

The logo features the letters 'CTS' in a bold, italicized, white sans-serif font. To the right of the letters are several horizontal white lines of varying lengths, creating a sense of motion or speed.

CTS

Reimagining Connectivity



About Us

Our Legacy

Technical Expertise

Industry Compliance

Solution Portfolio

Product-Testing & Quality Assurance

Authority Approvals

Support Centre Locations

About Cenfra Telco Systems.

Cenfra Telco Systems (CTS) is engaged in the design, development and manufacturing of structured cabling network infrastructure solutions that are used for transmission of Data and Voice connectivity over Ethernet which include Low Voltage Copper cables and Connectivity, Fiber optic infrastructure, Indoor and Outdoor Cabinets, Power distribution units and Telecommunication infrastructure products.

Our resilience and commitment has helped us to forge a niche in the passive networking component market. As a global player, we have build a team of technical design experts, logistics partners, supply chain vendors to provide our clients with tested high-performance and dependable connectivity solutions in Datacenter, Communication and Security Products.

As a proud **BICSI Corporate member**, we strictly adhere to BICSI standards in all our undertaking. Our expertise lies in harnessing the power of Cloud Computing, bringing your vision to life with unparalleled precision.



Our Legacy.

Cenfra Telco Systems (CTS) is a part of Metromac Group, a 40+ years company with branches in UAE, USA, Qatar and India. CTS is certified ISO 9001:2015 (Quality Management System) and ISO 14001:2015 (Environmental Management System) and for ISO 45001:2018 (Occupational Health and Safety Management System).



CTS is part of Metromac- ELV, a Metromac Group of Companies.

Metromac is a 40 year old company with 250 + support staff across the GCC.

Six branches across the globe- USA, UAE, Qatar & India.

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 certified organization.

Well-managed in-house Supply Chain, Finance and Inventory management.

Sustainable, Innovative & efficient manufacturing facility for passive infrastructure solutions.

Technical Expertise.



Compliance

CTS diligently adheres to BICSI standards and best practices.



R & D

Certified in-house Research and Development team to develop innovative solutions



Product Support

Offer support across all stages: Pre-Sales, Product Positioning, and Post-Sale Audits.



Updated

Follow regular updates on standards and best practices for project specifications



Design Support

Design support for both consultants and end-users



Partner Program

Conducts programs for partner enablement, certification, and consultant training events.



Industry Compliance



ISO / IEC 11801
Standard, 2017
Edition

ISO/IEC 11801-1 – Generic Cabling for customer premises – Part 1: General Requirements
ISO/IEC 11801-2 – Generic Cabling for customer premises – Part 2: Office Premises
ISO/IEC 11801-3 – Generic Cabling for customer premises – Part 3: Industrial Premises
ISO/IEC 11801-4 – Generic Cabling for customer premises – Part 4: Single-Tenant Homes
ISO/IEC 11801-5 – Generic Cabling for customer premises – Part 5: Data Centres
ISO/IEC 11801-6 – Generic Cabling for customer premises – Part 6: Distributed Building services



ANSI/TIA-568

ANSI/TIA-568.0-E: Generic Telecommunications Cabling for Customer Premises
ANSI/TIA-568.1-E: Commercial Building Telecommunications Cabling
ANSI/TIA-568.2-D: Balanced Twisted-Pair Telecommunications Cabling and Components
ANSI/TIA-568.3-E: Optical Fiber Cabling and Components Standard
ANSI/TIA-568.4-D: Broadband Coaxial Cabling and Components
ANSI/TIA-568.5: Single Twisted Pair Ethernet Standards.



BS EN 50173

EN 50173-1:2018 General Requirements
EN 50173-2:2018 Office Spaces
EN 50173-3:2018 Industrial Spaces
EN 50173-4:2018 Homes
EN 50173-5:2018 Data Centre Spaces
EN 50173-6:2018 Distributed Building Services





Our Motto.

Seamless Connectivity.

*Creating an Agile Network For Tomorrow's
Digital Landscape*



Product Portfolio.



Passive Infrastructure Solutions

For a robust and scalable network infrastructure that meets the demands of the future.

Data Center Solutions

Providing with an environment cohesive to interoperability, security and reliability for this multi-cloud era.

Managed Power

Maximize power efficiency and avoid power failures with our managed power solutions.

FTTx Products & Specialty Cables

Smarter solutions for building smarter ecosystems.

Cabinets & Outdoor Enclosures

Providing with an environment cohesive to interoperability, security and reliability for this multi-cloud era.

Security Systems

Surveillance solutions to guard your assets from unscrupulous scenarios.

Passive Infrastructure Solutions.

■ High End Data Communication Copper Cables with Connectivity

CAT 8.2

Year: 2018 | Freq.
Characterization: 2000MHz
| Application: 40G | Types:
Shielded

CAT 7A

Year: 2010 | Freq.
Characterization: 1000MHz
| Application: 10+G |
Types: Shielded

CAT 7

Year: 2002 | Freq.
Characterization: 600MHz
| Application: 10G | Types:
Shielded

CAT 6A

Year: 2008 | Freq.
Characterization: 500MHz
| Application: 10G | Types:
Unshielded & Shielded

CAT 6

Year: 2002 | Freq.
Characterization: 250MHz
| Application: 1G/ Indoor
& Outdoor | Types:
Unshielded & Shielded/

CAT 5e

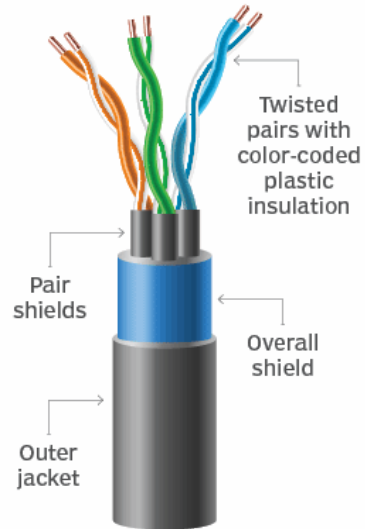
Year: 1999 | Freq.
Characterization: 100MHz
| Application: 100base-T |
Types: Unshielded &
Shielded

CAT 3

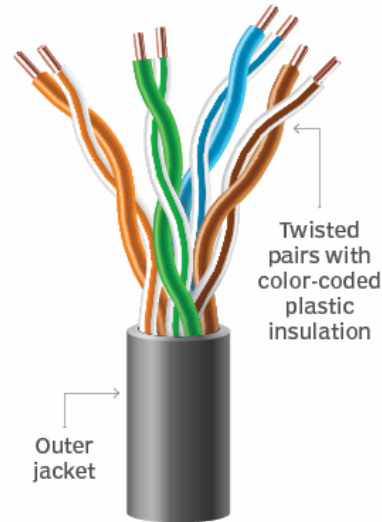
Year: 1991 | Freq.
Characterization: 16MHz |
Application: 10base-T |
Types: Unshielded



