

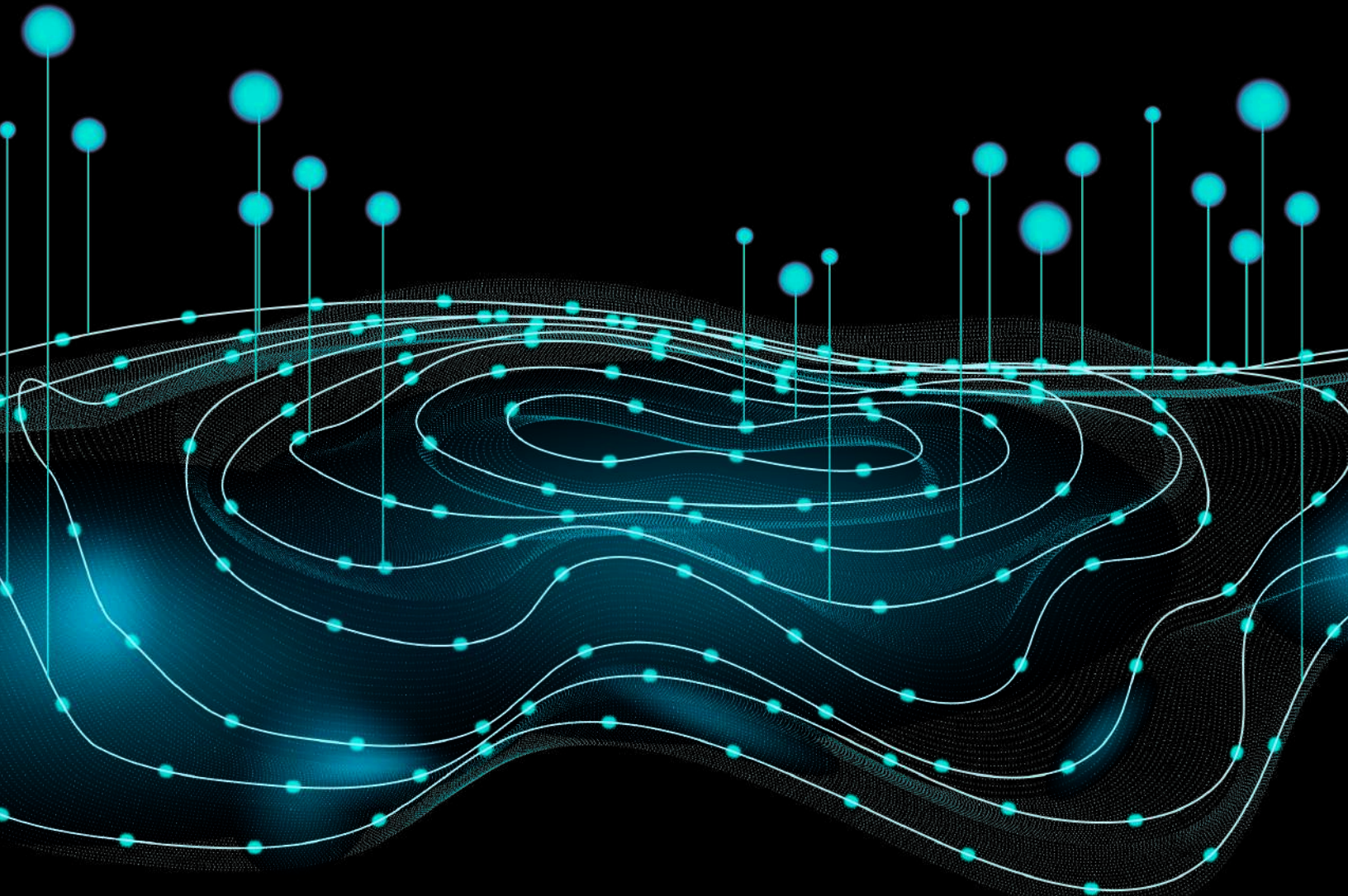


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU

2025

# BUSINESS CATALOG

COPPER-FIBER-ACCESSORIES



# CONTENTS



## INTRODUCTION

WHO ARE WE?

**03**



## COPPER PATCHCORDS

CAT 5E | CAT6 | CAT6A

**04**



## FIBER OPTICS

PIGTAIL | PATCHCORD  
| CONNECTORS

**45**



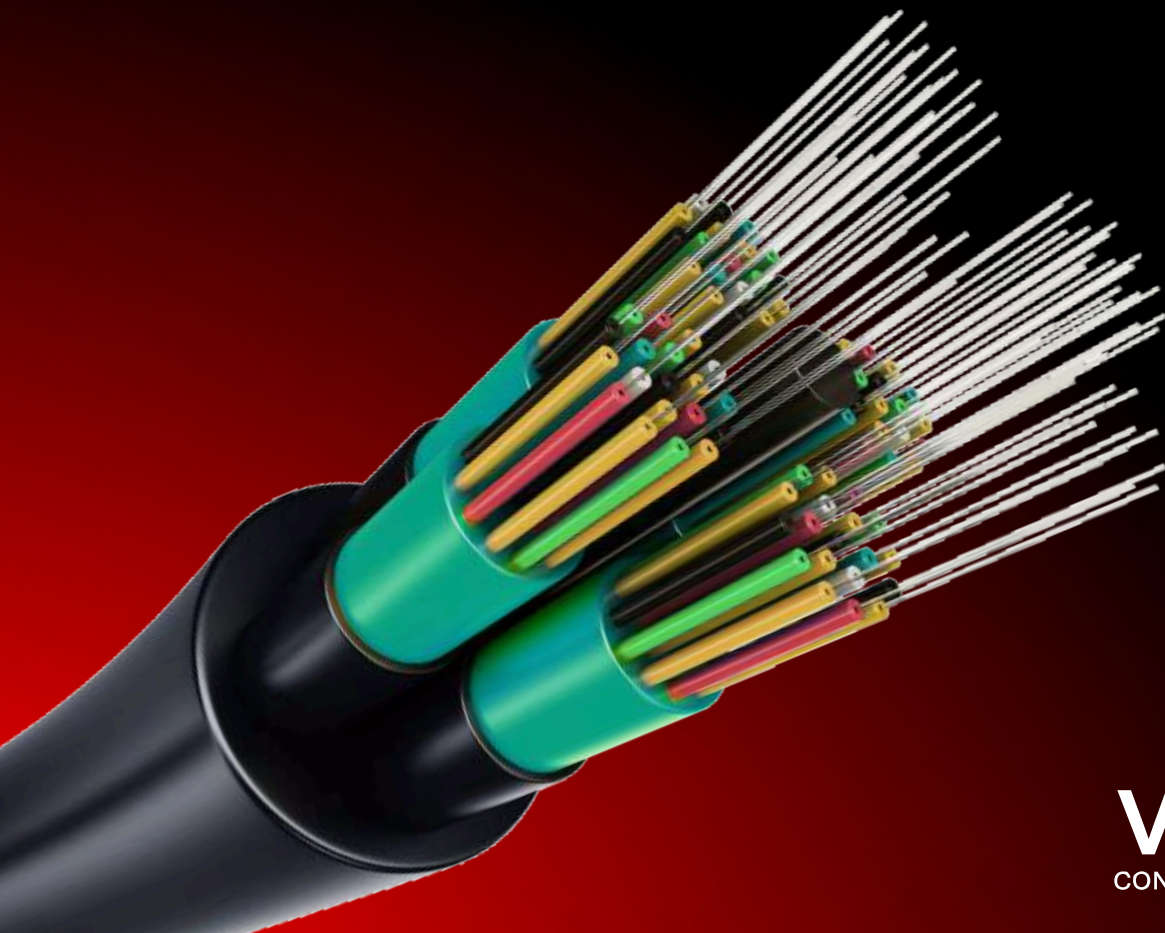
## ACCESSORIES

ADAPTERS | ATTENUATORS

**57**

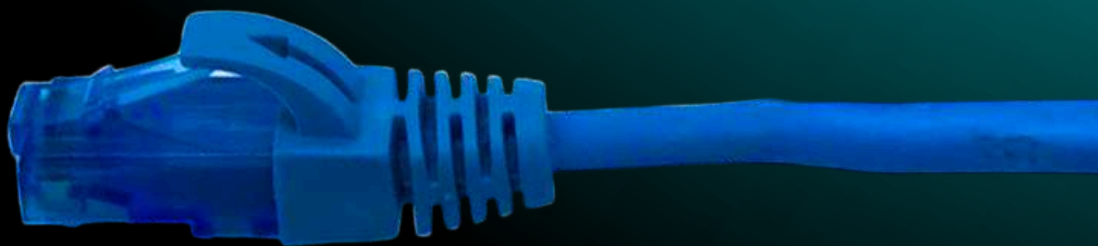
# WHO ARE WE?

Vietfiber, a member of Acik Holding, has been connecting the world with advanced fiber optic and copper solutions since its foundation. We manufacture high-performance fiber optic cable, patch cables, and copper patch cables, serving a wide range of industries, from operators and internet providers to security and software companies. Our commitment to innovation, expansion, and sustainability drives us forward.



04

# COPPER PATCHCORD

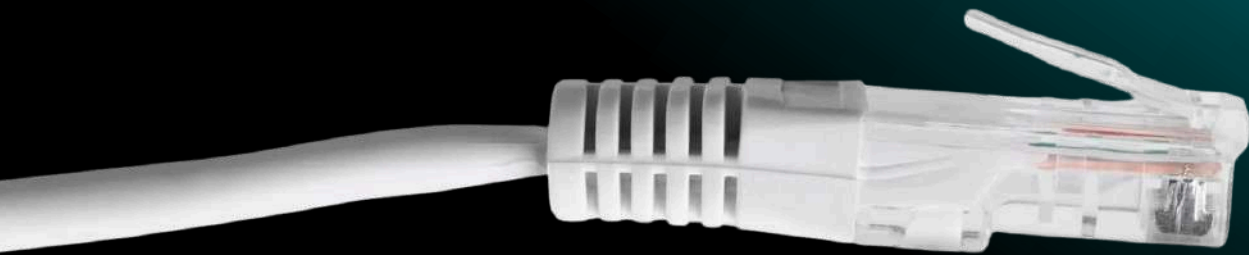


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU



# ABOUT

Category 5E UTP stranded cables exceed Category 5E / Class D specification. It is tested to 100 MHz frequency range and designed to support Gigabit 1000Base-T applications up to 100m.



## CAT 5 E STRANDED CABLE

### APPLICATION

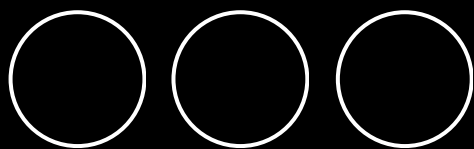
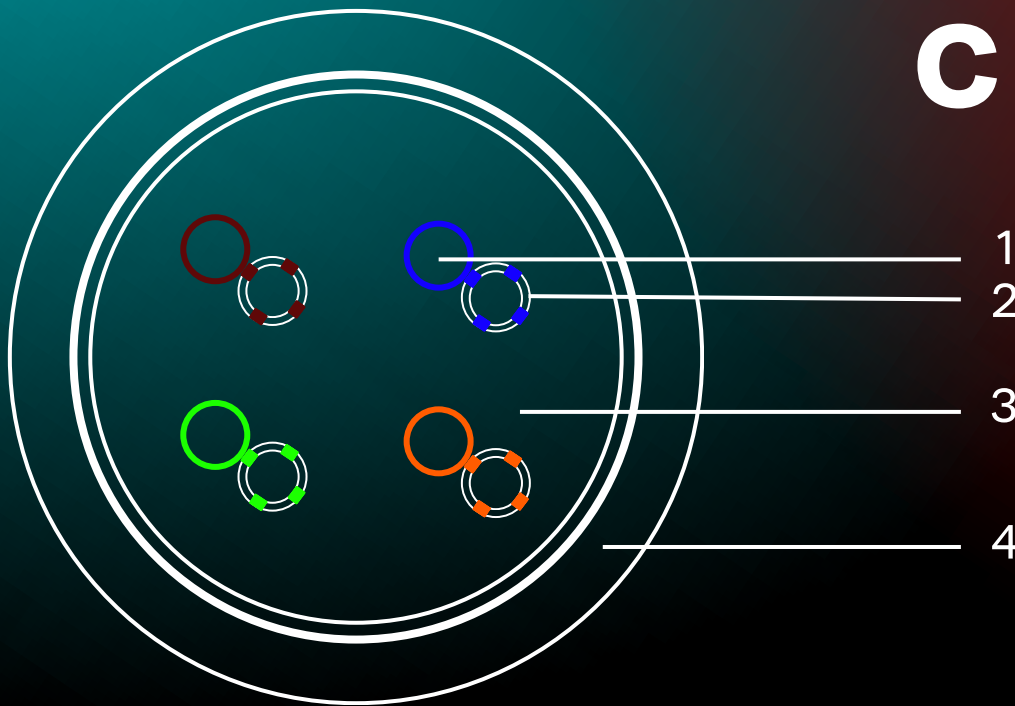
- Work area cable.
- Support current and future Category 5e applications, such as :  
1,000Base-T (Gigabit Ethernet),  
100 Base-T, 10 Base-T, FDDI,

### STANDARD

ANSI/TIA/EIA 568-B.2-1 (2002)  
ISO/IEC 11801 2nd edition (2002)  
ISO/IEC 11801 Amendment 2 (2010)



# CAT 5E



## 1. CONDUCTOR

**Material** Stranded bare copper ETP.  
**Sizes** 24AWG (7X0.18mm (±0.01mm))

## 2. INSULATION

**Material** Polyethylene  
**Sizes** 0.85mm

## 3. CABLE CORE

**Pair** 2 twisted Insulated conductors  
**Number of pairs** 4, all twisted together  
**Colour code pair 1** White / Blue and Blue  
**Colour code pair 2** White / Orange and Orange  
**Colour code pair 3** White / Green and Green  
**Colour code pair 4** White / Brown and Brown

