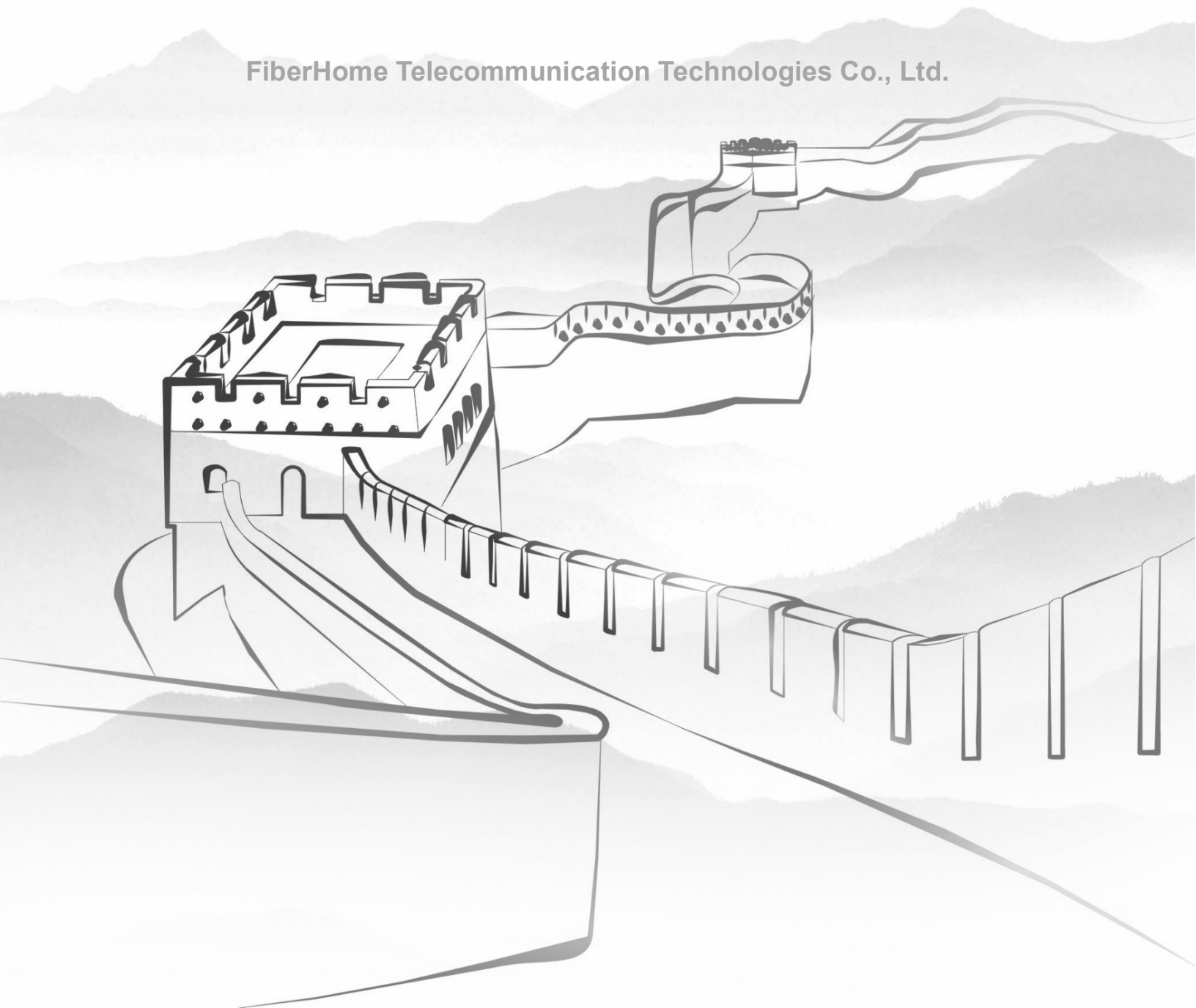


Optical Fiber Cable Specification



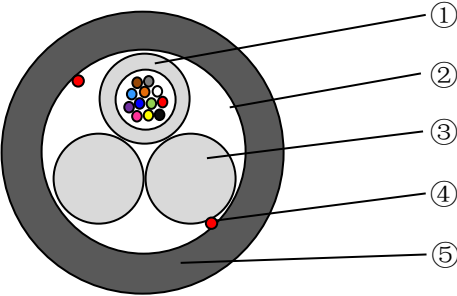
FiberHome Telecommunication Technologies Co., Ltd.



