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JACKSON COUNTY AIRPORT TERMINAL BUILDING

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27-2000 Communications O&M

Low Voltage System O&M

Project:

Jackson County Aiport
500 Sky Harbor Way,
Jefferson, GA

Twelve & Associates

Operations Manager: Brad Yeater

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Twelve & Associates, L.L.C.
Your lifesafety & security experts

Twelve Contacts for Projects

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Twelve and Associates Project Staff

Senior Engineer: John Jolley

Cell Phone: 678-591-3225

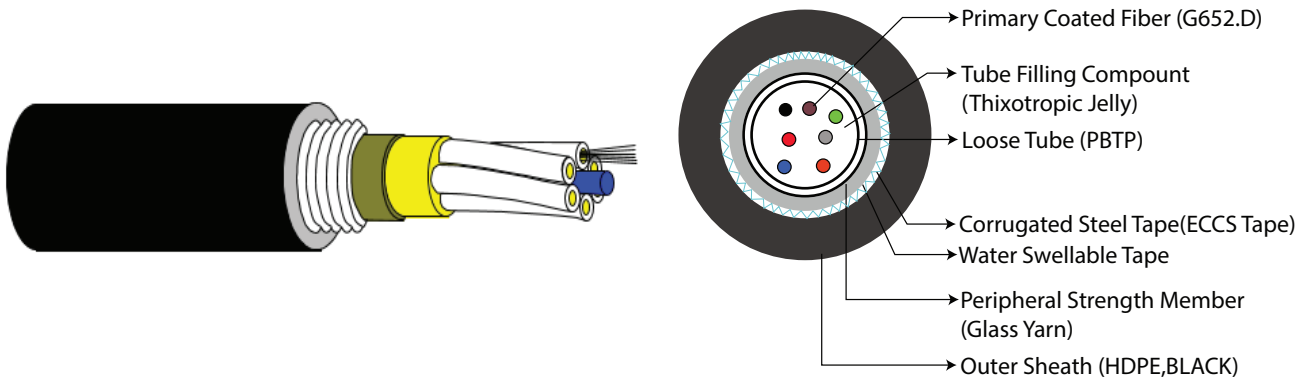
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FIBER OPTIC LOOSE TUBE GEL FILLED METALLIC ARMORED CABLE



DESCRIPTION

Datacom loose tube (Single Mode and Multi-Mode) design offers durable and reliable optical transmission performance over a broad temperature range. Optical fibers are placed inside gel-filled buffer tubes. The core is wrapped with flexible strength members covered with water-blocking tape. Corrugated steel armor is applied and then encased with a black jacket which provides superior crush resistance for direct burial applications and outdoor installation. Datacom Cable offers loose tube gel-filled water-blocking UV resistance central tube cable. There is no central strength member of central tube models.

Datacom Single Armoured Single Jacket OSP cables are available in fibre counts from 6 to 144 fibres as a “stranded loose tube” design. Fiber count 6 to 24 are in central loose tube design and from 48 to 144 core fibre models has multi-tube designs. Fiber strands are grouped in separate tubes, each tube shall have maximum of 6 fibres.

APPLICATION

- This cable can be used for outdoor data communications connections including CATV, WAP, CCTV, telecom trunk and access lines.
- These cables are armoured for direct burial and conditions with risk of severe rodent attacks.
- This type of cable can be used as distribution and feeder cables for FTTH Projects
- Local loop, metro, long-haul and broadband network.

FEATURES

- Gel-filled tube and water-blocking tape :
- Blocks water from entering the cable and damaging the optical fibres.
- Steel tape armour: Makes the cable rodent proof.
- ITUG652.D Single Mode fibres: Deliver high bit rate data transmission and are bend insensitive.