## 4. JACKET

**Material** PVC  
**Diameter** 5.1 ± 0.03mm  
**Colour**

# ELECTRICAL CHARACTERISTICS

# CAT 5E

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
D.C. resistance conductor	$\leq 9.5$	$\Omega/100m$
Resistance unbalance: within a pair / between pairs	$< 2 / < 4$	%
Insulation resistance	$\geq 5,000$	$M\Omega.km$
Dielectric strength conductor and conductor screen (2s)	1min (1Kv)	kV
Mutual capacitance	$< 56$	nF/km
Capacitance unbalance pair to ground	$< 3,300$	pF/km
Nominal velocity of propagation (for information only)	69	%
Delay skew (differential delay)	$\leq 40$	ns/100m
Transfer impedance according IEC 61156-5	Grade 2	
Coupling attenuation according IEC 61156-5	Type II	

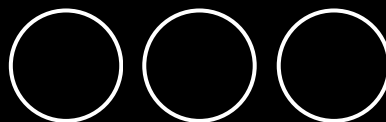
# MECHANICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Elongation at break of the conductors	18	
Resistance unbalance: within a pair / between pairs	$\geq 100$	%
Insulation resistance	$\geq 100$	
Dielectric strength conductor and conductor screen (2s)	$< 9$	mPa

# ENVIRONMENTAL AND OVERALL CHARACTERISTICS

## CAT 5E

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Maximum operating voltage (for all temperatures cable is intended to be used)	72	V dc
Maximum continuous current per conductor (at 25 C)	1.5	A
Temperature rating installation	-10 to +50	°C
Temperature rating operation	-25 to +60	
Total cable weight	31	kg/km
Minimum bending radius (during operation and installation)	21/42	mm
Maximum pulling strength	45	N
Burning load	395	kJ/m
Fire performance according IEC 60332-1	Pass	



**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU



# ABOUT

Cat5e UTP Solid Cable has been designed for Horizontal Cabling Networks for Transmission of High Speed Data, Digital and Analog, Voice and Video Signals on Lans. Supports Gigabit Ethernet (1000 Base-T) Standard Suitable for Noisy Environments, High EMI Interference Surroundings and Complies to the Requirement of ANSI/TIA-568-C.2 and ISO/IEC 11801. Bandwidth Performance Up to 100mhz.

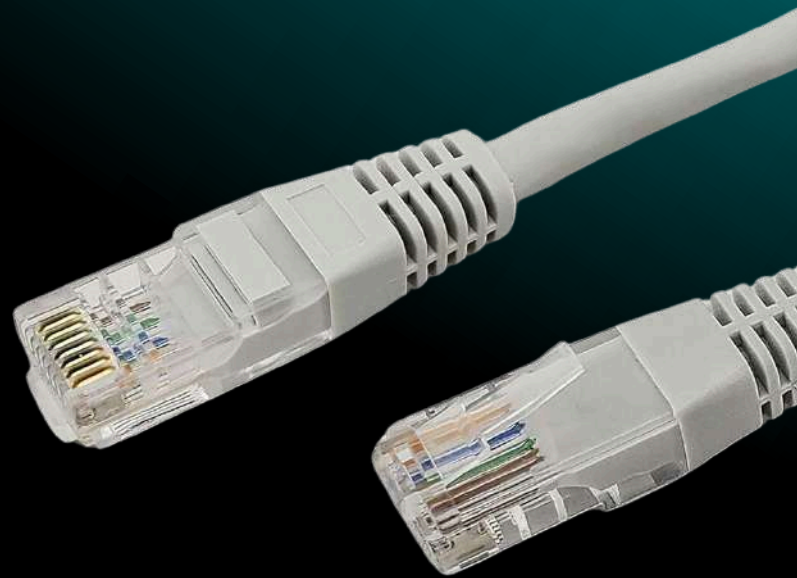
## CAT 5 E SOLID CABLE

## APPLICATION

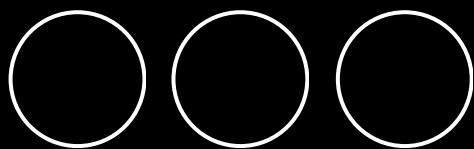
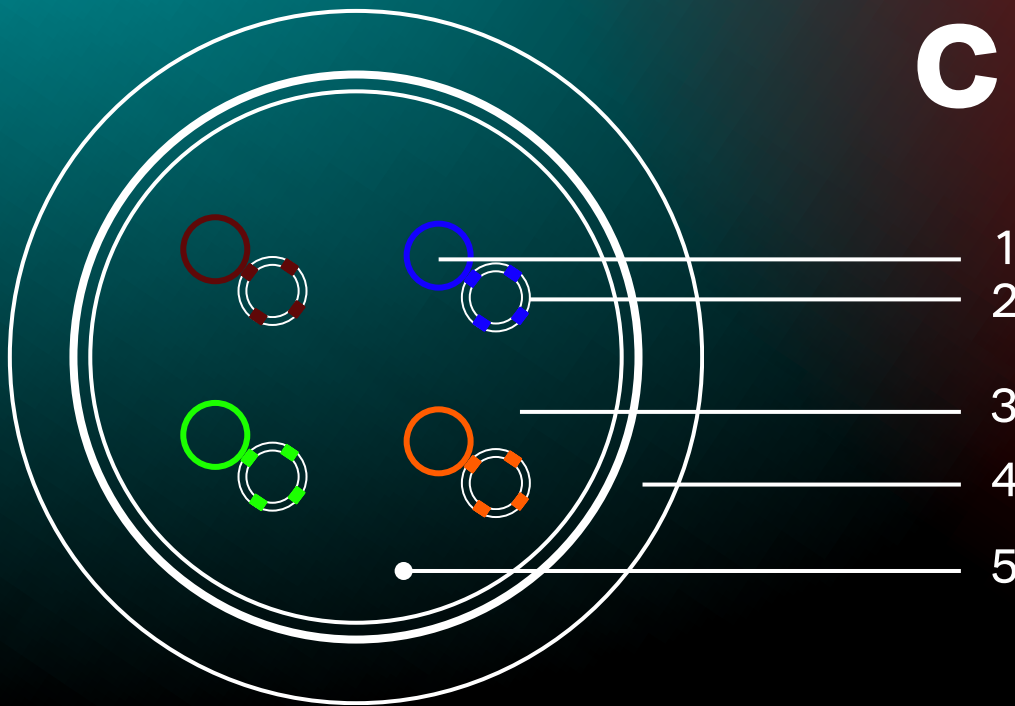
- Work area cable.
- Support current and future Category 5e applications, such as :  
1,000Base-T (Gigabit Ethernet),  
100 Base-T, 10 Base-T, FDDI

## STANDARD

ANSI/TIA/EIA 568-B.2-1 (2002)  
ISO/IEC 11801 2nd edition (2002)  
ISO/IEC 11801 Amendment 2 (2010)



# CAT 5E



## 1. CONDUCTOR

**Material** Solid bare copper ETP.  
**Sizes** 24AWG

## 2. INSULATION

**Material** Polyethylene  
**Sizes** 0.85mm

## 3. CABLE CORE

**Pair** 2 twisted Insulated conductors  
**Number of pairs** 4, all twisted together  
**Colour code pair 1** White / Blue and Blue  
**Colour code pair 2** White / Orange and Orange  
**Colour code pair 3** White / Green and Green  
**Colour code pair 4** White / Brown and Brown

## 3. JACKET

**Material** PVC  
**Diameter**  $5.1 \pm 0.03$ mm  
**Colour**

## 5. RIPCORD

**Material** Polyethylene

# ELECTRICAL CHARACTERISTICS

# CAT 5E

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
D.C. resistance conductor	$\leq 9.5$	$\Omega/100m$
Resistance unbalance: within a pair / between pairs	$< 2 / < 4$	%
Insulation resistance	$\geq 5,000$	$M\Omega.km$
Dielectric strength conductor and conductor screen (2s)	1min (1Kv)	kV
Mutual capacitance	$< 56$	nF/km
Capacitance unbalance pair to ground	$< 3,300$	pF/km
Nominal velocity of propagation (for information only)	69	%
Delay skew (differential delay)	$\leq 40$	ns/100m
Transfer impedance according IEC 61156-5	Grade 2	
Coupling attenuation according IEC 61156-5	Type II	

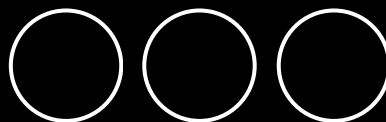
# MECHANICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Elongation at break of the conductors	20	
Resistance unbalance: within a pair / between pairs	$\geq 100$	%
Insulation resistance	$\geq 100$	
Dielectric strength conductor and conductor screen (2s)	$< 9$	mPa

# ENVIRONMENTAL AND OVERALL CHARACTERISTICS

# CAT 5E

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Maximum operating voltage (for all temperatures cable is intended to be used)	72	V dc
Maximum continuous current per conductor (at 25 C)	1.5	A
Temperature rating installation	-10 to +50	°C
Temperature rating operation	-25 to +60	
Total cable weight	31	kg/km
Minimum bending radius (during operation and installation)	21/42	mm
Maximum pulling strength	45	N
Burning load	395	kJ/m
Fire performance according IEC 60332-1	Pass	



**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU



# ABOUT



Category 6 is an Ethernet cable standard defined by the Electronic Industries Association and Telecommunications Industry Association. Cat 6 is the sixth generation of twisted pair Ethernet cabling that is used in home and business networks.



## CAT 6 STRANDED CABLE APPLICATION

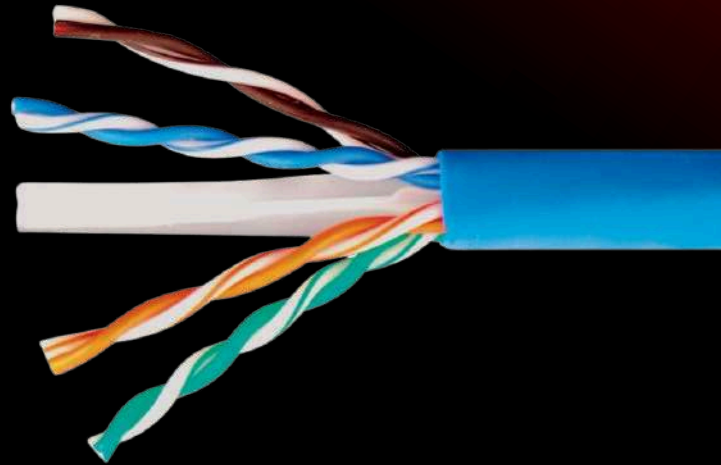
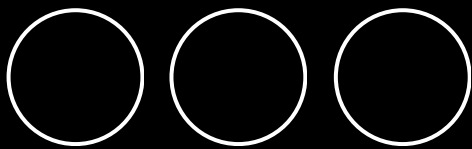
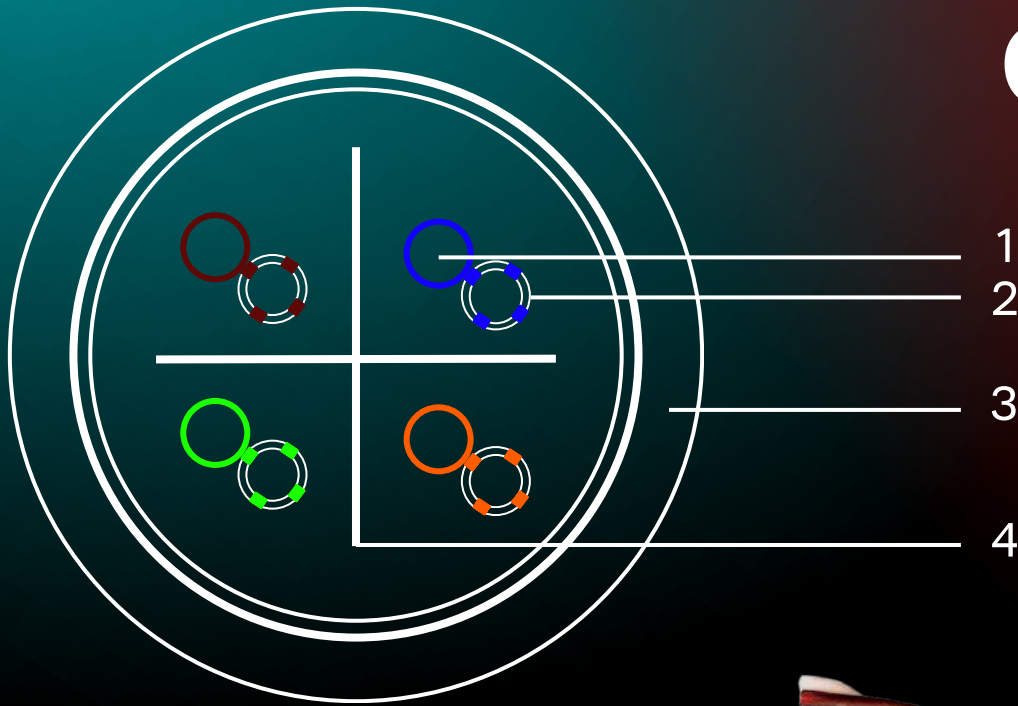
- IEEE 802.3: 1000BASE-T (Gigabit Ethernet), 100BASE-TX, 10BASE-T ANSI/TIA/EIA-854: 1000BASE-TX
  - 155 Mb/s, 1.2 Gb/s ATM
  - ANSI X3.263: 100 Mb/s
- IEEE 802.3af DTE Power (POE)
  - 4/16 Mb/s Token Ring
- Digital Video, Broadband and Baseband Analog Video

## STANDARD

ISO/IEC 11801:2002 Class E

TIA/EIA 568-B.2-1, TIA/EIA 568-C, TIA/EIA 568-C.2 IEC61156-5, IEC 60332-1, 60754-1, 60754-2, 61034-2 EN 50173-1, EN 50288-6-1

# CAT 6



## 1. CONDUCTOR

**Material** Stranded copper  
**Sizes** 24AWG (7X0.18mm ( $\pm 0.01$ mm))

## 2. INSULATION

**Material** Polyethylene  
**Sizes**  $0.85 \pm 0.05$ mm

## 3. JACKET

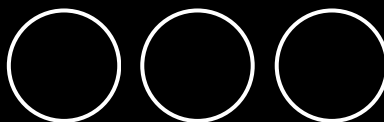
**Material** PVC  
**Diameter**  $6.0 \pm 0.03$ mm  
**Colour**

## 4. CROSS SEPARATOR

**Material** HDPE  
**Colour** White  
**Thickness** 0.45mm

# ELECTRICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Dielectric strength between conductors	DC, 1min (1kV)	kV
Impedance	110	$\Omega$
Operating frequency, maximum	250	MHz
Propagation delay	536	ns/100 m Max
Skew delay	45 ns	ns/100 m Max
Mutual capacitance	5.6	no Max./100m
Conductor	6.65	$\Omega$ Max./100m
Normal Velocity of Propagation NVP	69	%
TVL	30-10	log (f/100) dB
Insulation resistance	$\geq 5000$	M $\Omega$ .km
DC resistance unbalance	3	%



## MECHANICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Minimum bend radius during installation	8x outside dia	mm
Minimum bend radius after installation	4x outside dia	
Installation temp.	-10 to + 50	°C
Operating temp.	-25 to + 60	
Storage temp.	-25 to + 70	

## INSTALLATION CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Maximum pulling tension	90	N
Minimum bend radius during installation	55	mm
Minimum installed bend radius	27	mm
Normal weight	35	kg/km





# ABOUT



Category 6 is an Ethernet cable standard defined by the Electronic Industries Association and Telecommunications Industry Association. Cat 6 is the sixth generation of twisted pair Ethernet cabling that is used in home and business networks.



