# Fiber Optic Drop Cable with Messenger

Specification

NT-FTTX-x-yy-DM x = Fiber Count, yy = SM (singlemode) or MM (multimode)



## **Description:**

Nanda Technologies's Fiber Optic Drop Cable uses special low- bend-sensitivity fiber B6 (G.657A1), providing greater bandwidth and excellent communication transmission properties. Two parallel strength members (non- metallic FRP), ensures the optical fibers are protected. The low smoke zero halogen (LSZH) flame-retardant jacket allows for safety and environmental protection. The cable is light weight with a flute design which can be easily be stripped and spliced, simplifying installation and maintenance. The messenger enhances the overall tensile strength of the cable.

#### Features:

- Figure-eight construction for use with standard messenger clamping and support hardware
- · FRP strength member
- LSZH outer cable jacket for excellent UV and weather resistance
- Figure-eight tight-buffered fiber optic cables meet all functional requirements

	Messenger / Tone wire
	FRP Strength Member
	Optical Fiber
	LSZH Jacket

**Technical Parameters** 

Specification	recillical Farallielers			
Fiber Type	G.657A1, Singlemode			
Number of Fibers	1 to 6			
Fiber Core Diameter	245 ±10µm			
Attenuation	1310nm	≤0.36 (dB/km)		
	1383nm	≤0.34 (dB/km)		
	1550nm	≤0.25 (dB/km)		
	1625nm	≤0.23 (dB/km)		
Attenuation (after hydrogen aging)	1363nm avg. value	≤1310nm ~ 1625nm max.		
Specification	Technical Parameters			
Zero Dispersion Wavelength	1300nm ~ 1324nm			
Zero Dispersion Slope	≤0.092ps / (nm²km)			
Coefficient Mode Dispersion	≤0.2ps / SQRT (km)			
Cable Cut-off Wavelength	λcc < 1260nm			
Mode Field Parameter	1310nm			
Cladding Diameter	125.0 ±0.5µm			
Cladding Non-circularity	<0.5%			
Core-clad Concentricity	≤0.5µm			
Coating Diameter	245 ±10μm			
Fiber Core Coating Material	UV Hardened Resin			
Cable Diameter	2.1 x 5.6 ±0.1mm			
Cable Diameter (body)	3.4 x 2.0 ±0.1mm			
Strength Member Reinforcement	FRP, 0.5mm diameter			
Jacket	LSZH			
Jacket Shore Hardness	≥55D			
Jacket Fire Performance	Test for vertical flame propagation for a single cable			
Messenger	Phosphate wire, 1.0mm diameter			
Tensile Strength	Long Term 300N			
Working Temperature	-20° ~ 60°C			
Temperature Cycling Induced Attenuation	≤0.05 dB/km			
Bending Specificity (30mm*10 laps)	≤0.05 dB (λ=1550nm)			
Packaging	1500m / Plywood Drum / Cardboard Carton			



# **Light Armored Cable**

NT-ARMLTxxxSM xxx = Fiber Count 12, 24, 48, 72, 96, 144



	Specification							
Number of Fibers		12	24	48	72	96	144	
Design		G.652D						
Central Strength Member		Material: Fiber Reinforced Plastic (FRP), Diameter: 2.5mm (±0.2mm)						
Additional Sheath	Material:	Material: Low-density Polyethylene (LDPE)						
	Diameter:			-		3.9mm (±0.05mm)	7.2mm (±0.05mm)	
	Material	Polybutylene Terephthalate (PBT)						
Loose Tube	Dia: ±0.06mm	2.3						
	Thickness: ±0.03mm	0.35						
	Core# / Tube	12						
	Material	LDPE						
Filler Rope	Color	Black						
	Dia: ±0.03mm	2.3						
	Number	5	4	2	-	-	-	
Water Blocking Layer		Water Blocking Tape & Water Blocking Yarn						
Strength Member		Glass Yarn						
Armoring	Material:	Steel Strip						
Annoning	Thickness: ±0.03mm	0.20	0.20					
Ripcord	Material/Color	Aramid Fiber / Yellow						
Outer Sheath	Material:	Medium-density Polyethylene (MOPE)						
	Thickness: ±0.03mm	1.8						
Cable Diameter (±0.2mm)		12, 24, 48, 72 fibers: 12.5   96 fibers:14.2   144 fibers: 16.4						
Min. Bend	Without Tension	10.0 x Cable Diameter						
Radius	Maximum Tension	15.0 x Cable Diameter						
Temp.	Installation	-30 ~ +60°C (-22 ~ 140°F)						
	Transport/Storage	-40 ~ + 70°C (-40 ~ 158°F)						
	Operation	-40 ~ +70°C (-40 ~ 158°F)						

## Features:

- · Loose tube
- Singlemode
- Fiber counts from 12 to 144
- · Smaller, more flexible tubes for easier installation and routing
- On 5,000 meter reels
- PE coated armor offers additional crush resistance and protection from rodent attack