STANDARDS COMPLIANCE

- TELECORDIA GR-20
- TIA 568D.3
- ITUG652.D
- ROHS

FIBER OPTIC LOOSE TUBE GEL FILLED METALLIC ARMORED CABLE

MECHANICAL CHARACTERISTICS

Temperature Range (IEC 60794-1-2-F1)	
Laying and Installation Temperature	-20° to +70°C
Operation Temperature	-20° to +70°C
Cable Bending Radius (IEC 60794-1-2-E11A)	
Cable Bending Radius (During Installation)	20 X D, D=Dia meter
Cable Bending Radius (During Installed)	10 X D, D=Dia meter
Repeated Bending (IEC 60794-1-2-E6)	30 Cycle,r=20XD 5KG Load
Tensile Force (IEC 60794-1-2-E1)	1500 N
Torsion Resistance (IEC 60794-1-2-E7)	10 Cycle (± 360°) 3 Kg Weight, L= 2 Mtr
Crush Resistance (IEC 60794-1-2-E3)	2000 N/ 10cm
Impact Resistance (IEC 60794-1-2-E4)	50 N.m

COLOUR CODING (Color of Fibers in a Tube)

4F Cable	Blue,Orange,Green,Brown,	
6F Cable	Blue,Orange,Green,Brown,Slate,White	
8F Cable	Blue,Orange,Green,Brown,Slate,White,Red,Black	
12F Cable	Blue,Orange,Green,Brown,Slate,White,Red,Black,Yellow, Violet,Pink & Aqua	
24F Cable		Blue,Orange,Green,Brown,Slate, White,Red,Black,Yellow,Violet, Pink,Aqua&Natural
	Ring Marked Fiber	Blue,Orange,Green,BrownSlate, White,Red,Yellow,Violet,Pink,Aqua
48F Cable		Blue,Orange,Green,Brown,Slate, White,Red,Black,Yellow,Violet, Pink,Aqua
	Loose Tube Colour Color Of Filler	Blue,Orange,Green,Brown Black

CABLE PHYSICAL CHARACTERISTICS

Fibre Count	4	6	8	12	24	48
Cable Diameter in mm (+/- 0.5)	10.0	10.0	10.0	10.0	10.5	11.8
Nominal Cable Weight (Kg/Km)	85±10	85±10	85±10	85±10	85±10	125.0
Standard Length (meters)	2000 ± 10%			4000 ± 5%		

CABLE TRANSMISSION CHARACTERISTICS

Attenuation at 1310 nm (dB/Km)	≤ 0.36
Attenuation at 1550 nm (dB/Km)	≤ 0.23

ORDERING INFORMATION

Description

**Datacom CLT Gel Filled Steel Tape Armoured
Single Jacket ITUG652.D Cable. PE Jacket**

**Datacom MLT Gel Filled Steel Tape Armoured
Single Jacket ITUG652.D Cable-PE Jacket**

Part No.

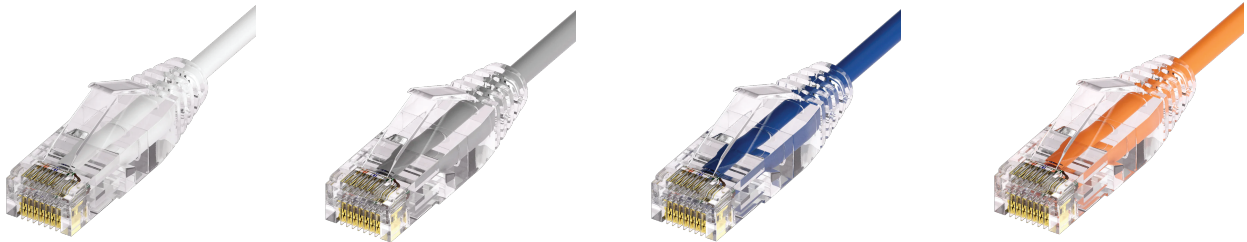
DC-FO'a''bb'CLTSTSP-'xxx'

DC-FO'a''bb'MLTSTSP-'yyy'

** xxx= Number of cores, value ranges from (04-24) yyy=(48-144) , a= Type of Fiber Values are -9 (Single Mode), 5 (Multi Mode)
bb=Grade of Fiber D2 (652.D) , A1 (657.A1) , A2 (657.A2) M3 (OM3),M4 (OM4) , M5 (OM5).