## CAT 6 SOLID CABLE APPLICATION

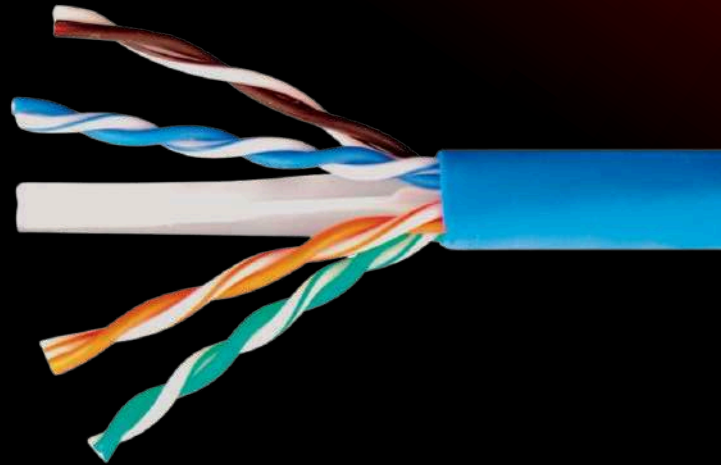
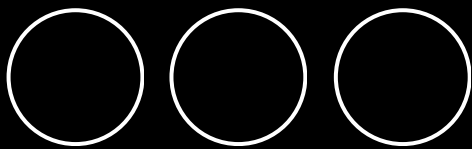
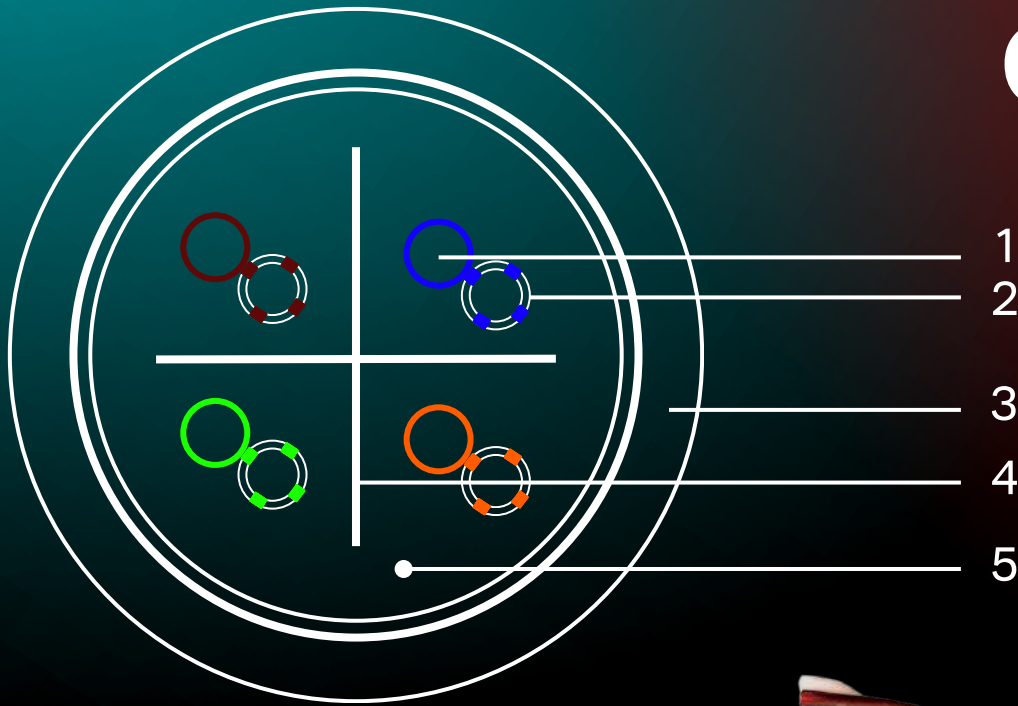
- IEEE 802.3: 1000BASE-T (Gigabit Ethernet), 100BASE-TX, 10BASE-T ANSI/TIA/EIA-854: 1000BASE-TX
  - 155 Mb/s, 1.2 Gb/s ATM
  - ANSI X3.263: 100 Mb/s
- IEEE 802.3af DTE Power (POE)
  - 4/16 Mb/s Token Ring
- Digital Video, Broadband and Baseband Analog Video

## STANDARD

ISO/IEC 11801:2002 Class E

TIA/EIA 568-B.2-1, TIA/EIA 568-C, TIA/EIA 568-C.2 IEC61156-5, IEC 60332-1, 60754-1, 60754-2, 61034-2 EN 50173-1, EN 50288-6-1

# CAT 6



## 1. CONDUCTOR

Material Solid copper  
Sizes 24AWG (0.57mm)

## 2. INSULATION

Material Polyethylene  
Sizes  $1.0 \pm 0.05\text{mm}$

## 3. JACKET

Material PVC  
Diameter  $6.0 \pm 0.03\text{mm}$   
Colour 

## 4. CROSS SEPARATOR

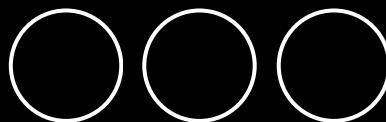
Material HDPE  
Colour White  
Thickness 0.45mm

## 5. RIPCORD

Material Polyethylene

# ELECTRICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Dielectric strength between conductors	DC, 1min (1kV)	kV
Impedance	100	$\Omega$
Operating frequency, maximum	250	MHz
Propagation delay	536	ns/100 m Max
Skew delay	45 ns	ns/100 m Max
Mutual capacitance	5.6	no Max./100m
Conductor	6.65	$\Omega$ Max./100m
Normal Velocity of Propagation NVP	69	%
TVL	30-10	log (f/100) dB
Insulation resistance	$\geq 5000$	M $\Omega$ .km
DC resistance unbalance	3	%



## MECHANICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Minimum bend radius during installation	8x outside dia	mm
Minimum bend radius after installation	4x outside dia	
Installation temp.	-10 to + 50	°C
Operating temp.	-25 to + 60	
Storage temp.	-25 to + 70	

## INSTALLATION CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Maximum pulling tension	90	N
Minimum bend radius during installation	55	mm
Minimum installed bend radius	27	mm
Normal weight	40	kg/km





# ABOUT



Category 6 is an Ethernet cable standard defined by the Electronic Industries Association and Telecommunications Industry Association. Cat 6 is the sixth generation of twisted pair Ethernet cabling that is used in home and business networks.



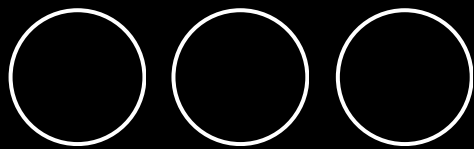
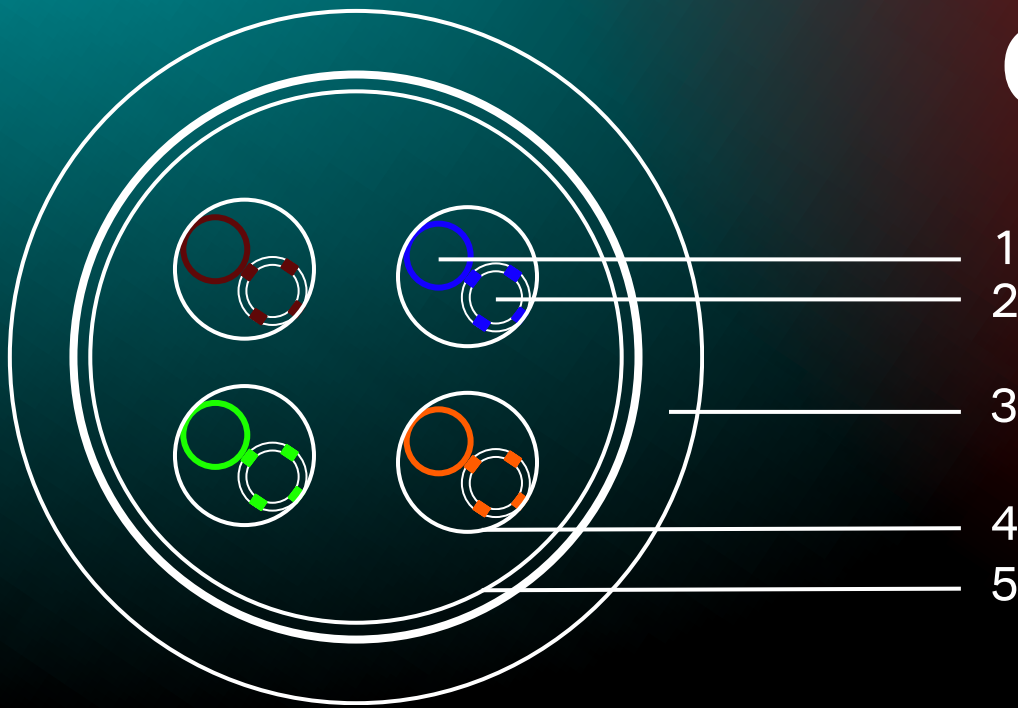
## CAT 6 SFTP CABLE APPLICATION

- IEEE 802.3: 1000BASE-T (Gigabit Ethernet), 100BASE-TX, 10BASE-T ANSI/TIA/EIA-854: 1000BASE-TX
  - 155 Mb/s, 1.2 Gb/s ATM
  - ANSI X3.263: 100 Mb/s
- IEEE 802.3af DTE Power (POE)
  - 4/16 Mb/s Token Ring
- Digital Video, Broadband and Baseband Analog Video

## STANDARD

ISO/IEC 11801:2002 Class E  
TIA/EIA 568-B.2-1, TIA/EIA 568-C, TIA/EIA 568-C.2 IEC61156-5, IEC 60332-1,  
60754-1, 60754-2, 61034-2 EN 50173-1, EN 50288-6-1

# CAT 6




## 1. CONDUCTOR

Material Stranded copper  
Sizes 24AWG (7x0.18mm)

## 2. INSULATION

Material Polyethylene  
Sizes  $0.85 \pm 0.05\text{mm}$

## 3. JACKET

Material PVC  
Diameter  $5.3 \pm 0.03\text{mm}$   
Colour 

## 4. FOIL

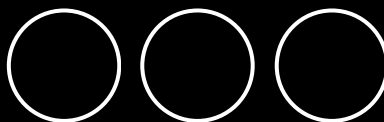
Material Aluminum

## 5. SHIELD

Material Tinned copper

# ELECTRICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Dielectric strength between conductors	DC, 1min (1kV)	kV
Impedance	110	$\Omega$
Operating frequency, maximum	250	MHz
Propagation delay	536	ns/100 m Max
Skew delay	45 ns	ns/100 m Max
Mutual capacitance	5.6	no Max./100m
Conductor	6.65	$\Omega$ Max./100m
Normal Velocity of Propagation NVP	69	%
TVL	30-10	log (f/100) dB
Insulation resistance	$\geq 5000$	M $\Omega$ .km
DC resistance unbalance	3	%



## MECHANICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Minimum bend radius during installation	8x outside dia	mm
Minimum bend radius after installation	4x outside dia	
Installation temp.	-10 to + 50	°C
Operating temp.	-25 to + 60	
Storage temp.	-25 to + 70	

## INSTALLATION CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Maximum pulling tension	90	N
Minimum bend radius during installation	55	mm
Minimum installed bend radius	27	mm
Normal weight	40	kg/km

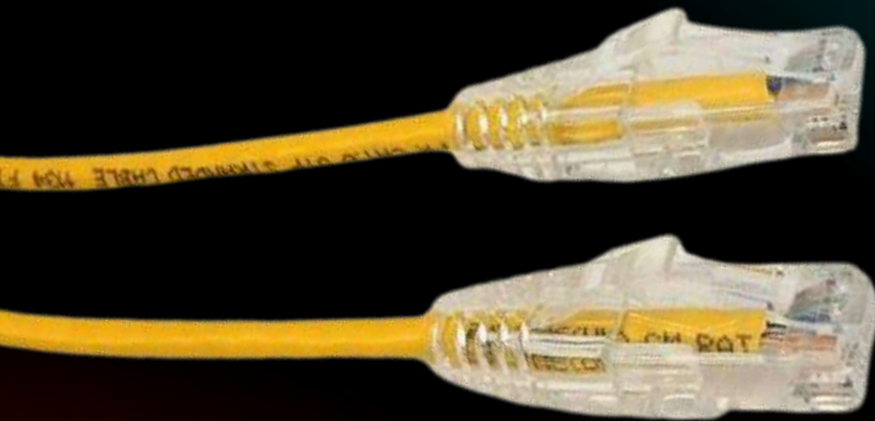




# ABOUT



Category 6 is an Ethernet cable standard defined by the Electronic Industries Association and Telecommunications Industry Association. Cat 6 is the sixth generation of twisted pair Ethernet cabling that is used in home and business networks.



