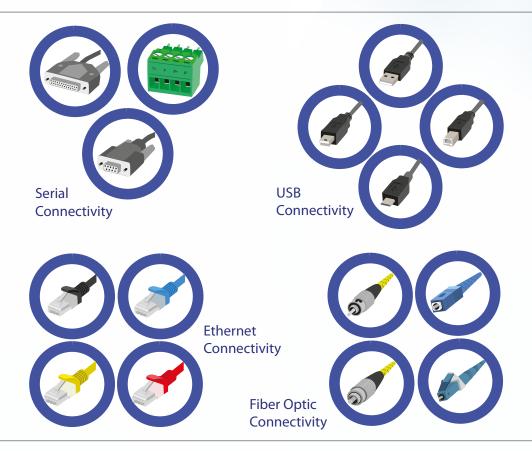




CONNECTIVITY WITH INDUSTRIAL RUGGEDNESS



Connectivity is crucial for all types of data networks. Data networks evolve over time as technology improves; it is often necessary to connect legacy copper-wired serial communications to modern TCP/IP communications through more advanced media such as optical fiber. Moreover, many different types of data formats, standards, media and connectors are often mixed and used together within a single data network. Examples of different types of standards and protocols include physical-layer standards, such as RS-232, RS-485, RS-422, TTL, USB, and TCP/IP, and higher-level protocols, such as Profibus, Interbus, Modbus, BACnet, and Modbus TCP/IP. Copper wires and optical fibers are typical examples of different media; and there are dozens of different connectors used for machine-to-machine (M2M) connectivity and data communication systems, including DB9, DB25, USB type A, USB type B, mini USB, micro USB, terminal blocks, RJ11, RJ45, and ST, SC, FC, and LC connectors for fiber optic products.

Data networks perform many important tasks, including industrial automation (production, processing, monitoring, etc.), building automation (heating, ventilation, air conditioning [HVAC]; security systems; surveillance systems; etc.), motor control, and motion control. The costs for data equipment such as computers, PLCs, and industrial manufacturing or data processing equipment, ranges from hundreds to hundreds of thousands of dollars, but perhaps the most important cost is system downtime because this affects your profitability, product delivery times, and customer relationships. With our wide range of robust, machine-made cables, connectors, patch cords, terminal blocks, and gender changers, you can enjoy the maximum uptime and drastically reduce repair and replacement costs for your M2M connectivity and data communication systems. From serial to TCP/IP, copper wire to optical fiber, and D-sub to USB, CommFront connects your legacy and modern networks with industrial ruggedness.

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Serial Connectivity

Serial ports come in various forms (such as DB9, DB25 and Terminal Blocks) and with both female and male connectors; it is often necessary to convert from one form to another: DB9 to DB25, female to male, DB9 to terminal blocks, etc. CommFront has cables and connectors for all these situations. With our robust, machine-made cables and connectors, you can enjoy the maximum uptime and drastically reduce repair and replacement costs for your M2M connectivity and data communication systems.

Serial Cables

Gender Changers

Terminal Blocks



Category: Serial Cables (Straight-Through)

- DB9 Female to DB9 Male Cable (10ft/3m)
- DB9 Female to DB25 Male Cable (10ft/3m)

Category: Serial Monitoring Cables

- Full-duplex Monitoring Cable
- Half-duplex Monitoring Cable



Category: Gender Changers

- DB9 Female to Female
- DB9 Male to Male
- DB25 Female to Female
- DB25 Male to Male



Category: Terminal Blocks

- DB9 Female to Terminal Blocks
- DB9 Male to Terminal Blocks



USB Connectivity

Replacing conventional RS-232/RS-485/RS-422 ports, USB has become the norm for controlling computer peripherals, and it has now moved from the desktop to more challenging environments, including instrumentation, point of sales, factory & building automation, etc. Similar to serial connectivity, USB also comes in different formats, such as type A, type B, mini, and micro USB. With our range of robust USB connectivity products, including cables and conversion adapters, CommFront connects your modern networks with industrial ruggedness.

Extension Cables



Category: USB Extension Cables - Type A Male to Female Cable (15ft/5m) - Type B Male to Female Cable (15ft/5m)

Conversion Cables



Category: USB Conversion Cables

- Type A Male to type B Male Cable (15ft/5m)
- Type A Male to Mini USB Cable (15ft/5m)
- Type A Male to Micro USB Cable (15ft/5m)

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Ethernet Connectivity

Data networks evolve over time, and the same applies to Ethernet cables; from CAT 3 to CAT 6, the requirements for twisted-pair cables have become more demanding for the sake of increasing network speeds. Modern 10/100M Ethernet requires at least CAT 5 cables, and Gigabit networks require CAT 6 cables for speed and reliability. With our range of high-quality, machine-made, color-coded CAT 5e and CAT 6 cables, you can now organize your data networks confidently and systematically.