ULTRA SLIM UNSHIELDED 28 AWG STRANDED PATCH CORD LSZH



DESCRIPTION

DATACOM Cat6/Cat6A UTP Ultra Slim Patch Cord is a 3.6 ± 0.3 mm diameter 4 pair cable terminated with 50-micron gold plated modular plugs. Ultra Slim cords are constructed of 28 AWG unshielded, twisted pair, solid, LSZH cable with high-performance modular plugs. Its compact 28 AWG design simplifies installation and management. DATACOM Ultra Slim cord plug latch prevents snags and provides easy release, saving time on frequent moves and Changes. Cat6 and Cat6A LSZH cords are varieties of length and 6 colors are available.

APPLICATION

- Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet), 10GBASE-T (10Gigabit Ethernet over limited distances as specified in the industry. 10GBASE-T standards)
- 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM
- Digital video and broadband/baseband analog video
- Voice over Internet Protocol (VoIP)
- 10GBASE-T Ethernet /Data center I/O Consolidation / Data center server virtualization / Backbone aggregation / Parallel processing and high-speed computing.

FEATURES

- Exceeds all ANSI/TIA-568.2-D Category 6A and ISO 11801 Class EA electrical performance requirements for frequencies up to 500 MH(Cat6A).
- Meets ANSI/TIA-1096, Supports IEEE 802.3af/802.3at (48 cables in a bundle) and 802.3bt type 3 and type 4 (24 cables in a bundle) PoE applications.
- 100% performance tested for wire map, NEXT and return loss, Centered de-embedded plug, Integral pair manager, Patented tangle-free latch.
- Conductor contacts plated with 50 micron gold for superior performance.

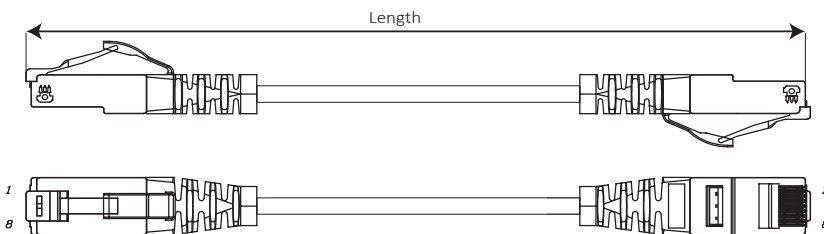
STANDARDS COMPLIANCE

- ANSI/TIA-568.2-D and ISO 11801 Class E
- IEC 60332-1-1
- ROHS compliance: Compliant
- PoE compliance: Rated for 1000 cycles with IEEE 802.3af / 802.3at and 802.3bt type 3 and type 4
- Flammability rating: LSZH compliance

ULTRA SLIM UNSHIELDED 28 AWG STRANDED PATCH CORD LSZH

CONSTRUCTION	
Category	CAT 6/6A UTP
Product type	Patch Cord
Conductor Gauge	28AWG
Conductor Type	Stranded
Plug Housing Material	Polycarbonate
Jacket Material	LSZH
Connector 1 Type	Modular Plug
Connector 2 Type	Modular Plug
Outer diameter	3.6 ± 0.3mm

TECHNICAL DRAWINGS



ORDERING INFORMATION

Description

Datacom Cat6 28 AWG Stranded U/UTP Patch Cord, LSZH

Datacom Cat6A 28 AWG Stranded U/UTP Patch Cord, LSZH

Part No.

DC-PC-UTC628-'L'M-LSZH-'CL'

DC-PC-UTC6A28-'L'M-LSZH-'CL'

- L = Length of cord in Meters. M - denotes Meter (0.2M-5M)
- CL = Color of Patch cords - WT - White, BU - Blue, YL - Yellow, GY - Gray.

DataComm Electronics' high performance category 6 jacks feature 180° configuration for rear termination. These jacks are designed to work with DataComm's keystone wallplates and surface mount boxes.

