5 upon project request).
Fiber Count	Typical range 2F to 144F. Common backbone counts: 12F, 24F, 48F, 72F, 96F and 144F.
Loose Tube	Color-coded PBT loose tubes containing optical fibers; gel-filled or dry water-blocking design according to order.
Stranding	Loose tubes and fillers stranded around the central strength member.
Central Strength Member	Steel wire / phosphated steel wire, sized according to cable design.
Fillers	PP or equivalent fillers used as required to maintain cable geometry and roundness.
Water Blocking	Water-blocking tape / yarn and filling compound according to final construction.
Armor	Corrugated steel tape (CST) mechanical armor.
Outer Jacket	Black polyethylene (PE), outdoor grade, UV and weather resistant.
Cable Identification	Sequential length marking and PLANET / cable-type printing according to approved production artwork.
Cable Classification	Armored Metallic Not dielectric
Armor Type	Corrugated Steel Tape (CST) metallic armor.

3. Mechanical & Environmental Characteristics

Parameter	Typical / Reference Value
Operating Temperature	-40°C to +70°C
Storage Temperature	-40°C to +70°C
Installation Temperature	-20°C to +60°C
Minimum Bend Radius - Static	$\geq 10 \times$ cable outside diameter
Minimum Bend Radius - Installation	$\geq 20 \times$ cable outside diameter
Tensile Load - Reference	1000 N long term / 3000 N short term*
Crush Resistance - Reference	1000 N/100 mm long term / 3000 N/100 mm short term*
Water Penetration	Designed for longitudinal water blocking; test evidence available upon project request.

4. Optical Characteristics - OS2 / OM3 / OM4 / OM5

Parameter	Specification
Attenuation @ 1310 nm	≤ 0.36 dB/km
Attenuation @ 1550 nm	≤ 0.22 dB/km
Mode Field Diameter @ 1310 nm	9.2 ± 0.4 μm
Cladding Diameter	125.0 ± 0.7 μm
Cladding Non-Circularity	≤ 1.0%
Coating Diameter	245 ± 10 μm
Cable Cut-off Wavelength	≤ 1260 nm
Fiber Standard	ITU-T G.652.D / IEC 60793-2-50 Type B1.3
Multimode Core / Cladding Diameter	50 / 125 μm (OM3 / OM4 / OM5)
OM3 Fiber Standard	IEC 60793-2-10 Type A1a.2 / TIA-492AAAC
OM3 Attenuation @ 850 / 1300 nm	≤ 3.0 / 1.0 dB/km
OM3 Minimum Effective Modal Bandwidth @ 850 nm	≥ 2000 MHz·km
OM4 Fiber Standard	IEC 60793-2-10 Type A1a.3 / TIA-492AAAD
OM4 Attenuation @ 850 / 1300 nm	≤ 3.0 / 1.0 dB/km
OM4 Minimum Effective Modal Bandwidth @ 850 nm	≥ 4700 MHz·km
OM5 Fiber Standard	IEC 60793-2-10 Type A1a.4 / TIA-492AAAE
OM5 Attenuation @ 850 / 953 / 1300 nm	≤ 3.0 / 1.0 / 1.0 dB/km
OM5 Minimum Effective Modal Bandwidth @ 850 / 953 nm	≥ 4700 / 2470 MHz·km

TYPICAL CONFIGURATION GUIDE			GYTS OS2 / OM3 / OM4 / OM5 OUTDOOR
Fiber Count	Tube Structure	Typical O.D. (mm)	Typical Application
12F	Stranded loose tube	Approx. 8.5 - 10.0	Outdoor distribution / duct
24F	Stranded loose tube	Approx. 9.0 - 11.0	Campus / access backbone
48F	Stranded loose tube	Approx. 10.5 - 12.0	Backbone / distribution
72F	Stranded loose tube	Approx. 11.5 - 13.5	Telecom backbone
96F	Stranded loose tube	Approx. 12.5 - 15.0	High-count backbone
144F	Stranded loose tube	Approx. 14.5 - 17.0	High-density backbone

5. Applications

- Outdoor duct networks
- Telecom access and backbone networks
- Campus and inter-building backbone
- Industrial and infrastructure projects
- Protected outdoor tray / tunnel routes
- Projects requiring metallic armored outdoor fiber cable in OS2 or multimode OM3 / OM4 / OM5 versions

6. Standards & Compliance

Standard / Requirement	Status / Reference
IEC 60794 Series	Reference standard for optical fiber cable construction and testing
ITU-T G.652.D	Standard single-mode OS2 fiber
IEC 60793-2-50	Optical fiber product specification reference
RoHS	Compliant upon applicable production declaration
CE Marking	Subject to applicable EU conformity documentation
CPR / EN 50575	Optional; project-specific classification and declaration required
Flame Performance	Optional construction / rating only when specifically ordered and supported by test evidence
IEC 60793-2-10 / TIA-492	Reference multimode optical fibers OM3 / OM4 / OM5

QUALITY, OPTIONS & ORDERING

PLANET GYTS | PL-GYTS

7. Quality & Verification

Manufactured under controlled production conditions. Final cable diameter, weight, tube allocation and mechanical values shall be stated in the approved production datasheet for the selected fiber count. Routine and type-test documentation can be submitted upon consultant / project request when available.

8. Available Project Options

- Fiber options: OS2 G.652.D standard; G.657.A1 / G.657.A2, OM3, OM4 or OM5 upon project request
- Dry-core / dry water-blocking construction
- Custom fiber count and loose-tube allocation
- Custom jacket printing and sequential meter marking
- Project-specific PE jacket thickness / cable diameter
- CPR / flame-rated versions subject to certified configuration

9. Product Identification Principle

Do not identify the cable only by the Chinese family code. The approved description should always state the actual construction: fiber type + fiber count + tube structure + central strength member + water blocking + armor type + outer jacket + intended installation method.

10. Warranty

25-Year System Warranty

Subject to proper installation and certified components usage.

Part Number	Description
PL-GYTS-xxS2	Outdoor Fiber Optic Cable Single Mode OS2
PL-GYTS-xxM3	Outdoor Fiber Optic Cable Multi Mode OM3
PL-GYTS-xxM4	Outdoor Fiber Optic Cable Multi Mode OM4
PL-GYTS-xxM5	Outdoor Fiber Optic Cable Multi Mode OM5

XX: Number of Core