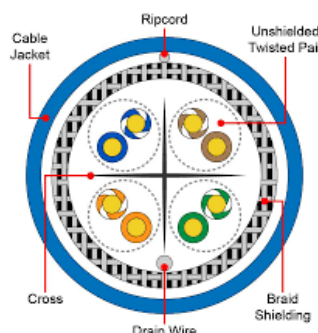
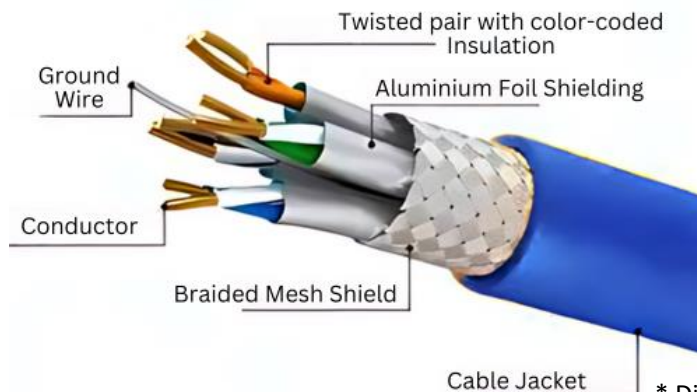
■ Types of Shielding & Sheath



Shielded twisted pair



Unshielded twisted pair



* Different sheath colors available

Types of Sheath

- PVC
- LSZH
- PE
- PLENUM

Types of Shielding

U/UTP	Overall Unshielded with Unshielded Twisted Pairs
U/FTP	Overall Unshielded with Foil Screened Twisted Pairs
F/UTP	Overall Foil Screened with Unshielded Twisted Pairs
F/FTP	Overall Foil Screened with Individual Foil Screened Twisted Pairs
S/UTP	Overall Braid-Screened with Unshielded Twisted Pair
S/FTP	Overall Braid-Screened with Individual Foil Screened Twisted Pairs
SF/UTP	Overall Braid Screened & Foil Screened with Unshielded Twisted Pairs
SF/FTP	Overall Braid Screened & Foil Screened with Foil Screened Twisted Pair

■ Distinctive Ethernet Cables



Outdoor Rated

- Double Jacketed PVC/ LSZH / PE
- UV Protection
- CAT 6, CAT 6A Ethernet Cables

Fire Rated Cables

- 120 Minutes Circuit Integrity
- Compliance to IEC 60331-25
- CAT 6, CAT 6A Ethernet Cables

Lift Cables

- Max. Pull Force : 1550N
- TIA/EIA 568.2D, EN50173-1 and
- ISO/IEC 11801-1
- CAT 6, CAT 6A Ethernet Cables

Armored Cables

- Steel Wire Armor (SWA)
- Double Jacket/ Direct Burial Type
- CAT 6, CAT 6A Ethernet Cables

■ Patching System



Category

- CAT 3, CAT 5e, CAT 6, CAT 6A, CAT 8.2

Types

- Shielded / Unshielded
- 22- 28 AWG

Jacket

- PVC, LSZH, PE
- Customizable colors & length

Profile Type

- Standard, Slim, Flat Profiles

Compliance

- ANSI/TIA 568.2-D
- ISO/IEC 11801

Copper Cable Accessories.

■ Modular Connectors



Connector Category:

- CAT 5e
- CAT 6
- CAT 6A
- CAT 8.2

Shielding :

- Screened
- Unscreened

Orientation:

- Angled
- Straight

Compliance:

- ANSI/ TIA 568.2-D
- ISO / IEC 11801

■ Presentation Panels



Type of Patch Panel

- Loaded
- Unloaded
- Shielded
- Unshielded

If Loaded, Category of Patch Panel

- CAT 3
- CAT 5e
- CAT 6
- CAT 6A

Orientation

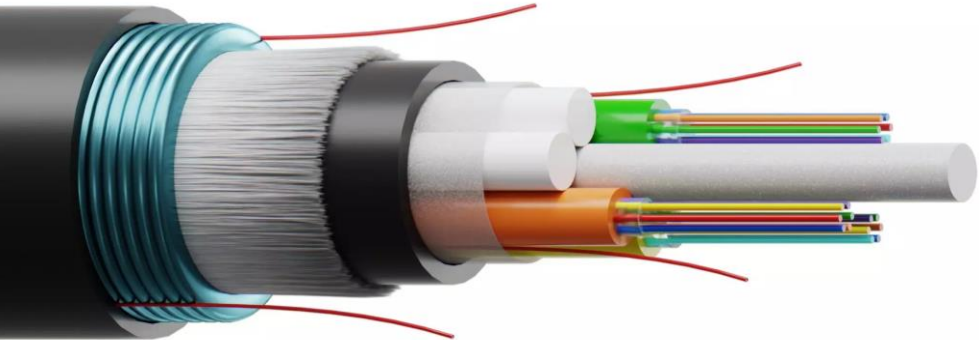
- Angled
- Straight
- Staggered

Compliance

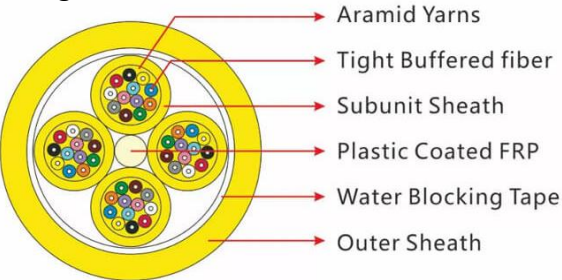
- ANSI/TIA 568.2-D
- ISO/IEC 11801

* Multiple configurations available

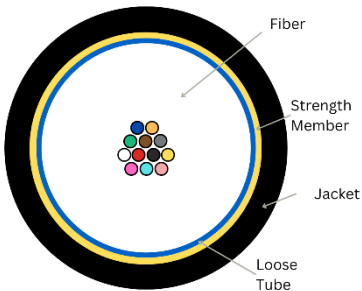
Fiber Optic



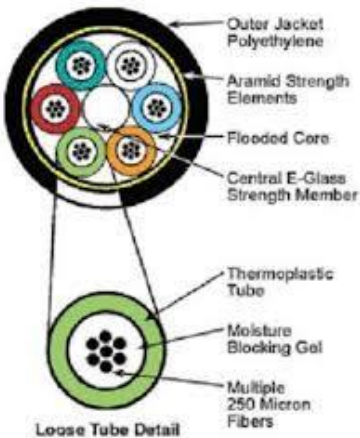
Tight Buffered



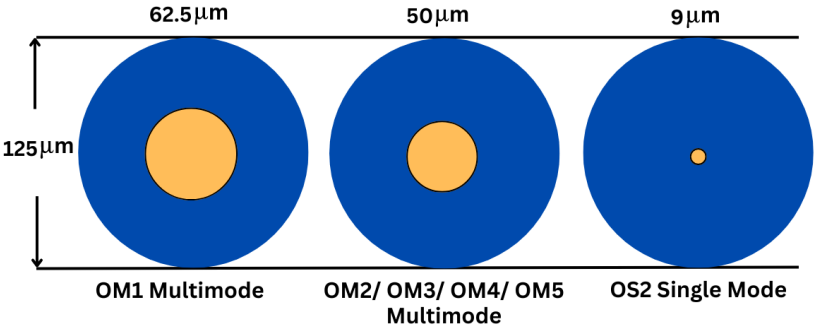
Central Loose Tube



Multi Loose Tube



Optical Fiber Core Diameters



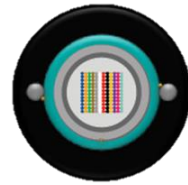
Transmission Standards	OM1	OM2	OM3	OM4	OM5	Single Mode
100 Mb	≈550 m (1800 ft)	≈550 m (1800 ft)	≈550 m (1800 ft)	≈550 m (1800 ft)	N/A	N/A
1 Gb	≈220 m (722 ft)	≈550 m (1800 ft)	≈550 m (1800 ft)	≈1000 m (3281 ft)	N/A	≈10,000 m (32,800 ft)
10 Gb	≈33 m (108 ft)	≈82 m (269 ft)	≈300 m (984 ft)	≈550 m (1800 ft)	≈550 m (1800 ft)	≈10,000 m (32,800 ft)
40 Gb	N/A	N/A	≈100 m (328 ft)	≈150 m (500 ft)	≈150 m (500 ft)	≈10,000 m (32,800 ft)
100 Gb	N/A	N/A	≈100 m (328 ft)	≈150 m (500 ft)	≈150 m (500 ft)	≈10,000 m (32,800 ft)

N/A – Not Applicable | OM – Optical Multimode

Reliable Fiber Optic Cables with Accessories



Indoor, Outdoor and **Fire-Rated Fiber Cables** from 2 to 2400 Cores in SM and MM



Ribbon Fiber Cable



Loose Tube Cable

Factory Tested For

Tensile Strength
Crush Resistance
Impact Resistance
Repeated Bending
Torsion
Water Penetration
Temperature Cycling

Fiber Count

• 2 to 2400 Core

Fiber Cable Mode

• Single Mode
• Multi Mode

Ribbon Fiber Cable Configurations

• 4F, 8F, 12F

Available Types

• Indoor, Indoor/ outdoor, Outdoor, Fire-Resistant, Armored versions in Metallic & Dielectric, Gel Free Micro Module FO cable for riser

FO Options Available

• ITU-T, G.652D, G.657A2, G.657B2, G.657B3

Fiber Color Coding according to ANSI/ EIA/ TIA 598

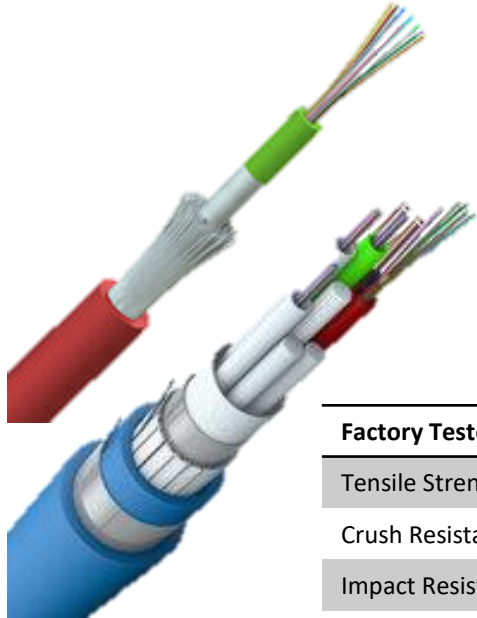
Available Packing Option

• Bakelite
• Wooden
• Ironwood Drums

Standards

• ANSI/TIA-568.3-D
• IEC 60793
• IEC 60794

■ Fire-Rated Fiber Optic Cables



Fire-Resistant Fiber Cables
with **proven fire resistance for beyond 120 minutes**, which comes in 2 to 144 Core armored construction.

Factory Tested For

Tensile Strength

Crush Resistance

Impact Resistance

Repeated Bending

Torsion

Water Penetration

Temperature Cycling

Fiber Count

• 2 – 144 Core

Fiber Color Coding as ANSI/EIA/TIA 598

Packing Available:

• Bakelite,
Wooden or
Ironwood Drums

Compliance Standards

• IEC 60331-25
• IEC 60793

■ FO Patch Panels



Available Version Types:

- Rack Mount
- DIN Rail Mount Type
- Slide & Swing Options

Available Panels:

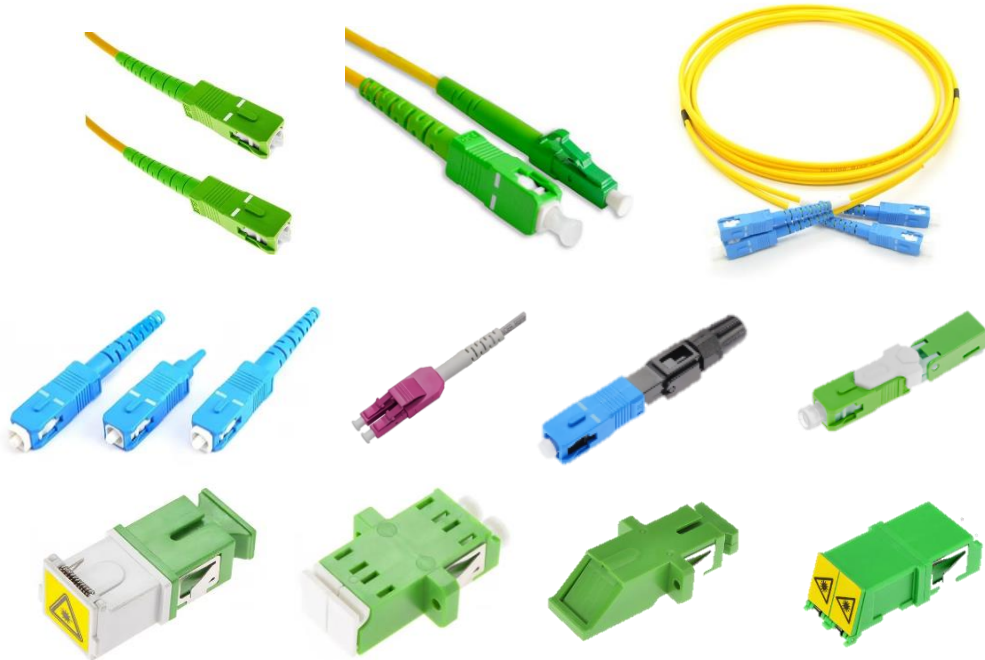
- 12 Port
- 144 Port

Features:

- Space Optimization
- Built-in Splice Trays
- Accommodates 30mm Bend Radius

Fiber Optic Accessories

We provide secure patch cords and connectors with pig tails and patch cords all factory tested. Tool free pre-polished connectors are available.