## CAT 6 SLIM CABLE APPLICATION

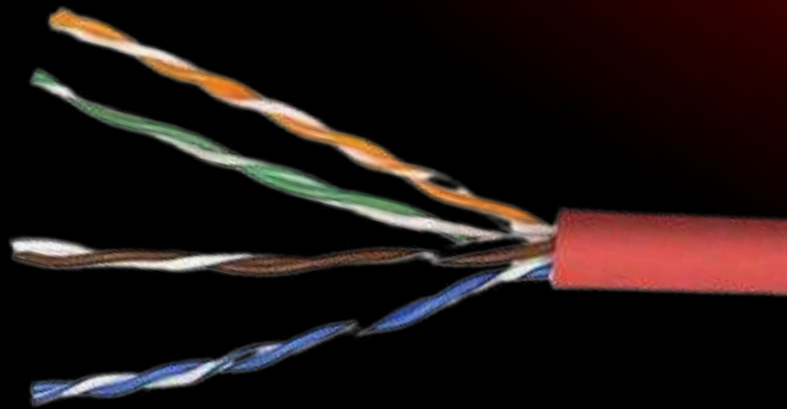
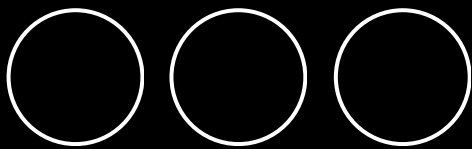
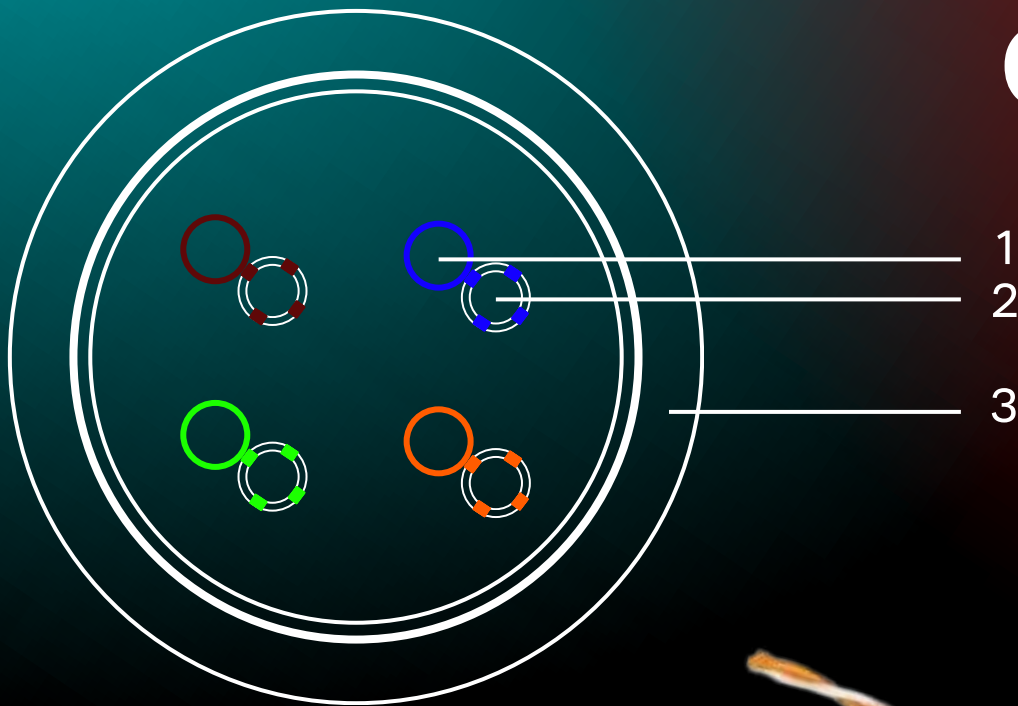
- IEEE 802.3: 1000BASE-T (Gigabit Ethernet), 100BASE-TX, 10BASE-T ANSI/TIA/EIA-854: 1000BASE-TX
  - 155 Mb/s, 1.2 Gb/s ATM
  - ANSI X3.263: 100 Mb/s
- IEEE 802.3af DTE Power (POE)
  - 4/16 Mb/s Token Ring
- Digital Video, Broadband and Baseband Analog Video

## STANDARD

ISO/IEC 11801:2002 Class E

TIA/EIA 568-B.2-1, TIA/EIA 568-C, TIA/EIA 568-C.2 IEC61156-5, IEC 60332-1, 60754-1, 60754-2, 61034-2 EN 50173-1, EN 50288-6-1

# CAT 6



## 1. CONDUCTOR

**Material** Stranded copper  
**Sizes** 28AWG  
(7X0.12mm (±0.01mm))

## 2. INSULATION

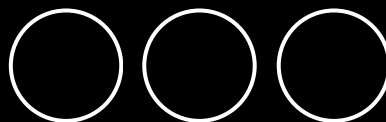
**Material** Polyethylene  
**Sizes** 0.55 ± 0.05mm

## 3. JACKET

**Material** PVC  
**Diameter** 3.8 ± 0.02 mm  
**Colour** 

# ELECTRICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Dielectric strength between conductors	DC, 1min (1kV)	kV
Impedance	220	$\Omega$
Operating frequency, maximum	250	MHz
Propagation delay	536	ns/100 m Max
Skew delay	45 ns	ns/100 m Max
Mutual capacitance	5.6	no Max./100m
Conductor	6.65	$\Omega$ Max./100m
Normal Velocity of Propagation NVP	65	%
TVL	30-10	log (f/100) dB
Insulation resistance	$\geq 5000$	M $\Omega$ .km
DC resistance unbalance	3	%



## MECHANICAL CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Minimum bend radius during installation	8x outside dia	mm
Minimum bend radius after installation	4x outside dia	
Installation temp.	-10 to + 50	°C
Operating temp.	-25 to + 60	
Storage temp.	-25 to + 70	

## INSTALLATION CHARACTERISTICS

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Maximum pulling tension	90	N
Minimum bend radius during installation	55	mm
Minimum installed bend radius	27	mm
Normal weight	18	kg/km





# ABOUT

The Category 6 Augmented cable standard, or Cat 6a, was created to further improve the performance of Cat 6 Ethernet cables



# CAT 6A STRANDED CABLE APPLICATION

- Supports category 6A (Class EA) networks running up to 500MHz applications
- Horizontal and backbone in structured cabling installations

# STANDARD

ANSI/TIA-568-C.2

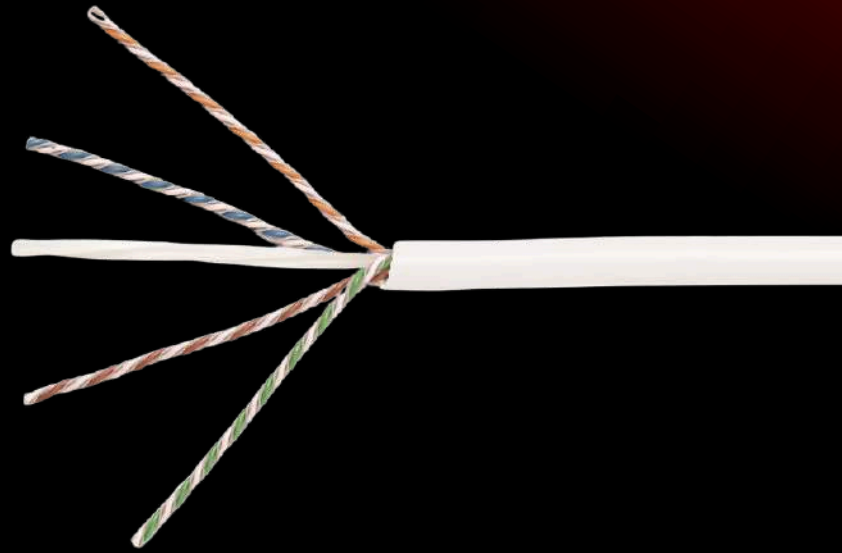
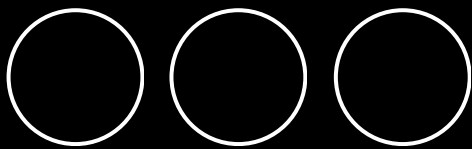
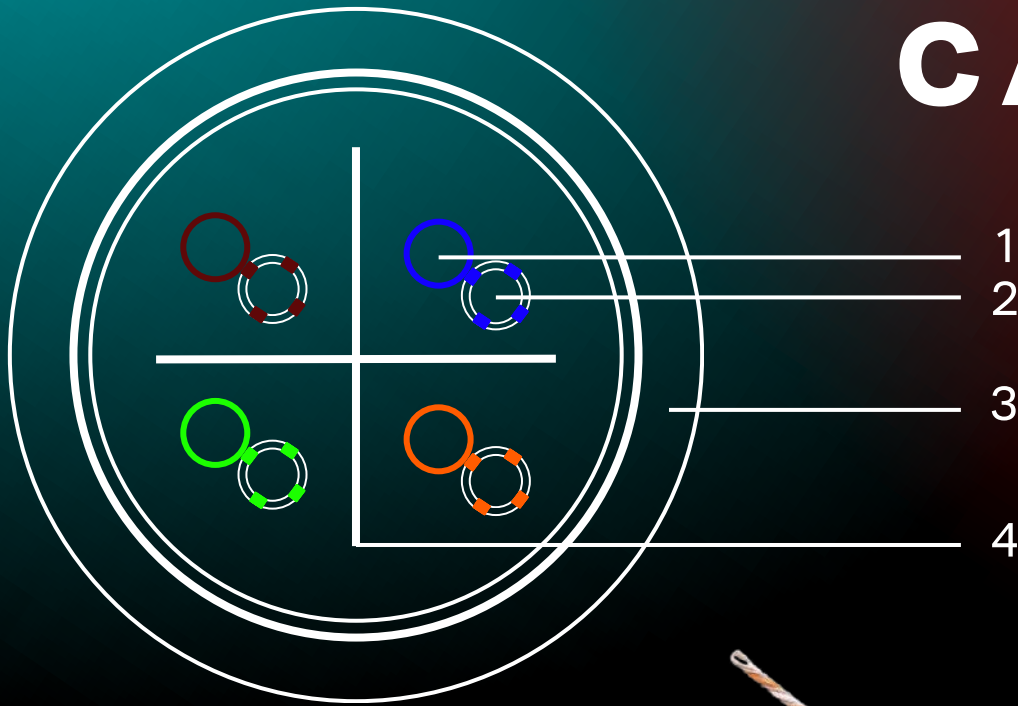
ISO 11801

IEC 60603-7

ETL Verified



# CAT 6A



## 1. CONDUCTOR

**Material** Stranded copper  
**Sizes** 24AWG (7X0.2mm (±0.01mm))

## 2. INSULATION

**Material** Polyethylene  
**Sizes** 1.0 ± 0.05mm

## 3. JACKET

**Material** PVC  
**Diameter** 6.0 ± 0.03mm  
**Colour**

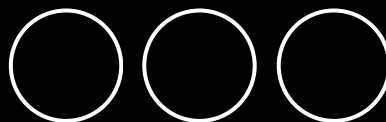
## 4. CROSS SEPARATOR

**Material** HDPE  
**Colour** White

# ELECTRICAL CHARACTERISTICS

# CAT 6A

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
D.C. resistance conductor	< 9.38	$\Omega$ /100m
Resistance unbalance: within a pair / between pairs	<=3	%
Capacitance unbalance pair to ground	< 3,300	pF/km
Delay skew (differential delay)	<= 45	ns/100m
Nominal velocity of propagation (for information only)	68	%
Propagation Delay (Nominal)	533	ns/100m at 500MHz
Test Voltage (d.c for 1 minute) Conductor / Conductor	1000V	VDC
Insulation Resistance (100~500V D.C)	>= 5000	M $\Omega$ /km
DC resistance unbalance	3	%

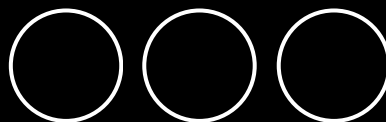


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU

# MECHANICAL CHARACTERISTICS

# CAT 6A

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Bulk Cable Weight	40	Kg/Km
Max. Pull Tension	100	N
Min. Bend Radius (installation)	8x	OD
Min. Bend Radius (installed)	4x	OD
Cold Bend	No Crack	@-20 C x 4hrs
Storage Temp.	-25 to + 70	°C
Operation Temp.	-25 to + 60	
Installation Temp.	-10 to + 50	

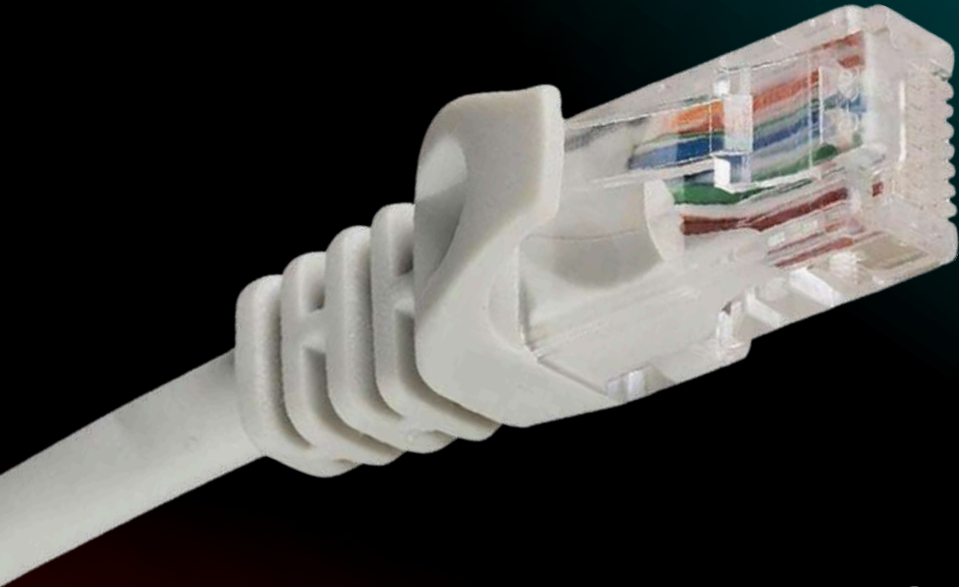


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU



# ABOUT

The Category 6 Augmented cable standard, or Cat 6a, was created to further improve the performance of Cat 6 Ethernet cables