Features

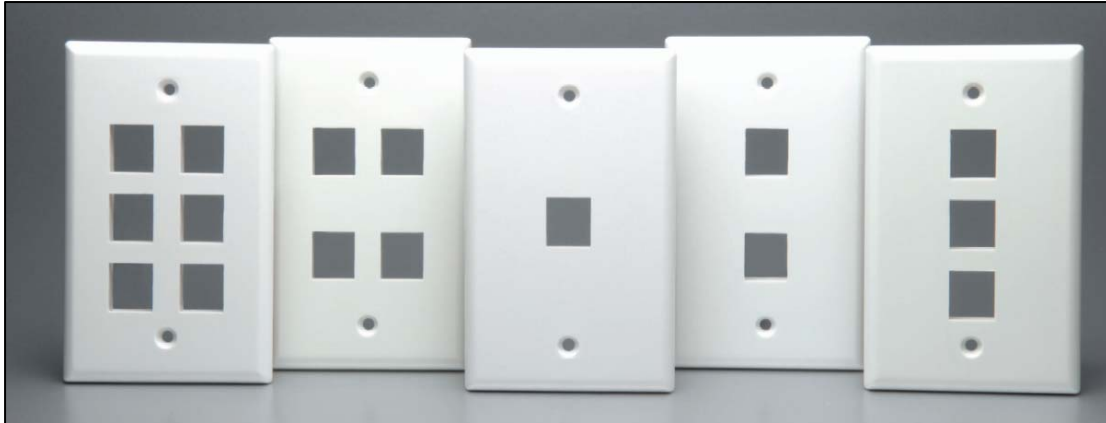
- Dual wiring code label allows connector to be wired to standard telephone wire or Category 5e wire.
- Designed to work with residential or light commercial installations.
- 110-type insulation displacement connectors (IDC).
- High-performance voice and data transmission
- UL Listed
- Meets FC Part 68 Requirements
- 25 Year product warranty



Part	Material
COVER	ABS UL94V0
IDC	PLASTIC: PIN: PHOSPHOR BRONZE PLATED WITH GOLD
PIN	PHOSPHOR BROZE PLATED WITH GOLD
PCB	UL 94V0
IDC CAP	PC

Part Number	Description	UPC Number	Min. Order
20-3426-AL	Keystone Category 6 Jack, Almond	660559010778	10
20-3426-BK	Keystone Category 6 Jack, Black	660559010785	10
20-3426-BL	Keystone Category 6 Jack, Blue	660559010792	10
20-3426-BR	Keystone Category 6 Jack, Brown	660559010808	10
20-3426-GY	Keystone Category 6 Jack, Gray	660559010815	10
20-3426-IV	Keystone Category 6 Jack, Ivory	660559010822	10
20-3426-LA	Keystone Category 6 Jack, Lite Almond	660559010839	10
20-3426-OR	Keystone Category 6 Jack, Orange	660559010846	10
20-3426-WH	Keystone Category 6 Jack, White	660559010853	10
20-3426-BL-10	Keystone Category 6 Jack, Blue, 10 Pack	660559009802	1
20-3426-IV-10	Keystone Category 6 Jack, Ivory, 10 Pack	660559009816	1
20-3426-OR-10	Keystone Category 6 Jack, Orange, 10 Pack	660559009833	1
20-3426-WH-10	Keystone Category 6 Jack, White, 10 Pack	660559009833	1

20-300*.-** Series Keystone Standard Wall Plate



**Our standard Universal Keystone Wall Plates accept snap-in inserts made by DataComm Electronics and most other major manufacturers.
Available in almond, black, brown, gray, ivory, lite almond and white.**