Available Accessories	<ul style="list-style-type: none"> • Pig Tails • Patch Cords • Connectors
Connectors Available in	<ul style="list-style-type: none"> • UPC • APC
Connector Types Available	SC, LC, MPO, MTP
Diameter	900 Microns, 2.0mm, 3.0 mm
Jacket	PVC and LSZH
Standards	IEC 61754-4 / IEC 61754-20 / IEC 61754-13



FTTx Solutions

Explore our comprehensive FTTx solutions range of drop cables, Micro/Mini ODF, gel free FO cables for risers, retractable FO cables, cabinets, splitters, patch-free FDH, retractable cables and APC accessories all tested and approved by the service providers.



Drop Cables

- 2 F
- 4 F

Micro ODF

- 2 Port
- 4 Port

Mini ODF

- Pre- Loaded (Max 48F)
- Splice Only Version (Max 288F)

Deep Cabinets

- 150 mm
- 350 mm

FO Splitters

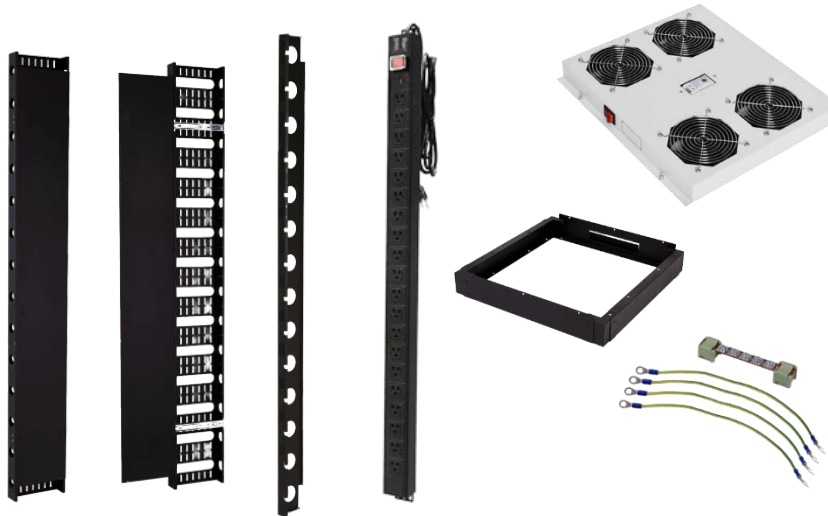
- 2:16, 2:32, 2:8 splitters
- LC/ APC & SC/APC Configuration

ONU Enclosures

FTTx Cables

APC Accessories

Cabinets & Accessories



Cenfra Telco Systems (CTS) offers customized solutions for **free-standing and wall-mounted structures**, designed with higher load-bearing capacities, available in **galvanized steel, stainless steel, and aluminum**.

Cabinet Types

- Floor Standing
- Wall Mount Cabinets
- Co-Location Cabinets
- Custom-made Cabinets

Accessories

- PDUs (Vertical/Horizontal)
- Fan Cooling Units
- Shelves
- Vertical Cable Managers
- Patching Bracket
- Blank Filler Panels
- Heavy Duty Castors
- Leveling Feet
- Baying Kit
- Plinth
- Grounding Kit
- Lighting Modules

Cabinet Types

■ Wall Mount Cabinets



Cenfra Telco Systems (CTS) wall mount cabinets are all tested and certified for anti-corrosion. These can be customized to the color of your choice. It has built-in cooling fan units.

Mounting Space available from	•4RU to 22RU
Standard depths	•120mm to 800mm with 600 mm Width
Load Bearing Capacity	• Up to 60 Kg
Models	•Surface Mount / Flush Mount
Accessories Available	•PDUs, Shelves, Mounting frames, •Leveling Feet / Castors, Screws & Cage Nuts,
Customizable features	•Color •Top and bottom cable provision •Dual section cabinets available
Door Types	•Perforated Metal or Glass Door with universal lock & key
Standards	EIA 310, EN 61587-1, EN 62208, CE 2006/95/EC Low Voltage Directive 2004/108/EC Electromagnetic Compatibility Directive ASTM B117-16



Cabinet Types

■ Floor Standing Cabinets



Cenfra Telco Systems (CTS) floor standing cabinets are also tested and certified for anti-corrosion with an optimized air flow design. It comes with access controlled locking system with built-in cable management. These can be customized to the color of your choice.

Mounting Space available from	• 18RU to 47RU
Standard depths	• 600 mm to 1200 mm with Width 600 mm Or 800 mm
Load Bearing Capacity	• Up to 1400 Kg
Accessories Available	<ul style="list-style-type: none"> • PDUs, Shelves, Mounting frames, Plinth • Leveling Feet / Castors, Screws & Cage Nuts • Provision for eye bolt
Customizable features	<ul style="list-style-type: none"> • Color • Top and bottom cable provision • Single or Dual Door Options
Cooling Feature	• Thermostat controlled fan units
Standards	EIA 310, EN 61587-1, EN 62208, CE 2006/95/EC Low Voltage Directive 2004/108/EC Electromagnetic Compatibility Directive ASTM B117-16



Cabinet Types

■ Co-Location Cabinets



Cenfra Telco Systems (CTS) co-location cabinets are also tested and certified for anti-corrosion with an optimized air flow design. It comes with access controlled locking system. These can be customized to the color of your choice.

Mounting Space available from	•27RU to 47RU
Standard depths	•600 mm to 1200 mm with Width 600 mm Or 800 mm
Load Bearing Capacity	• Up to 1400 Kg
Accessories Available	•PDUs, Shelves, Mounting frames, Plinth •Leveling Feet / Castors, Screws & Cage Nuts, •Provision for Eye Bolt
Customizable features	•Color •Top and bottom cable provision •Single or Dual Door Options •2 -4 Compartments
Cooling Feature	•Thermostat controlled fan units
Lock Feature	•Access controlled locking system •3 point locking system
Standards	EIA 310, EN 61587-1, EN 62208, CE 2006/95/EC Low Voltage Directive 2004/108/EC Electromagnetic Compatibility Directive ASTM B117-16



Cabinet Types

■ IP Rated Cabinets



Cenfra Telco Systems (CTS) custom cabinets also tested and certified for anti-corrosion. It is custom made for special outdoor applications with an elite design and dust-proof feature. It also comes with access controlled locking system and is solar panel enabled. These can be customized to the color of your choice.