# CAT 6A SOLID CABLE APPLICATION

- Supports category 6A (Class EA) networks running up to 500MHz applications
- Horizontal and backbone in structured cabling installations

# STANDARD

ANSI/TIA-568-C.2

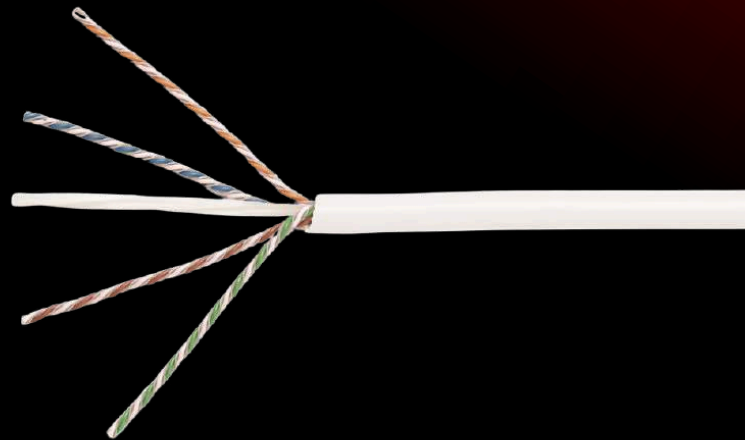
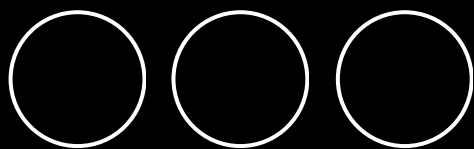
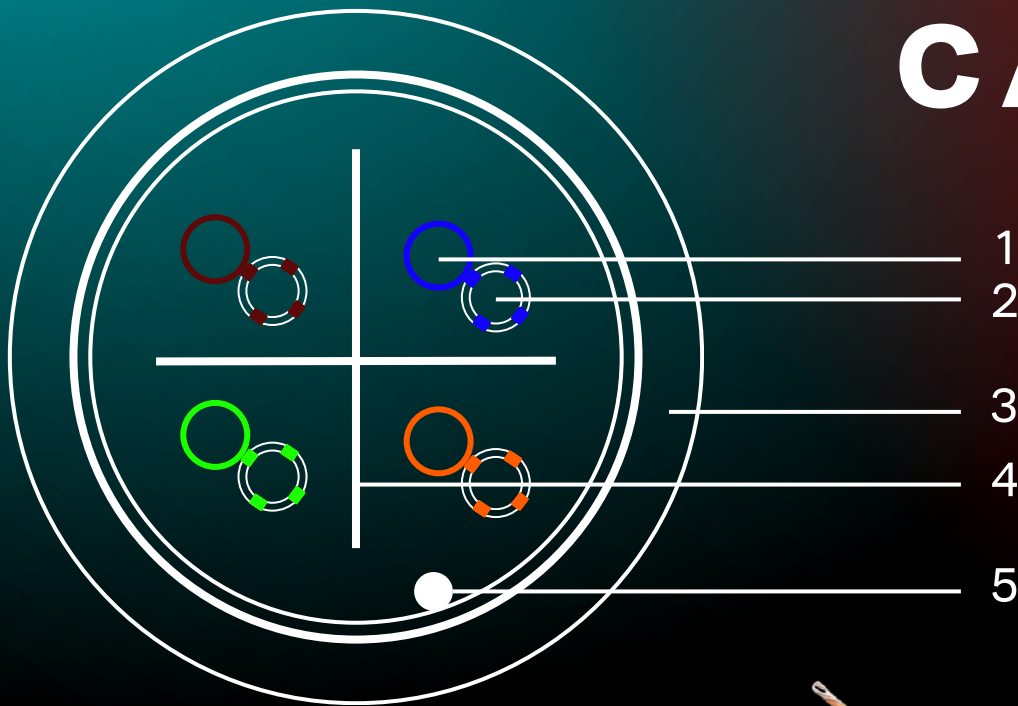
ISO 11801

IEC 60603-7

ETL Verified



# CAT 6A




## 1. CONDUCTOR

Material Solid copper  
Sizes 24AWG (0.55mm)

## 2. INSULATION

Material HDPE  
Sizes  $1.0 \pm 0.05$ mm

## 3. JACKET

Material PVC  
Diameter  $6.5 \pm 0.03$ mm  
Colour 

## 4. CROSS SEPARATOR

Material HDPE  
Colour White

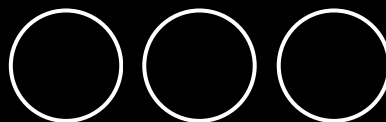
## 5. RIPCORD

Material Polyethylene

# ELECTRICAL CHARACTERISTICS

# CAT 6A

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
D.C. resistance conductor	< 9.38	$\Omega$ /100m
Resistance unbalance: within a pair / between pairs	<=3	%
Capacitance unbalance pair to ground	< 3,300	pF/km
Delay skew (differential delay)	<= 45	ns/100m
Nominal velocity of propagation (for information only)	68	%
Propagation Delay (Nominal)	533	ns/100m at 500MHz
Test Voltage (d.c for 1 minute) Conductor / Conductor	1000V	VDC
Insulation Resistance (100~500V D.C)	>= 5000	M $\Omega$ /km

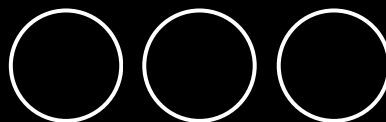


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU

# MECHANICAL CHARACTERISTICS

# CAT 6A

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Bulk Cable Weight	42	Kg/Km
Max. Pull Tension	100	N
Min. Bend Radius (installation)	8x	OD
Min. Bend Radius (installed)	4x	OD
Cold Bend	No Crack	@-20 C x 4hrs
Storage Temp.	-25 to + 70	°C
Operation Temp.	-25 to + 60	
Installation Temp.	-10 to + 50	

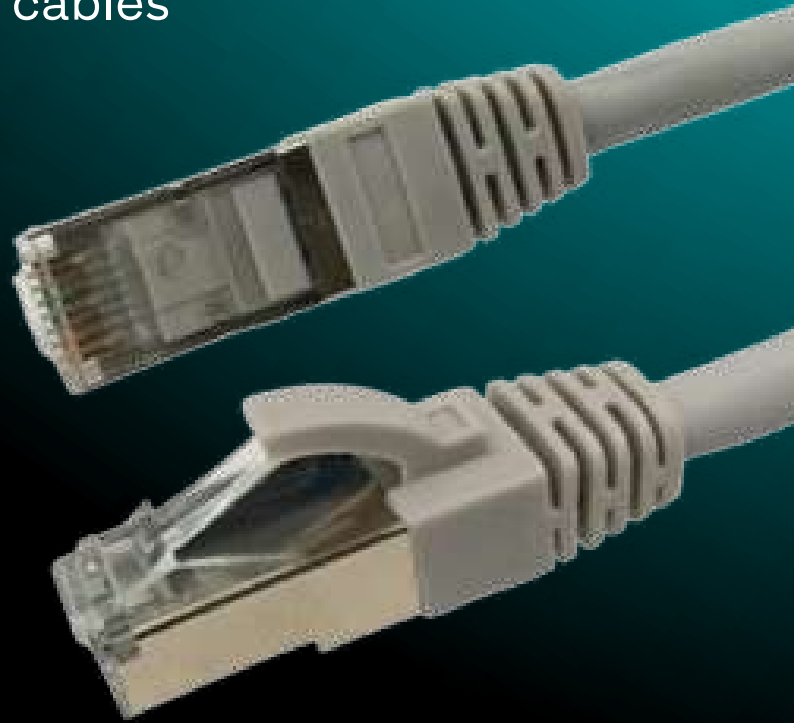


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU



# ABOUT

The Category 6 Augmented cable standard, or Cat 6a, was created to further improve the performance of Cat 6 Ethernet cables



# CAT 6A SFTP CABLE

# APPLICATION

- Supports category 6A (Class EA) networks running up to 500MHz applications
- Horizontal and backbone in structured cabling installations

# STANDARD

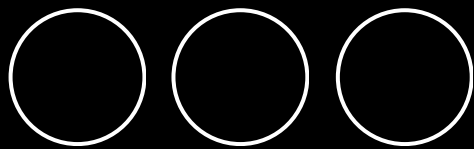
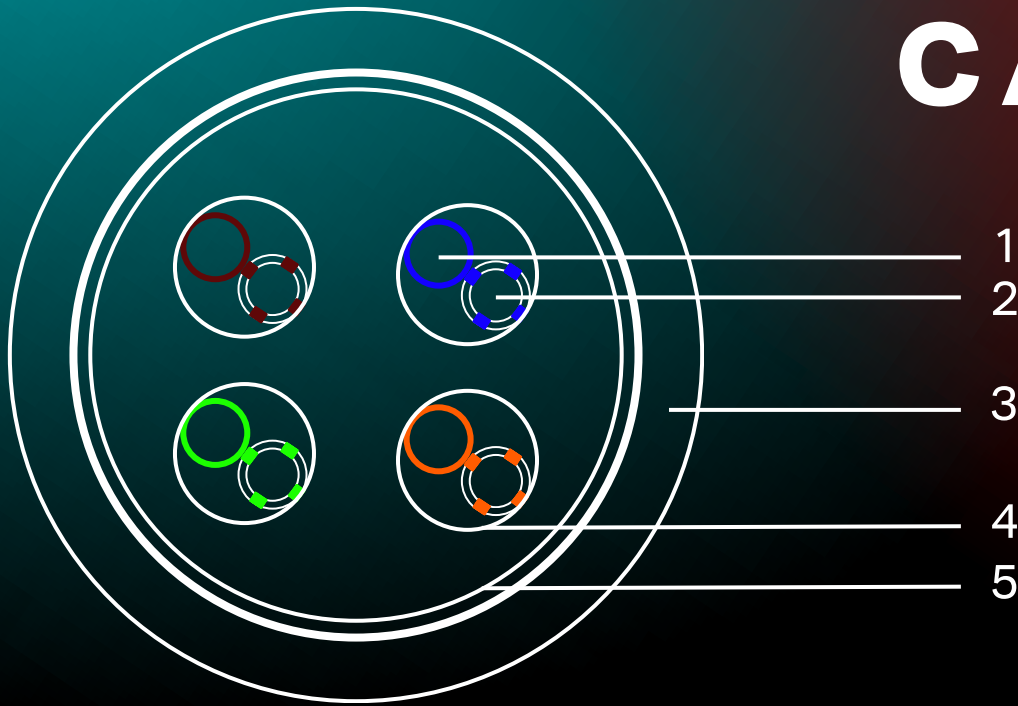
ANSI/TIA-568-C.2

ISO 11801

IEC 60603-7

ETL Verified

# CAT 6A



## 1. CONDUCTOR

**Material** Stranded copper  
**Sizes** 26AWG  
(7X0.16mm (±0.01mm))

## 2. INSULATION

**Material** FPE  
**Sizes** 1.0 ± 0.05 mm

## 3. JACKET

**Material** PVC  
**Diameter** 6.5 ± 0.03mm  
**Colour** 

## 4. FOIL

**Material** Aluminum

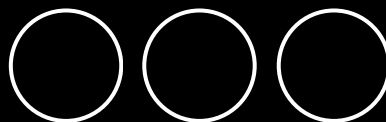
## 5. SHIELD

**Material** Tinned copper

# ELECTRICAL CHARACTERISTICS

# CAT 6A

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
D.C. resistance conductor	< 9.38	$\Omega$ /100m
Resistance unbalance: within a pair / between pairs	<=3	%
Capacitance unbalance pair to ground	< 3,300	pF/km
Delay skew (differential delay)	<= 45	ns/100m
Nominal velocity of propagation (for information only)	68	%
Propagation Delay (Nominal)	533	ns/100m at 500MHz
Test Voltage (d.c for 1 minute) Conductor / Conductor	1000V	VDC
Insulation Resistance (100~500V D.C)	>= 5000	M $\Omega$ /km

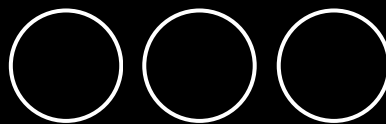


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU

# MECHANICAL CHARACTERISTICS

# CAT 6A

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Bulk Cable Weight	42	Kg/Km
Max. Pull Tension	100	N
Min. Bend Radius (installation)	8x	OD
Min. Bend Radius (installed)	4x	OD
Cold Bend	No Crack	@-20 C x 4hrs
Storage Temp.	-25 to + 70	°C
Operation Temp.	-25 to + 60	
Installation Temp.	-10 to + 50	

