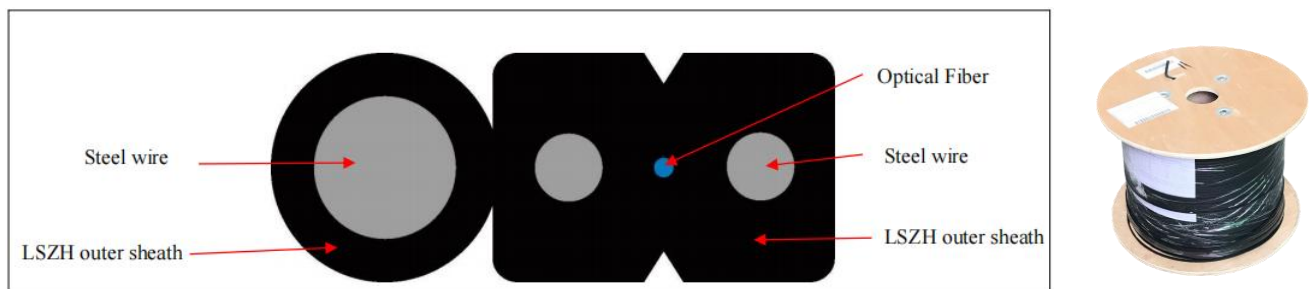


## Overviews

The optical fiber unit is positioned in the centre. Two parallel steel wires are placed at the two sides. A steel wire as the additional strength member is also applied. Then, the cable is completed with a black or color LSZH sheath.

## Cable structure diagram



## Fiber Color Code

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

## Application

- Internal FTTH applications horizontal and riser, especially suitable for the last leg in FTTH systems.

## Feature

- Outdoor , with Fig 8 messenger
- Low dispersion and attenuation
- LSZH material with good flame-retardance .
- Steel wire self-supporting can up of 50 meters pull-fly
- Special low bending sensitivity optical fiber provides high bandwidth and excellent communication transmission performance;
- Two parallel steel wire reinforcements ensure good compression resistance and protect fibers;
- Steel wires serve as additional reinforcements to ensure good tensile properties;
- Simple structure, light weight and high practicality;
- Novel chip removal groove design, easy to strip and splice, simplifying installation and maintenance

## Parameters of fiber

Optical fiber type	Unit	SM G652D	SM G657A1	SM G657A2	MM 50/125	MM 62.5/125
Waveband	nm	1310/1550	1310/1550	1310/1550	850/1300	850/1300
Attenuation	dB/km	0.36/0.24	0.36/0.24	0.36/0.24	3.5/1.5	3.5/1.5

## Optical fiber G657A2 Technical Specifications

Optical fiber complies with ITU-T G657A2 standard, G657A2 is the best standard in optical fiber.

G657A2 technical parameters are as follows:

Item	Technology Parameter		
Optical Characteristics	wavelength Attenuation	1310nm	≤0.36dB/km
		1550nm	≤0.22dB/km
		1383nm	≤0.35dB/km
		1310-1625nm	≤0.36dB/km
	Zero Dispersion Wavelength	1300-1322nm	
	Zero Dispersion Slope	ps/(nm <sup>2</sup> .km) ≤0.091	
	Typical Value	ps/(nm <sup>2</sup> .km) 0.086	
	PMD	Maximum Individual Fiber	0.2 ps/√km
		Link Design Value(M=20, Q=0.01%)	0.15 ps/√km
		Typical Value	0.04 ps/√km
	Cable Cutoff Wavelength λ <sub>cc</sub>	≤1260nm	
	Fiber Cutoff Wavelength λ <sub>c</sub>	1150-1330nm	
	Mode Field Diameter(MFD)	1310nm	8.6±0.4μm
		1550nm	9.6±0.5μm
	Effective Group Index of Refraction	@1310nm	1.4672
@1550nm		1.4683	
Attenuation Discontinuity	1310nm	dB/km ≤0.05	
	1550nm	dB/km ≤0.05	
Geometrical Characteristics	Cladding Diameter	125±0.7μm	
	Cladding Non-circularity	≤0.8%	
	Core-Cladding Concentricity Error	≤0.5μm	
	Coating Diameter	245±5μm	
	Cladding-Coating Concentricity Error	≤12μm	
	Coating Non-circularity	≤3.0%	