Single-mode ASU80-6/8/12 Cable Specification

Cable Design

ASU-Dielectric-Single Sheath-G.652D



- ① **Loose tube:** filled with a suitable water tightness compound, containing fibers
- ② **Water penetration:** water blocking yarns and bind yarns
- ③ **Reinforcement members:** FRP stranding with loose tube
- ④ **Ripcord:** 2 ripcord under outer sheath
- ⑤ **Outer Sheath:** Black-MDPE

Cable Specification

Cable Cores		6	8	12
No. of Fibers		6	8	12
Span	m	80	80	80
Loosetube Number		1	1	1
Loosetube Diameter	mm	2.1	2.1	2.1
Strength member		2	2	2
Strength member Diameter	mm	2	2	2
Sheath Thickness	mm	1.0	1.0	1.0
Nominal Cable Diameter	mm	6.6±0.5	6.6±0.5	6.6±0.5
Nominal Cable Weight	Kg/km	46±10	46±10	46±10

Cable Performance

Cable performance		
Test	Specified Value	Acceptance Criteria
Tensile IEC 60794-1-21, E1	800 N, 1 min, L≥50m	$\Delta\alpha\leq0.10\text{dB}$, no sheath damage after test
Crush IEC 60794-1-21, E3	1000 N/10cm, 1 min, Plate/Plate	$\Delta\alpha\leq0.10\text{dB}$, no sheath damage after test
Impact IEC 60794-1-21, E4	4.5 J, 1 time/3 points, R=12.5mm	$\Delta\alpha\leq0.10\text{dB}$, no sheath damage after test
Repeated Bending IEC 60794-1-21, E6	R=20D, 25 cycles, 20N	$\Delta\alpha\leq0.10\text{dB}$, no sheath damage after test
Torsion IEC 60794-1-21, E7	0.5m, 10 cycles, $\pm180^\circ$, 20N	$\Delta\alpha\leq0.10\text{dB}$, no sheath damage after test
Temperature Cycling IEC 60794-1-22, F1	2 cycles, -20~+65°C, 12 h	$\Delta\alpha\leq0.10\text{dB/km}$, no sheath damage after test
Water Penetration IEC 60794-1-22, F5	3m sample, 1m height, 24 h	No water leakage after test

Fiber Performance

G.652D performance		
Characteristics		Acceptance Value
Attenuation (IEC 60793-1-40)	@1310nm	$\leq0.35\text{ dB/km}$
	@1383nm	$\leq0.35\text{ dB/km}$
	@1550nm	$\leq0.21\text{ dB/km}$
	@1625nm	$\leq0.23\text{ dB/km}$
Mode field diameter (MFD)	@1310nm	$9.2\pm0.4\text{ }\mu\text{m}$
	@1550nm	$10.4\pm0.5\text{ }\mu\text{m}$
Chromatic dispersion coefficient (IEC 60793-1-42)	1288~1339nm (absolute value)	$\leq3.5\text{ ps/(nm}\cdot\text{km)}$
	1271~1360nm (absolute value)	$\leq5.3\text{ ps/(nm}\cdot\text{km)}$
	@1550 nm	$\leq18\text{ ps/(nm}\cdot\text{km)}$
Zero-dispersion wavelength		1302nm~1322 nm
Zero-dispersion slope		$\leq0.092\text{ ps/(nm}^2\cdot\text{km)}$
Cable cut-off wavelength λ_{cc} (nm)		$\leq1260\text{ nm}$
PMD (for fiber on the reel) (IEC 60793-1-48)		$\leq0.20\text{ ps/km}^{1/2}$
Cladding diameter		$125\pm0.7\text{ }\mu\text{m}$
Cladding non-circularity		$\leq0.60\text{ }\%$
Core/cladding concentricity error		$\leq0.5\text{ }\mu\text{m}$
Proof test		$\geq0.69\text{ GPa (100kpsi)}$

Sheath Marking

The outer sheath is marked in 1 meter intervals as follows (Example):

LinkedPro by FiberHome ASU 12FO G652D SPAN 80M MINIADSS12C 2025 LOT1 Drum NO. ****m

Cable Packing

1.1 Standard cable length for each reel

- Standard length: 4000m per reel Order tolerance: ± 5%.
- Other cable length available.
- Nonstandard length: Max 5% as per mutual agreement under Customer Approval.

----- End of Specification -----