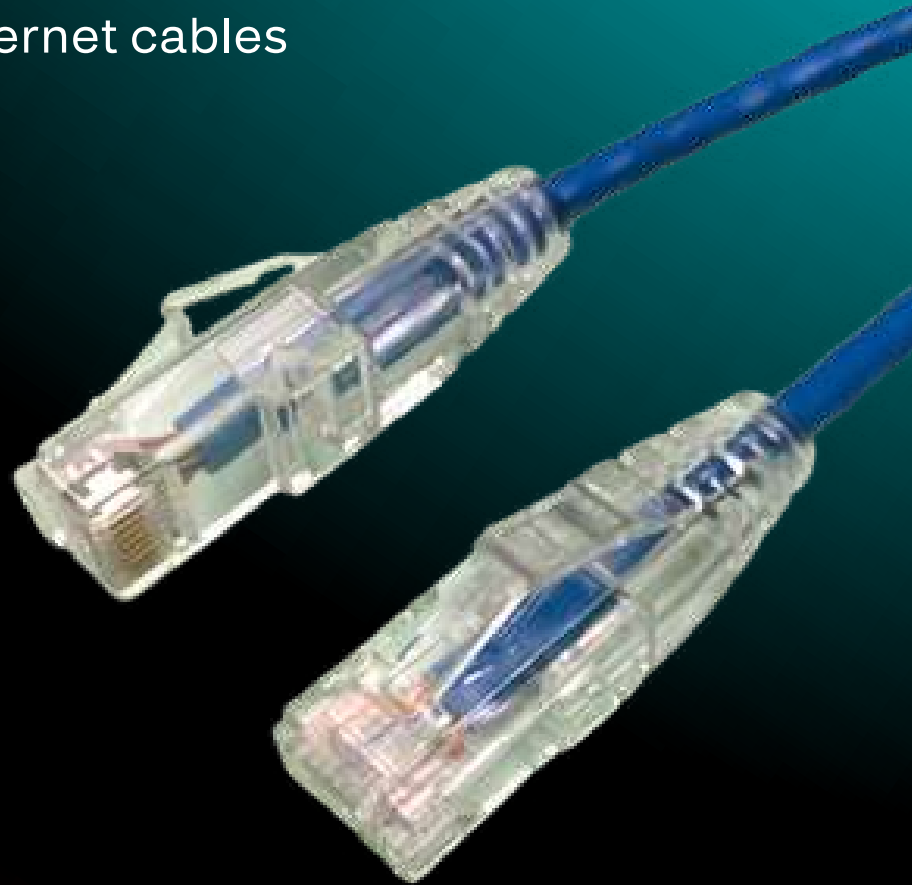


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU



# ABOUT

The Category 6 Augmented cable standard, or Cat 6a, was created to further improve the performance of Cat 6 Ethernet cables



# CAT 6A SLIM CABLE

# APPLICATION

- Supports category 6A (Class EA) networks running up to 500MHz applications
- Horizontal and backbone in structured cabling installations

# STANDARD

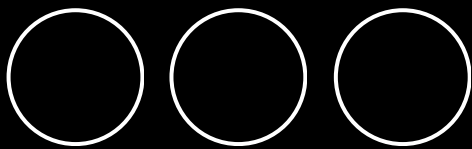
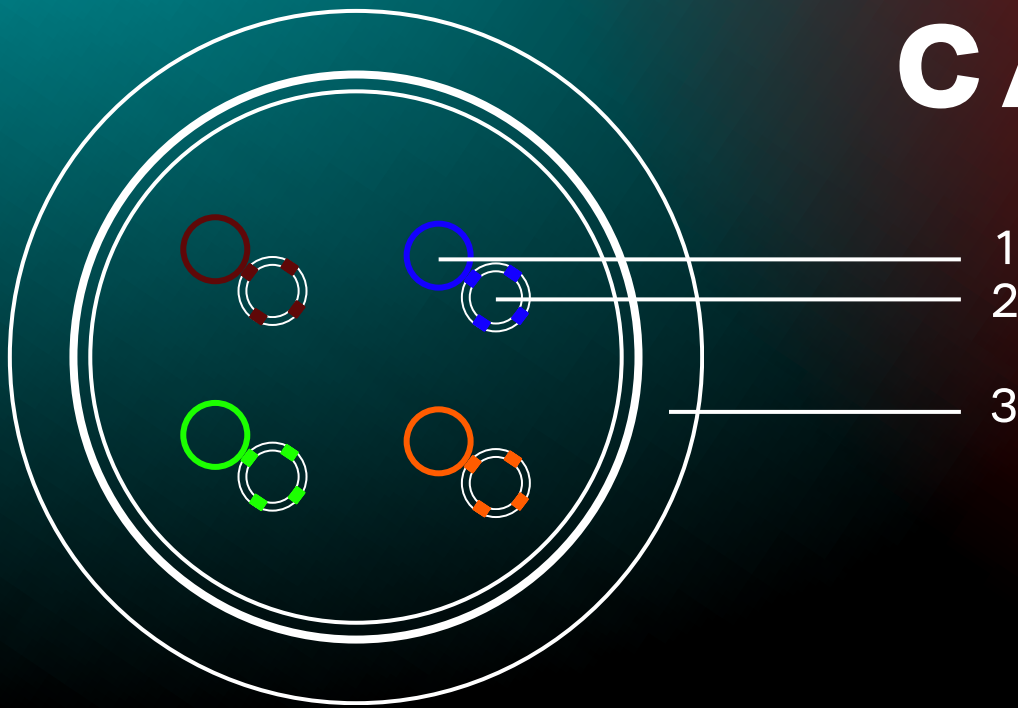
ANSI/TIA-568-C.2

ISO 11801

IEC 60603-7

ETL Verified

# CAT 6A




## 1. CONDUCTOR

**Material** Stranded copper  
**Sizes** 28 AWG  
(7x0.12mm(±0.01mm))

## 2. INSULATION

**Material** HDPE  
**Sizes** 0.6 ± 0.05mm

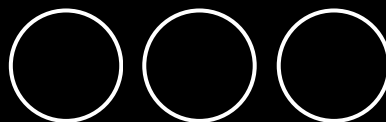
## 3. JACKET

**Material** PVC  
**Thickness** 0.55±0.03 mm  
**OD** 3.8mm  
**Colour** 

# ELECTRICAL CHARACTERISTICS

# CAT 6A

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
D.C. resistance conductor	< 22	$\Omega$ /100m
Resistance unbalance: within a pair / between pairs	<=3	%
Capacitance unbalance pair to ground	< 3,300	pF/km
Delay skew (differential delay)	<= 45	ns/100m
Nominal velocity of propagation (for information only)	65	%
Propagation Delay (Nominal)	533	ns/100m at 500MHz
Test Voltage (d.c for 1 minute) Conductor / Conductor	1000V	VDC
Insulation Resistance (100~500V D.C)	>= 5000	M $\Omega$ /km

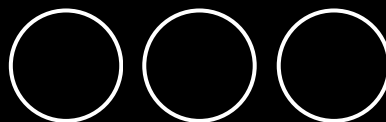


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU

# MECHANICAL CHARACTERISTICS

# CAT 6A

LOW FREQUENCY AND D.C (AT 20 C)	SPECIFICATION	UNIT
Bulk Cable Weight	19	Kg/Km
Max. Pull Tension	100	N
Min. Bend Radius (installation)	8x	OD
Min. Bend Radius (installed)	4x	OD
Cold Bend	No Crack	@-20 C x 4hrs
Storage Temp.	-25 to + 70	°C
Operation Temp.	-25 to + 60	
Installation Temp.	-10 to + 50	



**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU

45

# FIBER OPTIC PRODUCTS



**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU

# FIBER OPTIC CABLE

**CONNECTOR TYPE** SC / ST / LC / FC

**MODE** 9/125UM - 62.5/125UM  
- 50/125UM

**POLISH** UPC OR APC

**WAVELENGTH** 1310/1550NM | 850/1300NM  
FOR MULTIMODE

**LENGTH** 1M-15M OR CUSTOMIZED

**FIBER TYPE** SIMPLEX OR DUPLEX

**INSERTION LOSS TYPICAL**  $\leq 0.2\text{DB}$

**RETURN LOSS** SMF: UPC  $\geq 50\text{DB}$ , APC  $\geq 60\text{DB}$   
(LC/SC/ST/FC)  
MMF: UPC  $\geq 30\text{DB}$  (LC/SC/ST/FC)

**INTERCHANGEABILITY**  $\leq 0.2\text{DB}$

**VIBRATION**  $\leq 0.2\text{DB}$

**JACKET MATERIAL** PVC/ LSZH / OFNR

**JACKET COLOR** ● ● ● ● ● ● ● ●

**CABLE OD** STANDARD 0.9 / 2.0 / 3.0MM



**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU



# ABOUT

Fiber optic pigtail is a fiber optic cable terminated with a factory-installed connector on one end, leaving the other end terminated. Hence the connector side can be linked to equipment and the other side melted with optical fiber cables. High-quality pigtail cables offer the best performance possible for fiber optic cable terminations.



# PIGTAIL PRODUCTS

# APPLICATION

- Fiber optic pigtail are utilized to terminate fiber optic cables via fusion or mechanical splicing.
- Fiber optic pigtails are usually found in fiber optic management equipment like ODF, fiber terminal box and distribution box.

# STANDARD

ANSI/TIA/EIA 568-C.3

ISO/IEC 11801

IEC 60332 - 1

RoHS Compliance: Directive 2002/95/EC

# PIGTAILS

**CONNECTOR TYPE** SC / ST / LC / FC

**FIBER TYPE** OS2 (9/125UM)  
OM1 (62.5/125UM)  
OM2, OM3, OM4 (50/125UM)

**NUMBER OF FIBERS** 1F TIGHT JACKETED (SX)

**CABLE DIAMETER (MM)**  $0.9 \pm 0.05$

**JACKET COLOR** ●●●●● CUSTOM

**JACKET MATERIAL** LSZH

**CONNECTOR COLOR** ● UPC ● APC ● MULTI MODE ● ST, FC

**BEND RADIUS (MIN)** 10D

**CRUSH RESISTANCE** 10N/100MM

**VIBRATION**  $\leq 0.2\text{DB}$

**CONNECTOR CABLE RETENTION** 3N (0.67 LBS)

**CONNECTOR FERRULE** CERAMIC

**CONNECTOR REPEATABILITY**  $\leq 0.2\text{DB}$  (1000 TIMES MATING CYCLE)

**COATING STRIP FORCE**  $\leq 13.3\text{N}$

**STORAGE/INSTALLATION/OPERATING TEMPERATURE**  $-20^{\circ}\text{C}$  TO  $70^{\circ}\text{C}$



# PIGTAILS



PIGTAIL APC

PIGTAIL UPC



SC/ LC/FC/ ST

SC/ LC/FC/ ST



APC Singlemode  
9/125 um

UPC Singlemode  
9/125 um



LSZH

LSZH



PIGTAIL OM1

PIGTAIL OM2



SC/ LC/FC/ ST

SC/ LC/FC/ ST



OM1 Multimode  
62.5/125 um

OM2 Multimode  
50/125 um



LSZH

LSZH



PIGTAIL OM3

PIGTAIL OM4



SC/ LC/FC/ ST

SC/ LC/FC/ ST



OM3 Multimode  
50/125 um

OM4 Multimode  
50/125 um



LSZH

LSZH



# PIGTAILS

## PIGTAIL MULTICOLOR

**CONNECTOR TYPE** SC / ST / LC / FC / MTRJ / MU

**FIBER TYPE** OS2 (9/125UM)  
OM1 (62.5/125UM)  
OM2, OM3, OM4 (50/125UM)

**BUFFER** TIGHT-BUFFER, SEMI-TIGHT BUFFER  
OR EASY STRIP/LOOSE TUBE

**CABLE DIAMETER (MM)** 0.9 ± 0.05, 2.0MM, 3.0MM,  
CUSTOMIZED

**JACKET COLOR** AVAILABLE IN 6 OR 12 COLOR BUNDLES

**JACKET MATERIAL** LSZH

**CONNECTOR COLOR**  UPC  APC  MULTI MODE  ST, FC

**BOOTS** SEVERAL BOOT COLORS AND LENGTH

**DUSTCAP** SEVERAL DUSTCAP COLOR AND SHAPE

**VIBRATION** ≤ 0.2DB

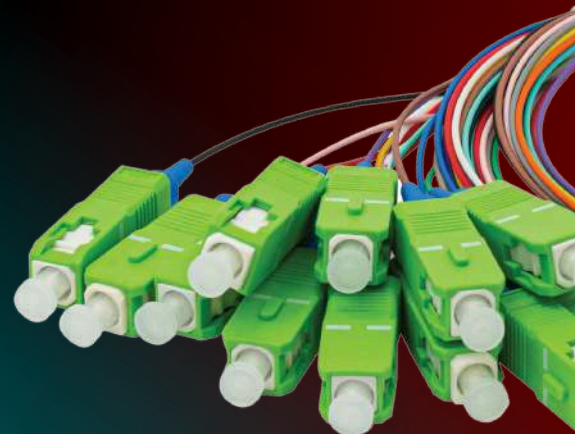
**CONNECTOR CABLE RETENTION** 3N (0.67 LBS)

**CONNECTOR FERRULE** CERAMIC

**CONNECTOR REPEATABILITY** ≤ 0.2DB (1000 TIMES  
MATING CYCLE)

**COATING STRIP FORCE** ≤ 13.3N

**STORAGE/INSTALLATION/  
OPERATING TEMPERATURE** -20°C TO 70°C





# ABOUT

Fiber optic patch cord refers to the connecting cables used to connect fiber optic equipment in fiber optic communication systems. It is composed of fiber optic cable and fiber connector that fixed at both ends of optical cable. Customers feel that our fiber optic patch cord is a good product with excellent performance, to prove that our quality of fiber optic patch cord is trustworthy.