Cooling Method

Air Conditioned

Heat Exchanger

Thermostat Enabled fan Controlled units

Works with principle of cooling with ambient air

Maximum cooling output: Up to 2000W

1 Year product warranty on cooling unit

Mounting Space available from

•6RU to 42RU

Protection Grade

• IP54 to IP68 and dust-proof
• NEMA Compliant
• Vandalism Protection

Load Bearing Capacity

• Up to 1400 Kg

Metal Sheet

• Galvanized sheet, 201 stainless sheet, 304 stainless steel

Customizable features

• Color
• Solar-panel enabled

Cooling Feature

• Available

Lock Feature

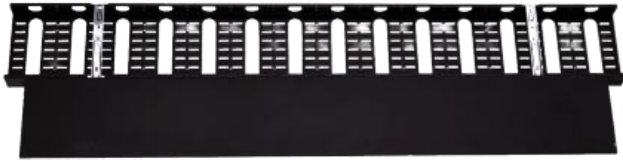
• Access controlled locking system

Standards

IEC 60529,
IEC 61000-4 Electromagnetic Compatibility,
IEC 335-1 Safety Requirement,
IEC 68-2 Environmental Requirements
CE Third Party Certification
316L Sea-side application



Efficient Cable Management Systems



Cable Managers Option

- Plastic
- Metallic

Finish

- Powder Coated For Metallic

Type

- Ring, Brush, Cover
- 19" Mounting Options

Support Accessories

- Cable ties, Velcro tape, screws, Cage nuts

Bending radius requirements incorporated into design for cable managers

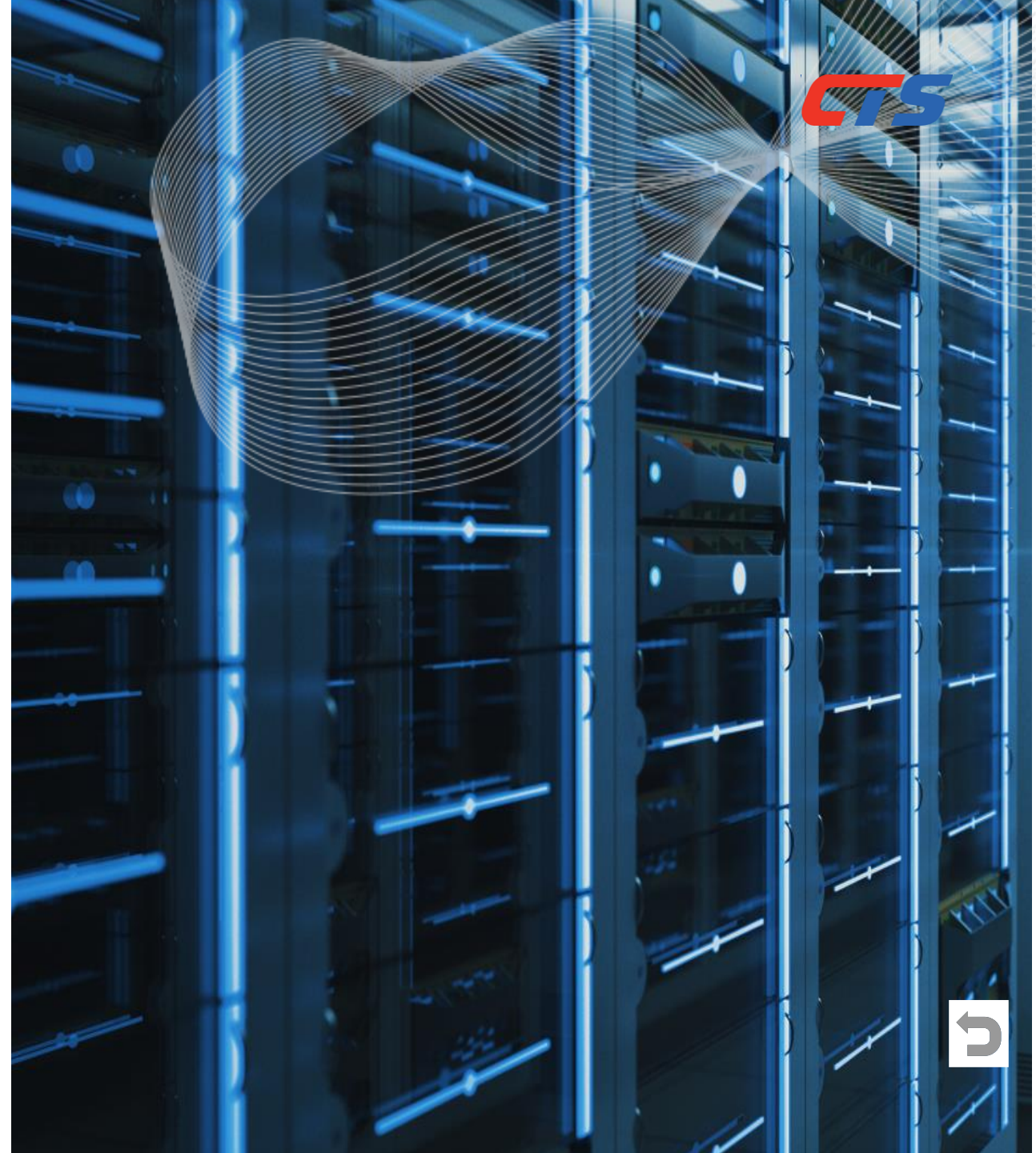
Various slotted designs

Customized lengths on vertical cable managers

Hybrid Data Centers



Cenfra Telco Systems (CTS) offers you with edge, modular, micro-modular data center solutions that are uniquely designed to provide you with an infrastructure foundation that is flexible, robust, highly efficient and has a smaller footprint. From custom-designed to pre-fabricated solutions, we provide an agile network that can house your data interoperability needs.



Resilient Data Center Solution.

■ Pre-Terminated Copper & Fiber Solutions

Has a modular design for changes in design and adaptability with over 60% smaller optical networking solutions freeing up raised floor and racking space.



Available in :

OS2, OM3, OM4

Pre-Terminated
Copper Cables:

CAT 6A, CAT 8

HD Fiber Closure
Models:

- 1U (144 Cores)
- 2U (288 Cores)
- 4U (576 Cores)

Factory Terminated &
Tested Trunk Cables

- 8 - 144 Core

Polarity:

Type A (Straight), Type B
(Reversed), Type C (Pairs Flipped)

Easy Plug & Play MTP / MPO Fiber Cassettes

Rivet Buckle Lockable Design Avoid Sliding

Standards

- ANSI/TIA 568.3-D
- Telcordia GR-326-CORE
- IEC 61754-7
- TIA 605-4 (FOCIS 5)
- CE (EN 50575 CPR)

■ Data Center Raceways



Cenfra Telco Systems (CTS) offers heavy duty & sturdy race ways for data center cable management with excellent ventilation & reduced dust retention to segregate, route, and protect fiber optic and copper cables from the building's entry point to termination and distribution equipment.

Key Features

Manufactured from Halogen free materials

Flame retardant UL94V-0

Designed for Faster Deployment, High Flexibility and easy maintenance

Electro zinc (EZ) for Indoor Use, Hot Dip Galvanized (HDG) for outdoor Use

■ Aisle Containments



- ✓ Hot Aisle Containment
- ✓ Cold Aisle Containment

Cenfra Telco Systems (CTS) provides standalone support structures, sliding doors, blanking panels, and roof panels to maximize utilization in both Hot and Cold Aisle Containment retrofits.