<u>Part #</u>	<u>UPC#</u>	<u>Description</u>	<u>Min. Order</u>
20-3001-AL	660559005293	Keystone Plate 1 Port, Almond, UL	10
20-3001-BK	660559005309	Keystone Plate 1 Port, Black, UL	10
20-3001-BR	660559005316	Keystone Plate 1 Port, Brown, UL	10
20-3001-GY	660559005323	Keystone Plate 1 Port, Gray, UL	10
20-3001-IV	660559005330	Keystone Plate 1 Port, Ivory, UL	10
20-3001-LA	660559005347	Keystone Plate 1 Port, Lite Almond, UL	10
20-3001-WH	660559005354	Keystone Plate 1 Port, White, UL	10
20-3002-AL	660559005361	Keystone Plate 2 Port, Almond, UL	10
20-3002-BK	660559005378	Keystone Plate 2 Port, Black, UL	10
20-3002-BR	660559005385	Keystone Plate 2 Port, Brown, UL	10
20-3002-GY	660559005392	Keystone Plate 2 Port, Gray, UL	10
20-3002-IV	660559005408	Keystone Plate 2 Port, Ivory, UL	10
20-3002-LA	660559005415	Keystone Plate 2 Port, Lite Almond, UL	10
20-3002-WH	660559005422	Keystone Plate 2 Port, White, UL	10
20-3003-AL	660559005439	Keystone Plate 3 Port, Almond, UL	10
20-3003-BK	660559005446	Keystone Plate 3 Port, Black, UL	10
20-3003-BR	660559005453	Keystone Plate 3 Port, Brown, UL	10
20-3003-GY	660559005460	Keystone Plate 3 Port, Gray, UL	10
20-3003-IV	660559005477	Keystone Plate 3 Port, Ivory, UL	10
20-3003-LA	660559005484	Keystone Plate 3 Port, Lite Almond, UL	10
20-3003-WH	660559005491	Keystone Plate 3 Port, White, UL	10
20-3004-AL	660559005507	Keystone Plate 4 Port, Almond, UL	10
20-3004-BK	660559005514	Keystone Plate 4 Port, Black, UL	10
20-3004-BR	660559005521	Keystone Plate 4 Port, Brown, UL	10
20-3004-GY	660559005538	Keystone Plate 4 Port, Gray, UL	10
20-3004-IV	660559005545	Keystone Plate 4 Port, Ivory, UL	10
20-3004-LA	660559005552	Keystone Plate 4 Port, Lite Almond, UL	10
20-3004-WH	660559005569	Keystone Plate 4 Port, White, UL	10
20-3006-AL	660559005576	Keystone Plate 6 Port, Almond, UL	10
20-3006-BK	660559005583	Keystone Plate 6 Port, Black, UL	10
20-3006-BR	660559005590	Keystone Plate 6 Port, Brown, UL	10
20-3006-GY	660559005606	Keystone Plate 6 Port, Gray, UL	10
20-3006-IV	660559005613	Keystone Plate 6 Port, Ivory, UL	10
20-3006-LA	660559005620	Keystone Plate 6 Port, Lite Almond, UL	10
20-3006-WH	660559005637	Keystone Plate 6 Port, White, UL	10

Patch Panels



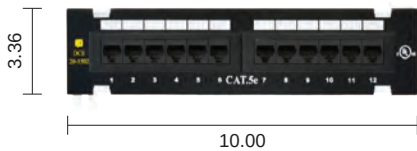
DATA COMMTM
ELECTRONICS

Category 5e & Category 6 Patch Panels

Features:

- Designed and color coded for TIA568A and TIA568B wiring configurations
- Meets all UL standards and requirements for category 5e & category 6 patch panels
- Intertek ETL Semko verified and tested to category 5e and category 6 industry standards & certifications
- 3P-Third Party Testing verified and tested to category 5e and category 6 industry standards & certifications
- Meets or exceeds all published TIA/EIA-568B guidelines for category 5e and category 6 requirements; meets FCC part 68
- Designed to fit all standard 19" racks and cabinets
- Patch panels come pre-configured with easy to read 110-style punch downs on the rear side and six-port RJ-45 front modules
- 16 gauge steel, black powder coated panel with UL 940-0 rated jack housing
- Connector spring wire contacts are 50 micro inches gold over nickel
- RoHS compliant
- 25-year product warranty
- 25-year Channel System Warranty when terminated with Honeywell Genesis Cable

Mini Patch Panels



Part Number

20-5502

20-5602

Description

Category 5e, 12-Port w/ 89D Mounting Bracket

Category 6, 12-Port w/ 89D Mounting Bracket

Universal Patch Panels

Part Number

20-5512

20-5612

Description

Category 5e, 12-Port

Category 6, 12-Port

Part Number

20-5524

20-5624

Description

Category 5e, 24-Port

Category 6, 24-Port

Part Number

20-5548

20-5648

Description

Category 5e, 48-Port

Category 6, 48-Port