# PATCHCORD PRODUCTS

# APPLICATION

Widely used in various fields such as fiber optic communication systems, fiber optic access networks, fiber optic data transmission, CATV, and local area networks

# STANDARD

ANSI/TIA/EIA 568-C.3

ISO/IEC 11801

IEC 60332 - 1

RoHS Compliance: Directive 2002/95/EC



# PATCHCORD

**CONNECTOR TYPE** SC / LC / FC / ST (END A) | SC / LC / FC / ST (END B)

**FIBER TYPE** OS2 G652D, G657A1, G657A2, G657B3  
OM1, OM2, OM3, OM4

**NUMBER OF FIBERS** 1F TIGHT JACKETED (SX),  
2F ZIPCORD JACKETED (DX)

**BUFFER DIAMETER (MM)**  $0.9 \pm 0.05$

**CABLE DIAMETER (MM)**  $2.0 \pm 0.2$  (SX),  $2.0 \times 3.8 \pm 0.2$  (DX)

**CABLE THICKNESS (MM)**  $0.35 \pm 0.05$

**JACKET COLOR** CUSTOMIZED

**JACKET MATERIAL** LSZH/OFNR

**CONNECTOR COLOR** ● UPC ● APC ● MULTI MODE ● ST, FC

**BEND RADIUS (MIN)** 20D

**CRUSH RESISTANCE** 10N/100MM

**CONNECTOR CABLE RETENTION** 50N (11.24 LBS)

**CONNECTOR FERRULE** CERAMIC

**CONNECTOR REPEATABILITY**  $\leq 0.2\text{DB}$  (1000 TIMES MATING CYCLE)

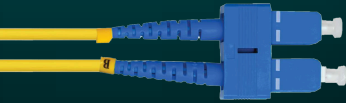
**STORAGE/INSTALLATION/OPERATING TEMPERATURE**  $-20^{\circ}\text{C}$  TO  $70^{\circ}\text{C}$



# PATCHCORD



PATCHCORD UPC



SC/ LC/  
FC/ ST



UPC DX  
9/125  $\mu\text{m}$



LSZH

PATCHCORD APC



SC/ LC/  
FC/ ST



APC DX  
9/125  $\mu\text{m}$



LSZH



PATCHCORD OM1



SC/ LC/  
FC/ ST



OM1 DX  
62.5/125  $\mu\text{m}$



LSZH

PATCHCORD OM2



SC/ LC/  
FC/ ST



OM2 DX  
50/125  $\mu\text{m}$



LSZH



PATCHCORD OM3



SC/ LC/  
FC/ ST



OM3 DX  
50/125  $\mu\text{m}$



LSZH

PATCHCORD OM4



SC/ LC/  
FC/ ST



OM4 DX  
50/125  $\mu\text{m}$



LSZH





# CONNECTORS

MU/UPC CONNECTOR



MTRJ/UPC CONNECTOR

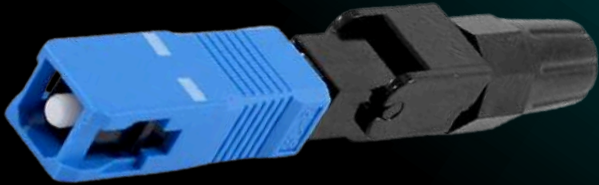


E2000/UPC CONNECTOR



# FAST CONNECTORS

SC UPC



## CONNECTOR TYPE

SC / LC / FC

## OTHER INFORMATION

NO EPOXY AND NO  
POLISHING REQUIRED  
PRE-POLISHED IN UPC  
AND APC

FC UPC



## DIAMETER

FOR PIGTAIL CABLE,  
PATCHCORD CABLE AND  
DROPCABLE: UPTO  
8.0MM DIAMETER

## INSERTION LOSS

SM  $\leq$  0.2DB, MM  $\leq$  0.3DB

LC APC



## RETURN LOSS

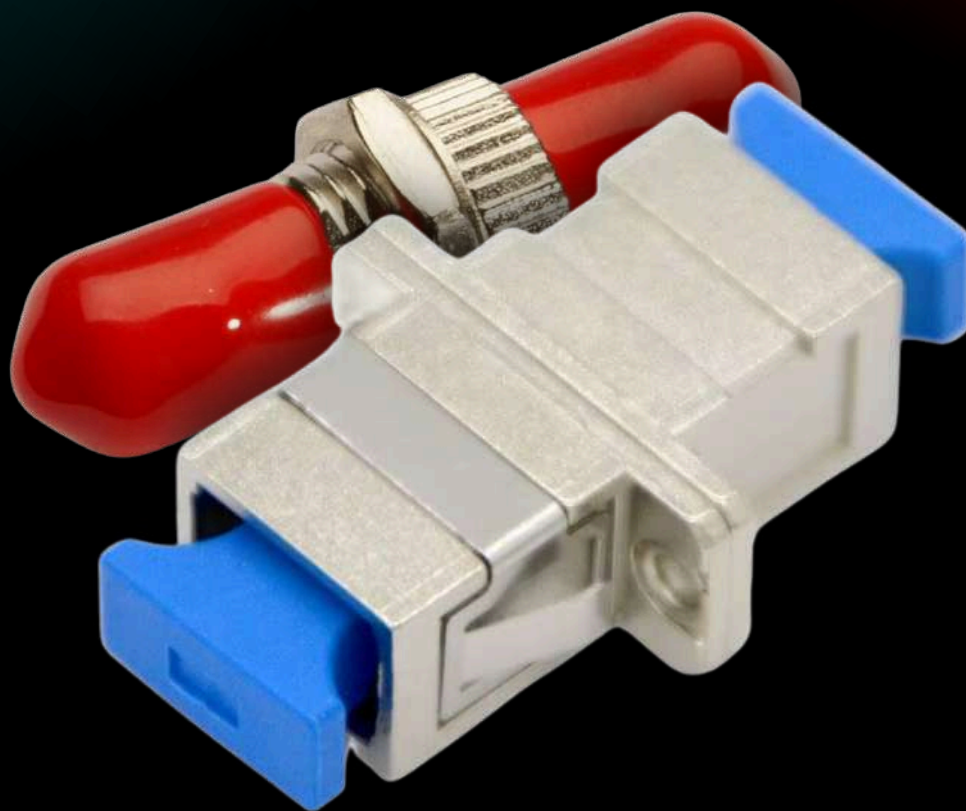
SM UPC  $\geq$  55.0 DB

SM APC  $\geq$  60.0 DB

MM  $\geq$  35.0DB

57

# ACCESSORIES

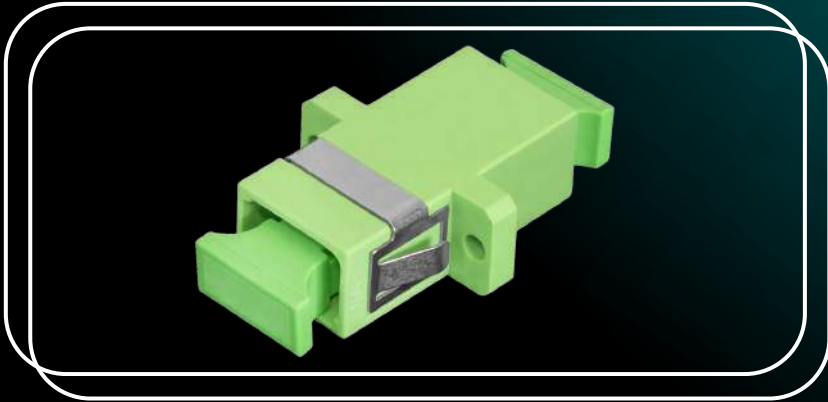


**VIETFIBER**  
CONNECTING THE FUTURE WITH YOU



# ADAPTER

SC APC SX ZIRCONIA WITH  
FLANGE GREEN T-CAP



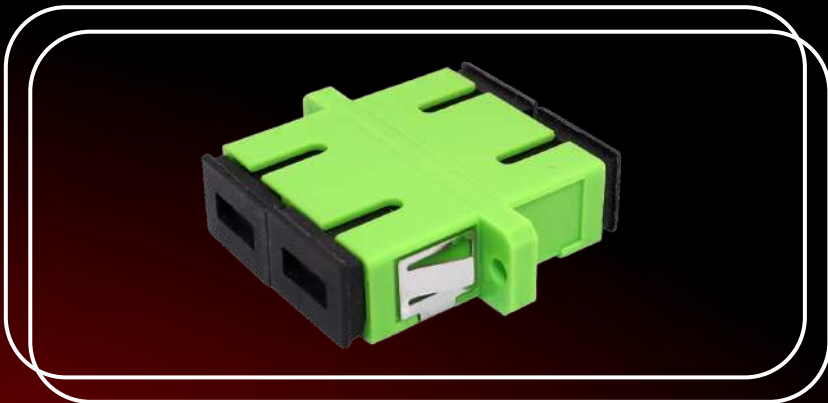
## TYPE

HYBRID TYPES  
FEMALE - FEMALE  
FEMALE - MALE

## MODE

SIMPLEX, DUPLEX,  
QUADRUPLX

SC APC DX ZIRCONIA WITH  
FLANGE BLACK FULL CAP



## MATERIAL

PLASTIC OR METAL

## FLANGE

WITH FLANGE OR  
WITHOUT FLANGE

## HOUSING COLOR

SEVERAL COLORS  
AVAILABLE

SC APC SX OUTERSHUTTERDOOR  
ZIRCONIA FLANGLSS WHITEGREEN



## DUST CAP COLOR

SEVERAL COLORS  
AVAILABLE

## INSERTION LOSS

< 0.2 DB

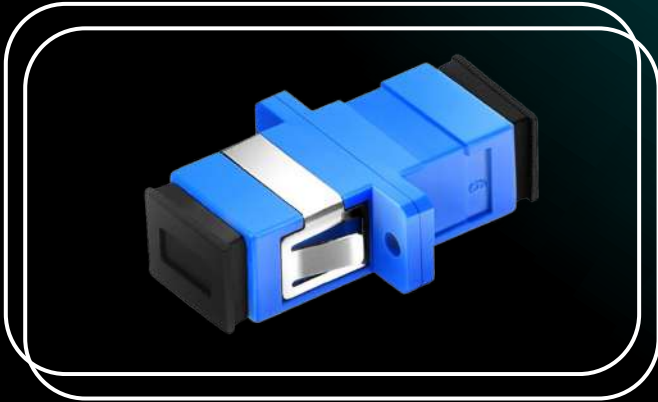
## DURABILITY

> 1000 MATINGS

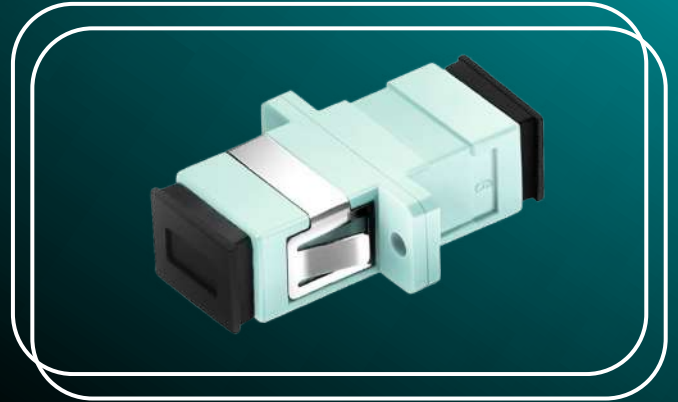


# ADAPTER

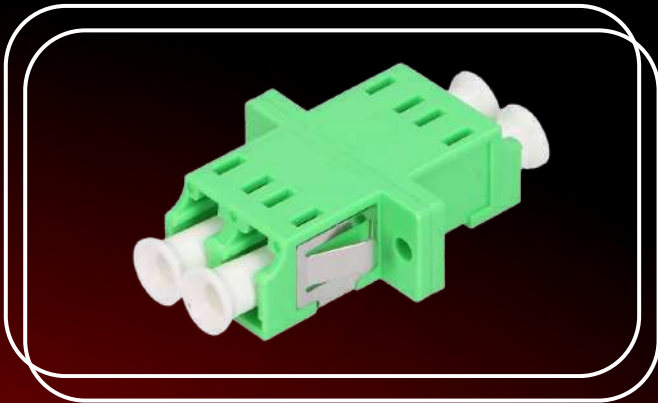
SC UPC SX ZIRCONIA WITH  
FLANGE BLACK FULL CAP



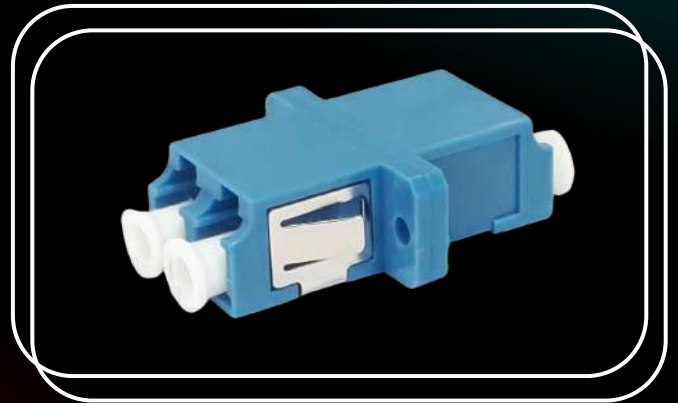
SC OM3 SX ZIRCONIA WITH  
FLANGE FULL-CAP AQUA