Key Features

Easier & Rapid Deployment in slab-based or raised data center deployment

Enhanced Reliability and protection.

Hotspot Negation and efficient heat management to save space in new build or retrofit

Optimized Air flow distribution by managing of hot air and cold air.

Improved Thermal performance of the cooling units by raising supply air set point temperature and higher return air temperature.



■ High Density Accessories



Cenfra Telco Systems (CTS) offers High-density fiber patch panels that are critical for managing complex fiber optic networks in data centers, telecommunications facilities, and enterprise networks. These panels accommodate large number of connections within a compact space, coupled with robust cable management and easy accessibility.

Key Features

Space efficient with maximum connections

Various port configurations with 1U / 2U / 4U sizes

Compatible with standard connectors

Integrated Cable management

Easy access for maintenance and reconfiguration

Sliding-out design for easy installation

Modular design for easy upgradation

■ KVM Switches



Cenfra Telco Systems (CTS) KVM switches and consoles are ideal for seamless, efficient server management and space optimization.

Key Features

3 in 1 LCD Console integrates the monitor, keyboard, and mouse.

Option to connect the LCD to a PC or KVM switch for multiple PCs

19" TFT LCD Monitor

Ultra Slim Keyboard with 99 keys & numeric keypad

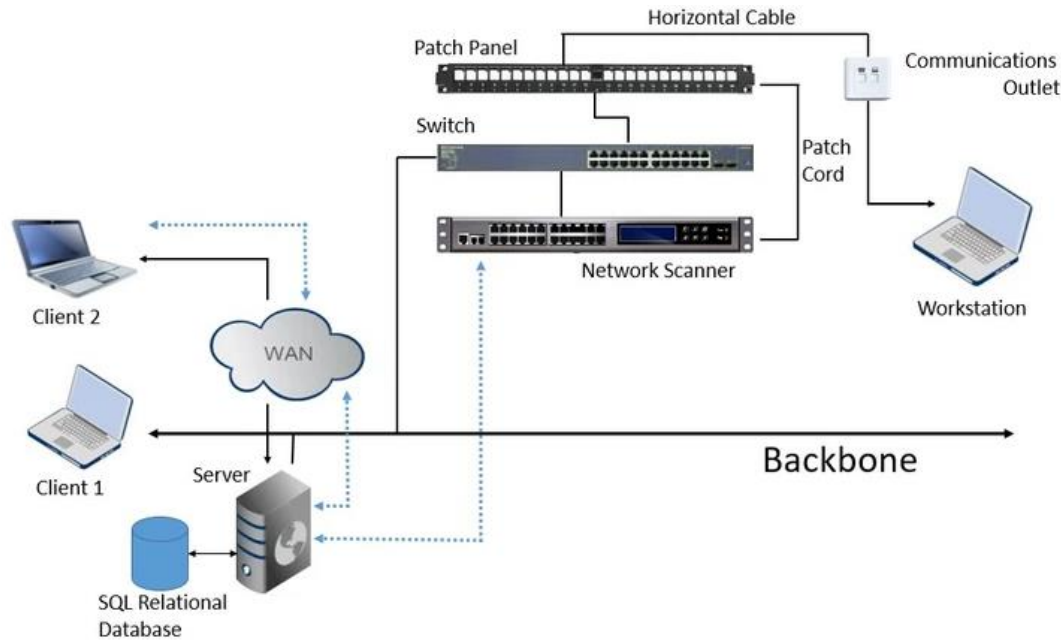
Standard PS/2 emulation

Automatically lock up with front panel lock latch

Compact steel construction & high-quality hand-protection sliding rails



■ Intelligent Monitoring Solutions



CTS Intelligent Solution incorporates smart technologies and features to enhance the efficiency, reliability, and flexibility of network operations. The system integrates intelligence into the physical layer of the network, allowing for real-time monitoring and management.

Key Components

- ✓ Smart Patch Panels with Network Interface
- ✓ Infrastructure Management Software
- ✓ Optional Sensors

Applications

- ✓ Data Centre's
- ✓ Enterprise Networks
- ✓ Smart Buildings
- ✓ Industrial Environment



Key Features

Enhanced Network Management

Improved Efficiency

Increased Security

High Performance Power Distribution Units

We offer you basic, metered modular, mountable Power Distribution Units (PDU) with redundancy and surge protection features as well as Unlimited Power Supply (UPS) solutions in sturdy construction with different power capacities to help you streamline your energy management needs.



Applications

Datacenter Power Monitoring and Management

Telco Central Offices & Base Stations

Industrial Automation & Environmental Systems

Commercial Offices & Workspaces

Medical Facilities

Broadcasting Studios & Field Operations

Renewable Energy Solar and Wind Farms

Laboratories and Research Facilities

Transportation Systems

PDUs

- Standard PDU
- Intelligent PDU

Network Mode Supports

- Cascade type
- Parallel Type
- Series Type

Available Types

- Basic,
- Metered
- Modular
- Switched
- Customized PDUs.

■ Types of PDU



Typical Use	Basic	Metered	Monitored	Switched
Distribute Power To multiple devices (multiple outlets)	●	●	●	●
Locally View Reports PDU loading amps (digital load meter)		●	●	●
Remotely View PDU loads in amps & alarm conditions (network interface/ software)			●	●
Remotely Control Individual outlets (network interface/software/ switchable outlets)				●
Monitor Individual outlet current levels				●

■ PDU Components

■ Input Plug Types



■ Output Receptacle Types



■ Other Modules



Robust Outside Plant Solutions

We specialize in customized OSP solutions built for outside plant applications that ensure uninterrupted connectivity no matter the environmental terrains. These are highly sort after product range by telecom operators and supports use in **industrial, hazardous** and **oil and gas applications**.

FRP & GRP Enclosure



Fiber Distribution Hub



Telecom Feeder Panel



FTB



Features

Ingress protection in Copper & Fiber Applications

Optimized design for accommodating higher density for Copper & Fiber

Fiber Optic Splice Closures



FO Splice
Enclosure
Capacity:

- Single fiber splice capacity up to 576 Fibers

Types

- Dome and In-Line type Closures

Applications

- Aerial / Underground / wall mount applications

Specialty Cables with Connectivity

Our versatile cable portfolio also has elevator cables for seamless vertical transportation and co-axial cables designed for reliable outdoor connectivity.

Elevator Cables



Key Features

Reliable data communication in the dynamic environment of elevator shaft

Withstands mechanical stresses including repeated flexing & bending.