	Curl	≥4m	
	Mode Field Diameter(MFD)	1310nm	8.6±0.4μm
		1550nm	9.6±0.5μm
	Effective Group Index of Refraction	@1310nm	1.4672
		@1550nm	1.4683
	Attenuation Discontinuity	1310nm	≤0.05dB/km
1550nm		≤0.05dB/km	
Environmental Characteristics (1310nm, 1550nm, 1625nm)	Temperature Dependence Induced Attenuation	-60°C to +85°C	≤0.05dB/km
	Temperature Humidity Cycling Induced Attenuation	85°C, RH85%, 30 days	≤0.05dB/km
	Water Soak Dependence Induced Attenuation	23°C, 30 days	≤0.05dB/km
	Dry Heat Aging	85°C, 30 days	≤0.05dB/km
Mechanical Characteristics	Proof Test	≥1.02%	
		≥9.1N	
		≥0.704Gpa	
	Coating Strip Force	Peak Force	1.3-8.9N
		Typical Value	1.9N
	Tensile Strength	Weibull Probability 50%	≥4000 Mpa
		Weibull Probability 15%	≥3050 Mpa
	Dynamic Stress Corrosion Susceptibility Parameter Nd	≥20	
	Macro-bend Induced Attenuation	10 turns with radius of 15mm at 1550nm	≤0.03dB
		10 turns with radius of 15mm at 1625nm	≤0.1dB
		1 turn with radius of 10mm at 1550nm	≤0.1dB
		1 turn with radius of 10mm at 1625nm	≤0.2 dB
		1 turn with radius of 7.5mm at 1550nm	≤0.4dB
1 turn with radius of 7.5mm at 1625nm		≤0.8dB	

## Dimensions and Descriptions

Items		Descriptions		
Optical Fiber	Fiber count	2	4	6
	Color	Blue/Orange	Blue/Orange/ Green/Brown	Blue/Orange/ Green/Brown/ Grey/White
Strength Member	Material	Steel wire		
	Diameter	0.45mm		
Messenger wire	Material	Steel wire		
	Diameter	1.0mm		
Outer Sheath	Material	LSZH		
	Color	Black		
Cable Diameter		5.2*2.0mm		
Cable Weight	Net Weight	Approx. 22kg/km		

## Main Mechanical and Environmental Performance

Performance	Long-term		Short-term	
Max. Tension (N)	330		600	
Max. Crushing Resistance(N/100mm)	1000		2200	
Min. Bending Radius	B1.3	60mm ( Dynamic )	B1.3	30mm(Static)
	B6	40mm ( Dynamic )	B6	20mm(Static)
Storage and operating temperature	-20 °C - + 60 °C			

## Appearance and packaging

- No damage on the surface; no trachoma.
- Wooden tray packaging; wood whole seal packaging
- Segment length: no less than 1000M. The segment length of each tray of the same batch shall be similar as much as possible. Other lengths can be agreed upon through consultation.
- Report certificate: It includes optical cable inspection number, optical cable type, core number, optical fiber type, length, etc

## HONDAO Cable Advantages

- The color of the optical cable can be black, white, or gray. Black/white is the norm, and gray is recommended. The gray color is more advanced.
- Colorful ribbons can be printed on the side of the optical cable. The colors are selectable. The ribbons make the optical fibers look more obvious and easy to distinguish.
- The optical fiber reel is made of PVC material. Compared with traditional reel materials, the PVC reel will not be affected by thermal expansion. The PVC tube in the middle will not loosen or shrink, and there will be no after-sales problems.
- Optical fiber packaging is divided into two types, carton packaging and cardboard-free packaging. The outside of the packaging is wrapped with plastic film to prevent rain and moisture.
- Advantage five: Text is printed every one meter on the optical cable. The text content can be customized such as: company name, year of manufacture, cable model, optical fiber standard, length, etc.
- The panel can be customized with LOGO, text, specifications, etc.
- Supports a variety of customizations, and can customize optical cables according to your specifications for optical fibers.



We produce a wide selection of network equipment under HONDAO brand. Gather thousands of products, which are supplier to customs of different field and different requirement. QC team test all goods before shipment. We screen the Chinese supplier in a search of the most efficient product solutions available to satisfy your individual needs.