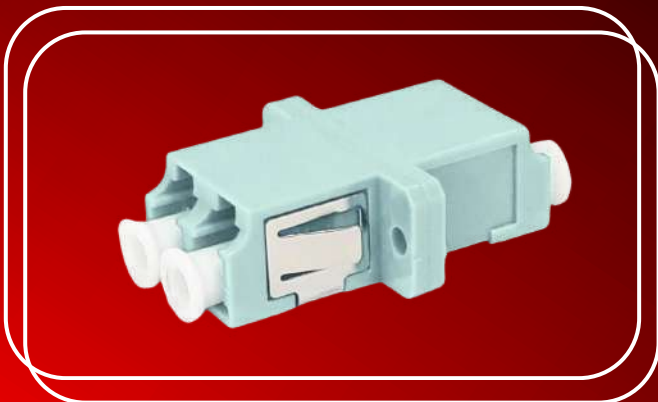
LC APC DX ZIRCONIA WITH  
FLANGE GREEN



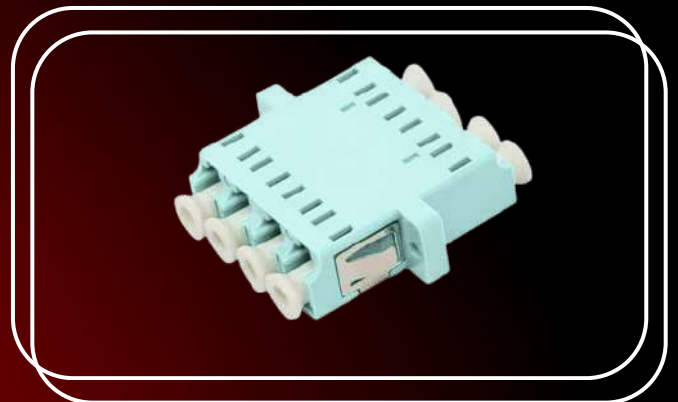
LC UPC DX ZIRCONIA WITH  
FLANGE BLUE



LC UPC OM3 DX ZIRCONIA  
WITH FLANGE AQUA



LC/UPC OM3 QUAD ZIRCONIA  
WITH FLANGE AQUA





# ADAPTER

FC/UPC SMALL D



FC/APC SX BIGD METAL PB GREEN



FC UPC SM SX SQUARE METAL ZIRCONIA RED BOOT



ST/UPC SM SX



ST/UPC MM SX



MPO/UPC-MPO/UPC SM BLACK



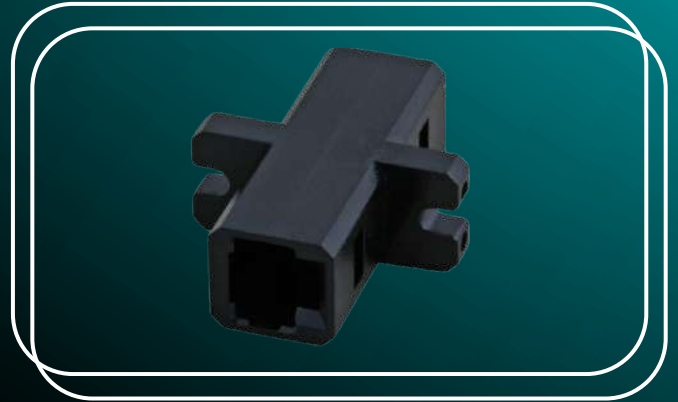


# ADAPTER

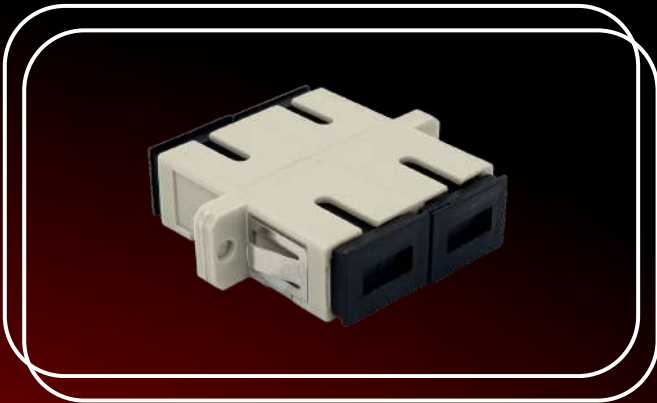
MU/UPC - MU/UPC SM



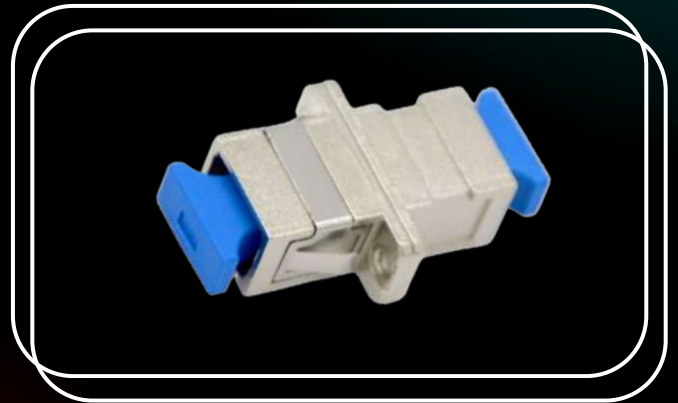
MTRJ/UPC - MTRJ/UPC SM  
BLACK



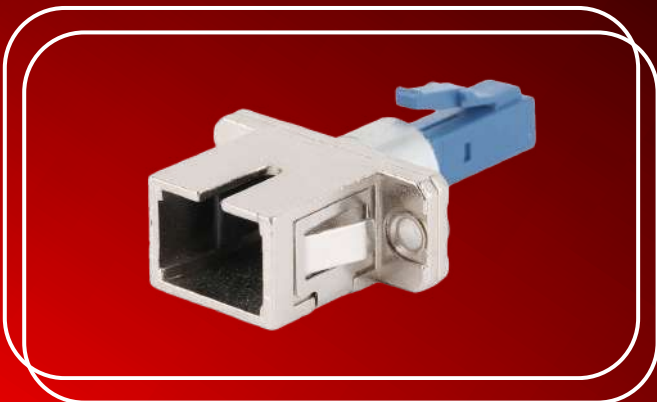
SC/UPC DX MM ZIRCONIA WITH  
FLANGE BLACK FULL CAP



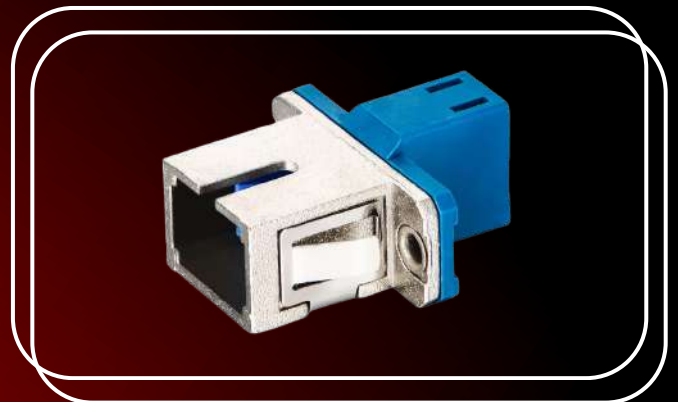
SC/UPC SX METAL ZIRCONIA  
WITH FLANGE BLUE T - CAP



SC UPC LC UPC SM SX  
FEMALE - MALE METAL



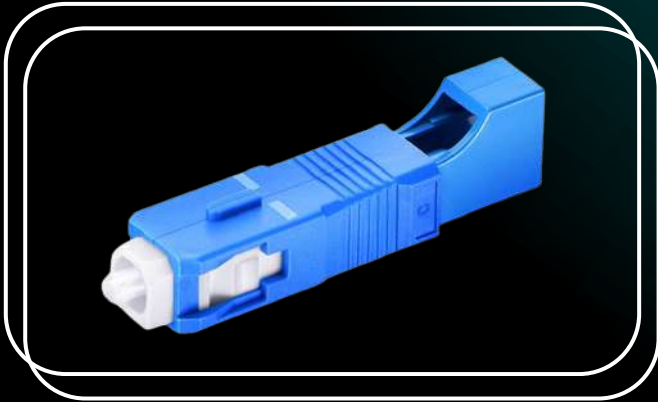
SC UPC - LC UPC SM SX  
FEMALE - FEMALE METAL



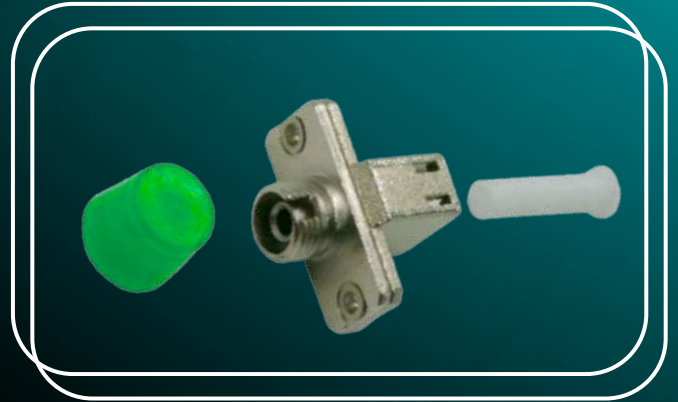


# ADAPTER

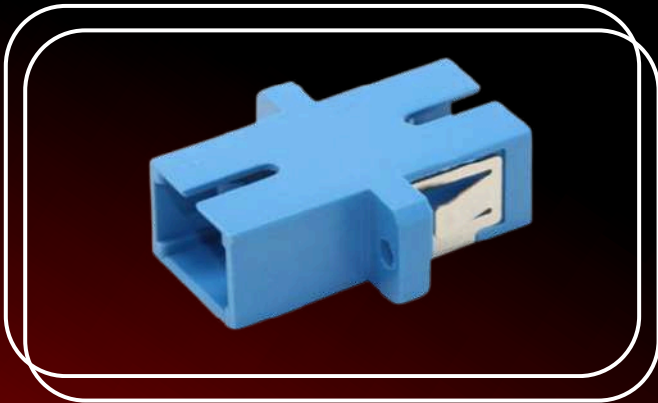
LC UPC - SC UPC SM SX  
FEMALE - MALE



LC UPC - FC APC SM SX  
FEMALE - FEMALE METAL



SC/UPC - SC/UPC SM SX  
FEMALE - FEMALE



SC/UPC - FC/UPC MM SX  
FEMALE - FEMALE



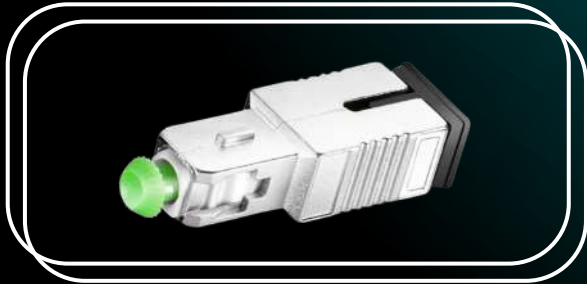
LC UPC - ST UPC SM SX  
FEMALE - FEMALE



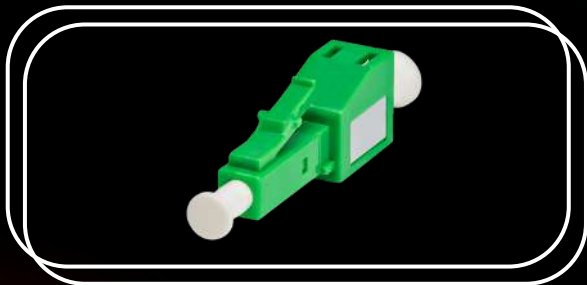


# ATTENUATOR

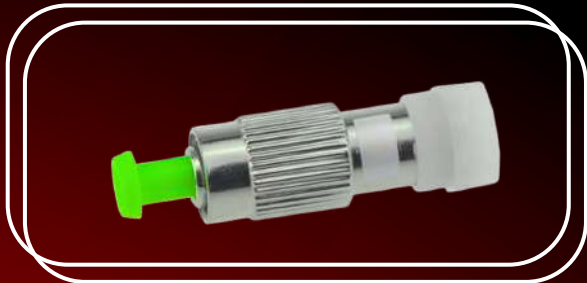
SC APC SM MALE - FEMALE  
5DB



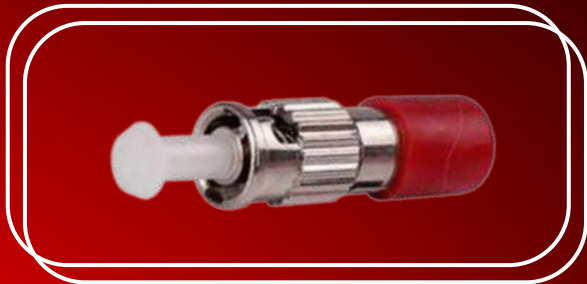
LC APC SM MALE - FEMALE  
5DB



FC APC, SM MALE - FEMALE  
5DB



ST UPC SM MALE - FEMALE  
5DB



## CONNECTOR

SC, LC, FC, ST, MU

## POLISHING TYPE

UPC OR APC

## FERRULE

2.5MM ZIRCONIA

CERAMIC FERRULE (SC)

1.25MM ZIRCONIA

CERAMIC FERRULE (LC)

## ATTENUATION

1-20DB

## CONNECTOR STYLE

METALIC

## ADAPTER STYLE

PLASTIC

## RETURN LOSS

SM UPC  $\geq$  50.0 DB

SM APC  $\geq$  60.0 DB

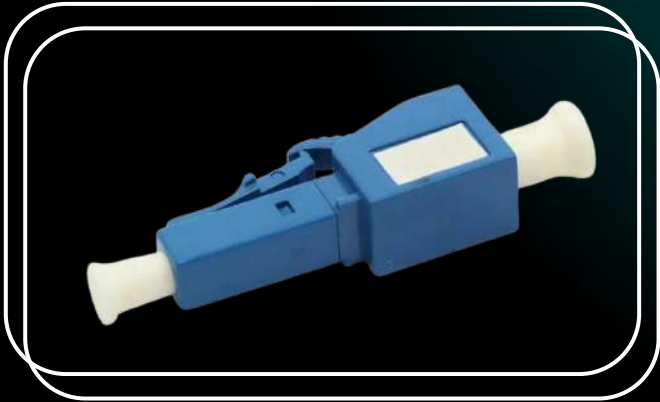
## DURABILITY

200 CYCLES



# ATTENUATOR

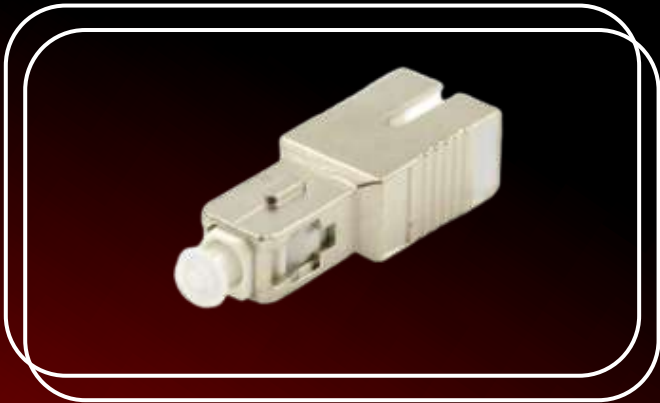
LC UPC SM MALE - FEMALE  
5DB



MU UPC SM MALE - FEMALE  
10DB



SC UPC SM MALE - FEMALE  
5DB



FC UPC SM MALE - FEMALE  
5DB



**VIETFIBER**

CONNECTING THE FUTURE WITH YOU