Cable types	<ul style="list-style-type: none"> • Category 6 / 6A • 24/23 AWG • Bare copper
Available Construction Types	<ul style="list-style-type: none"> • Flat • Round
Insulation	<ul style="list-style-type: none"> • HDPE
Outer Sheath	<ul style="list-style-type: none"> • PVC / Rubber

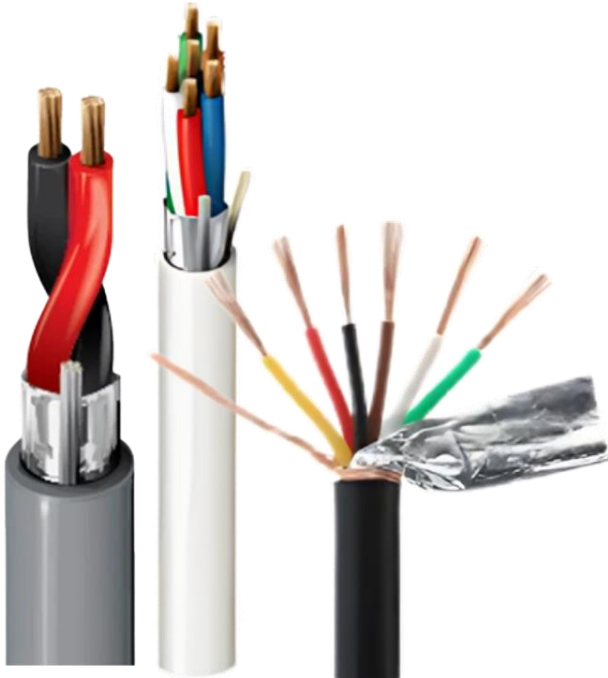
Coaxial Cables



Available Types	<ul style="list-style-type: none"> • RG59, RG6, RG11
Sheath	<ul style="list-style-type: none"> • PVC • LSZH
Suitable for	<ul style="list-style-type: none"> • SMATV, Security, Radio Communication applications
Supreme EMI Protection	
Standards	<ul style="list-style-type: none"> • ANSI/TIA 568.4-D • ISO/IEC 11801-1:2017



■ Control Cables



Cenfra Telco Systems (CTS) control cables are ideal for broad array of applications in electrical and instrumentation sector. Their advantages are that it is lightweight and has a flexibility that will suit any structure.

Control cables can be applied to **BMS system, lighting control, home automation, CCTV, video intercom, door access control, lift access control, AV system, master clock system, public address.**

Certifications & Approvals

ISO9001, ISO14001, OHSAS18001, UL444, UL13

RoHS: Compliant Directive 2011/65/EU CPR E class

No & Type of Conductors

- 2C, 3C, 4C, 6C
- Tinned Copper or Bare Copper

Available Types

- 12 AWG, 14 AWG, 16 AWG, 18 AWG, 20 AWG, 22 AWG, 24 AWG
- Indoor & Outdoor Versions

Sheathing

- Unshielded & Shielded

Outer Sheath

- PVC, FR-PVC, LSZH, PE

Belden equivalent

- 8471, 8719, 8723, 8760, 8771, 9740, 9841, 9842, DEDN182U, 6504FE, 4202FE



■ Submersible Cables



Key Features

Water proof and moisture resistant

Durability

Flexibility

Corrosion Resistant

No & Types of Conductors

- 3C, 4C
- IS 8130 Compliant Flexible Bare Stranded Copper

Insulation

- PVC / XLPE / EPR Rubber

Outer Sheath

- PVC/ EPR Rubber

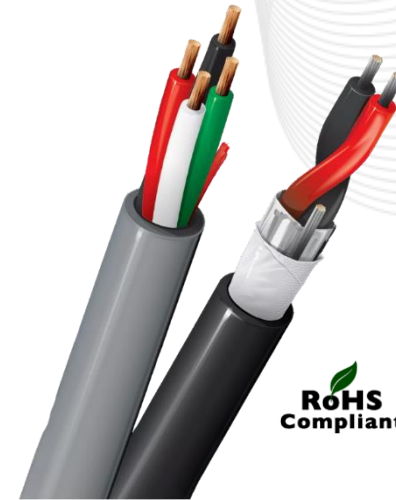
Available Construction Types

- Flat
- Round

Standards

- IS 694: 2010,
- BS 6500
- IEC 60227

■ Speaker Cables



Types

- 2C, 3C, 4C Tinned Copper or Bare Copper

Insulation

- PVC, FR-PVC, PP

Outer Sheath

- PVC, FR-PVC, LSZH

Available Model

- 12 AWG, 14 AWG, 16 AWG, 18 AWG, 20 AWG, 22AWG

Belden Equivalent

- 5000, 5100, 5200, 5300, 5400, 5500, UF/UH

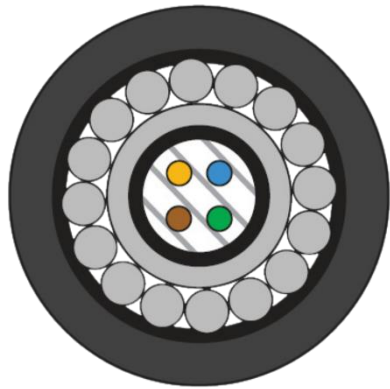
Certifications & Approvals

ISO9001, ISO14001, OHSAS18001, UL444, UL13

RoHS: Compliant Directive 2011/65/EU CPR E class

Tactical Cables

Cenfra Telco Systems (CTS) Tactical cables are designed for use in harsh environments.

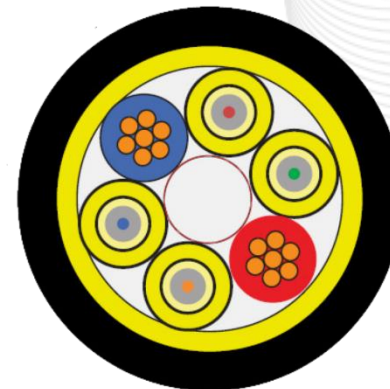


Key Features
Rugged Construction
Flexible
Lightweight
High Performance

Fiber Count	• 2 – 12 Fibers
Construction	• Fibers are placed in gel-filled stainless steel tubes with armouring and strain relief made of stainless steel wire with a jacket of PA-12
Applications	• Military, Broadcast, Industrial, Emergency Services
Standards	• IEC 60793 • IEC 60794 • Telcordia GR-20 • TIA/EIA 598

Tether Cables

These Airborne Central Tech Source Tether fiber cables are specialized for use in tethered aerial platform such as drone or balloon providing high-speed data transmission between the airborne device and a ground station



Key Features
High Bandwidth & Low Latency
Durability & Flexibility
Environmental Resistance
Signal Integrity

Construction	• 6 Core Fiber + 4 Core Fiber, • 3 Core fiber + 4 Core Power • 1 Core Fiber + 2 Core Power
Applications	• Surveillance and Reconnaissance • Emergency Response • Border Security • Renewable Energy Wind Turbines • Scientific Research • Broadcasting & Media
Standards	• IEC 60793 • IEC 60794 • Telcordia GR-20 • TIA/EIA 598

■ Festoon Cables

Cenfra Telco Systems (CTS) Festoon cables are designed for use in industrial applications where continuous flexing and moving is required.



