# **SPECIFICATION**







## Description

It's a kind of FTTH patch cord assembly with **2.0x5.0mm Aerial Flat FTTH Drop Cable**. It adopts lower insertion loss SC technologies, and compact cable structure, achieving fast deployment, high reliability, and durability.

This is a last cable in FTTH project. Used widely between MST,FAT, FTTX Pro-connectorized terminal box tec. With easy accessibility to the fiber and simple installation.



# **PIGTAIL'S Optical Specifications**

Connector	Mini IP(SC /APC) Connector waterproof	Polish	APC-APC
Fiber Mode	9/125μm, G657A2	Jacket Color	Black/Grey
Cable OD	2.0x5.0±0.1mm	Wavelength	SM:1310/1550nm
Cable Structure	Simplex	Jacket Material	LSZH
Insertion loss	≤0.3dB	Return loss	SM APC ≥ 60dB(min)
Operation Temperature	-20 ~ +70°C	Install&Storage temperature	-40 ~ +70°C

**Remark:** The IL in the table is only refer to the IL (connector). The product IL must contain the connector IL and fiber cable IL, IL all =  $2 \times IL$  (connector) + IL (1km cable IL)/1000 x L (cable length).

#### **Mechanical and Environmental Characteristics**

Items	Unite	Specifications	Reference
Span Length	М	50	
Tension(Long Term)	N	300	IEC 61300-2-4
Tension (Short Term)	N	600	IEC 61300-2-4
Crush (Long Term)	N/10cm	500	IEC 61300-2-5
Crush (Short Term)	N/10cm	1000	IEC 61300-2-5
Min. Bend Radius (Dynamic)	mm	20D	
Min. Bend Radius (Static)	mm	10D	
Operating Temperature	°C	-20~+60	IEC 61300-2-22
Storage Temperature	°C	-20~+60	IEC 61300-2-22

## **End-Face Quality (SM)**

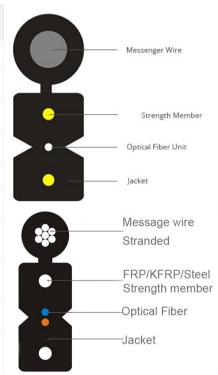
Zone	Range (µm)	Scratches	Defects	Reference		
A: Core	0 to 25	None	None			
B: Cladding	25 to 115	None	None			
C: Adhesive	115 to 135	None	None	IEC 61300-3-35:2015		
D: Contact	135 to 250	None	None			
E: Rest of ferrule		None	None			



# **Cable Technical Data**



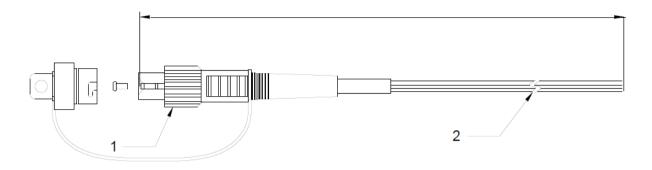
Fiber Count	1F		
Managa Wira	Solid Steel wire/ Straned Steel wire/FRP/KFRP		
Message Wire	1.0mm or (7*0.4mm)-1.2mm		
Strangth mambar	FRP/KFRP/Solid Steel wire		
Strength member	0.45-0.52mm		
Cable diameter(mm) Approx.	2.0*5.0(±0.1)		
Cable weight(kg/km) Approx	18.5/20		
Tensile Strength Short/ Long	600/300 for Steel wire strength member+FRP Strength member		
Term(N)	400/200 for FRP wire strength member+FRP Strength member		
Crush resistance short/long term (N/100mm)	1000/500		
Operating temperature range(°C)	-40°C ~+70°C		



# **Connector Optical Specifications**

Туре	Mini IP SC/APC
Insertion loss	Max. ≤ 0.3 dB
Return loss	≥ 60 dB
Tensile strength between optical cable and connector	Load: 300N Duration: 5s
Water proof	IP67
Fall	Drop height: 1.5 m Number of drops: 5 for each plug Test temperature: -15°C and 45°C
Bending	Load: 45 N Duration: 8 cycles, 10s/cycle
Torsion	Load: 15 N Duration: 10 cycles ± 180°
Static side load	Load: 50 N for 1h
Water proof	Depth: under 3m of water. Duration: 7 days
Change of temperature	Temperature: -25°C to 70 °C Duration at extreme temps: 1h Temperature change speed: 1°C/min

# **Length Tolerance**



Overall Length(L) (m)	length of tolerance (cm)		
10 <l<40< td=""><td>+15/-0</td></l<40<>	+15/-0		
40 <l< td=""><td>+0.5% × L/-0</td></l<>	+0.5% × L/-0		

# **Packaging**

This easily taken and well-protected fiber patch cable package has been labelled and marked by OMC as default. Which carton to be used depends on goods Qty. Packing can be customized.



1,PE Wrap



2, Paper Carton



3,Fuming-free Pallet

## **Application**

Multi-purpose Outdoor&Indoor.

For connection between distribution box and RRH.

Deployment in Remote Radio Head cell tower applications.

Fiber optic communications in harsh outdoor environments

Outdoor communication equipment connection

Waterproof fiber equipment SC port Remote wireless base station

FTTH wiring project

## **Features**

Fast deployment, plug and play.

Double locked anti-vibration design.

Easy to install and uninstall.



### Installation conditions

Weather condition	Max. span(m)	Installation sag	Installation sag ratio (m)	Installation tensile (N)	Weather load tensile (N)	weather load sag(m)	weather load sag ratio
Max. wind speed: 37 m/s	50	1.5%	0.5	157	773	1.44	2.9%
Max. wind speed: 26.67 m/s ice: 0	80	1.0%	1.125	157	713	2.23	3.0%
Max. wind speed: 10.7 m/s	70	1.4%	0.98	157	744	2.09	3.0%

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