Key Features

Oil & Grease Resistant

UV Protection

Flexibility

Durability

High Tensile Strength

Compact Design

Fiber Count

• 2 – 96 Fibers

Applications

- Cranes
- Elevators
- Automated Machinery
- Conveyers

Standards

- IEC 60793
- IEC 60794
- Telcordia GR-20
- TIA/EIA 598



Product-Testing & Quality Assurance

All our products undergo rigorous testing at certified laboratories, where they are subjected to mechanical and environmental conditions that simulate real-world application scenarios. Our certifications are acquired through thorough evaluation at esteemed laboratories to attest the superior performance of **CTS** components.

Intertek (US):

ETL verification on performance parameters of copper cables and accessories like;

- NEXT
- Insertion Loss & Return Loss
- PSNEXT (Power Sum Next)
- ACR-N (Attenuation to Cross Talk Ration Near End), PSACR-N, ACR-F, PSACR-F
- PSANEXT (Power Sum Alien Near End Cross Talk)



Compliance Standards:

ISO9001, ISO14001, OHSAS18001

ISO/IEC 11801-1, TIA-568.2-D, IEC 61156-5, EN 50173-1, EN 50288-10-1

IEC-60794-1-21 & 22

IEC 60332-1-1/2, IEC 60754-2, IEC 61034-1

ASTM B117-16

Wimpey Labs (UAE):

Fiber Optic cables and components are tested using OTDR, visible light source, power meter and light source method for the below parameters:

- Attenuation
- Insertion & Return Loss

Other Parameters Tested

- Tensile Strength
- Crush Resistance
- Cable Bending
- Temperature Cycling



ETL Certifications



intertek



3933 US Route 11
Cortland, New York 13045 USA
Phone Number: (800) 345-3851
Fax Number: (607) 758-6637
Web: www.intertek.com

ETL Verified Certificate of Conformance Number: 105838319CRT-001f

On the basis of the tests undertaken, the sample(s) of the below product have been found to comply with the electrical transmission requirements of the referenced specification(s) at the time the tests were carried out.

Rendered to:

CTS
16192 Costal Highway
Lewes, DE 19958
USA

www.cts-usa.tech

Contact: Ms. Lydia Alexander

Product tested: Category 6A, 4-pair, 23 AWG, U/UTP, LSZH, horizontal (solid) cable

Part number(s): CCC6AUULSGY

Compliant to: ANSI/TIA-568.2-D

EN 50173-1

EN 50173-2

EN 50288-11-1

IEC 61156-5

ISO/IEC 11801-1

Authorized marking: ETL VERIFIED TO ANSI/TIA-568.2-D, EN 50173-1, EN 50173-2, EN 50288-11-1, IEC 61156-5 and ISO/IEC 11801-1 CATEGORY 6A

Continuing compliance to this specification is monitored through production testing, ongoing inspections by Intertek at the production facility and random sample testing.

Date issued: 28-May-2024

Approved By:

Antoine Pelletier
Antoine Pelletier, Project Engineer

This verification supersedes all previous verifications with the noted Verification/Report number(s) dated before this verification notice.

NOTE: This verification is part of the full test report(s) and should be read in conjunction with it.

This Verification is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to copy or distribute this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results referenced from this Verification are relevant only to the sample tested. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

ETL Verified CoC Number

Certified Products

CoC 105838319CRT-001c

Category 6 23 AWG U/UTP Cable

CoC 105838319CRT-001a

Category 6 UTP Modular Jack

CoC 105838319CRT-001b

Category 6 UTP Patch Cord

CoC 105838319CRT-001f

Category 6A 23 AWG U/UTP Cable

CoC 105838319CRT-001d

Category 6A UTP Modular Jack

CoC 105838319CRT-001e

Category 6A UTP Patch Cord

CoC 105838319CRT-001i

Category 6A 23 AWG U/FTP Cable

CoC 105838319CRT-001g

Category 6A Shielded Modular Jack

CoC 105838319CRT-001h

Category 6A Shielded Patch Cord

Product-Performance & Warranty

CTS solutions come with the provision of 25-year limited performance warranty to ensure your interests are protected.

The CTS 25-Year System Warranty covers:

- **25 Year Performance warranty** is offered to the performance of the system built using the complete connectivity solution from Cenfra Telco System.
- Warranty is Compliant to **ANSI/TIA/EIA and the ISO/IEC specifications** in effect at the time of installation.
- This warranty is applicable to systems that are designed, installed, documented, registered and tested by **CTS partners who have undergone training certification**.
- The warranty will be void in the following cases
 - Any physical damage caused by accidents, misuse, neglect or natural disasters
 - Unauthorized modification or repairs of the system by a non CTS-Certified personnel.
 - Components not supplied by CTS or not installed according to CTS guidelines.
 - The duration is strictly limited to the period specified in the certificate and will not extend beyond that timeframe.
 - Warranties are processed through **a written submission of the claim form** to the customer support team of CTS.
- Warranties **are issued following an audit of test data** and are subject to approval by the CTS technical support team during a site audit. All links requiring warranty support must be 100% tested.



Authority Approvals



As a manufacturer, Cenfra Telco Systems (CTS) products have acquired certifications from governing authorities for the distribution rights of our products in the UAE.

Micro Optical Distribution Frame	Pre-Terminated and Splice Only Mini ODF	Fiber Optic Splitters – SC/APC & LC/APC	FTTH Drop Cables - 1 core / 2 core / 4 core
Low Density and High-Density FO Patch Panels	Multicore Single Mode G.657A2 FO Cable	Fiber Optic Accessories – Pigtails, Adapters, Patch Cords	Complete CAT6 Unshielded Solution
Complete CAT6A Shielded Solution	ONU Cabinet (Residential and Commercial Grade)	Wall Mount Cabinets	Entire range of Floor Standing Cabinets
Fiber Raceways	Coaxial Solution	Home Automation Cabinets, Cables & Accessories	HD ODF, Splice Enclosures, FO Ribbon Cables



The Cenfra Telco Systems logo is positioned on the left side of the slide. It features the company name in a white sans-serif font, preceded by a vertical red line. Below the name is a horizontal bar with a series of white diagonal stripes on a dark blue background.

Cenfra
Telco
Systems

Support Centre Locations

Dubai

WS 104, Dubai Maritime City
UAE

Delaware

16192, Coastal Highway, Lewes
USA

Ahmedabad

Amrutbaug Colony, Navrangpura
India

Doha

Birkat Al Awamer, Al Wakrah
Qatar



Authorized Distributor in India



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Dr S R K Nagar, 2nd Stage. Jakkur, Bangalore – 560064, INDIA
TEL : +91-80-68957171 Email : sales@gpnet.co.in

Website : www.gpnet.co.in



Thank You