CAT 5e Cables





Category: CAT 5e Cables

- CAT 5e FTP Cable (black/10ft/3m)
- CAT 5e FTP Cable (blue/10ft/3m)
- CAT 5e FTP Cable (yellow/10ft/3m)
- CAT 5e FTP Cable (red/10ft/3m)
- CAT 5e FTP Cable (green/10ft/3m)
- CAT 5e FTP Cable (grey/10ft/3m)
- CAT 5e FTP Cable (orange/10ft/3m)

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Category: CAT 6 Cables (backward compatible with CAT 5/5e cables)

- CAT 6 FTP Cable (black/10ft/3m)
- CAT 6 FTP Cable (blue/10ft/3m)
- CAT 6 FTP Cable (yellow/10ft/3m)
- CAT 6 FTP Cable (red/10ft/3m)
- CAT 6 FTP Cable (green/10ft/3m)
- CAT 6 FTP Cable (grey/10ft/3m)
- CAT 6 FTP Cable (orange/10ft/3m)



Fiber Optic Connectivity

Fiber optic patch cords provide convenient connections between fiber-optic converters and patch panels. CommFront offers a range of high-quality, color- and number-coded, multi-mode or single-mode, LSZH (Low Smoke Zero Halogen) fiber-optic patch cords and cables. The LSZH fiber-optic patch cords are more fire-resistant than other type of cables, such as PVC-jacketed cables. Should they catch on fire, burning LSZH cables give off little smoke and no halogen substances, which is important not only for the environment but also for the health of people near the cables.

Multi-Mode FO Cables



Category: Multi-Mode Fiber Optic Cables

- MM/ST-ST LSZH FO Cable (10ft/3m)
- MM/SC-SC LSZH FO Cable (10ft/3m)
- MM/FC-FC LSZH FO Cable (10ft/3m)
- MM/LC-LC LSZH FO Cable (10ft/3m)
- MM/ST-SC LSZH FO Cable (10ft/3m)
- MM/ST-FC LSZH FO Cable (10ft/3m)
- MM/ST-ST LSZH FO Cable (15ft/5m)
- MM/SC-SC LSZH FO Cable (15ft/5m)
- MM/FC-FC LSZH FO Cable (15ft/5m)
 MM/LC-LC LSZH FO Cable (15ft/5m)
- MM/ST-SC LSZH FO Cable (15ft/5m)
- MM/ST-FC LSZH FO Cable (15ft/5m)

Single-Mode FO Cables



Category: Single-Mode Fiber Optic Cables - SM/ST-ST LSZH FO Cable (10ft/3m)

- SM/SC-SC LSZH FO Cable (10ft/3m)
- SM/FC-FC LSZH FO Cable (10ft/3m)
- SM/LC-LC LSZH FO Cable (10ft/3m)
- SM/ST-SC LSZH FO Cable (10ft/3m)
- SM/ST-FC LSZH FO Cable (10ft/3m)
- SM/ST-ST LSZH FO Cable (15ft/5m)
- SM/SC-SC LSZH FO Cable (15ft/5m)
- SM/FC-FC LSZH FO Cable (15ft/5m)
- SM/LC-LC LSZH FO Cable (15ft/5m)
- SM/ST-SC LSZH FO Cable (15ft/5m)
 SM/ST-FC LSZH FO Cable (15ft/5m)

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THE PRODUCTS



KEY FEATURES

- Machine made.
- Color and/or number coded.
- Built for harsh environments and interfacing with mission-critical equipment.
- Large selections of robust cables and connectors.

Model	Description
CBL-DB9_MF-1	RS232 DB9 Male-Female Cable - 10ft (3m), Black
CBL-DB9F_DB25M-1	RS232 DB9 Female to DB25 Male Cable - 10ft (3m), Black
CBL-Full-1A	Full-Duplex RS232 Monitor/Control Cable - Grey
CBL-Half-1	Half-Duplex RS232 Monitor/Control Cable - Grey
GCH-9_MM-1/GCH-9_FF-1	DB9 Male-Male Gender Changer / DB9 Female-Female Gender Changer
DB9F-TB-1/DB9M-TB-1	DB9 Female to Terminal Block / DB9 Male to Terminal Block
CBL-USB-AB-1	USB Type A to Type B Cable - 15ft (5m), Black
CBL-USB-MF-1	USB Type A Male to Female Cable - 15ft (5m), Black
CAT-5e_Black-1	RJ45 FTP CAT-5e Cable with Spring Protector - Black
CAT-5e_Blue-1	RJ45 FTP CAT-5e Cable with Spring Protector - Blue
CAT-6_Red-1	RJ45 FTP CAT-6 Cable with Spring Protector - Red
CAT-6_Yellow-1	RJ45 FTP CAT-6 Cable with Spring Protector - Yellow
FPC-MM-ST-ST-3M-1	10ft (3m) LSZH Fiber Optic Patch Cord - MM/ST-ST - Orange
FPC-MM-SC-SC-3M-1	10ft (3m) LSZH Fiber Optic Patch Cord - MM/SC-SC - Orange
FPC-MM-FC-FC-3M-1	10ft (3m) LSZH Fiber Optic Patch Cord - MM/FC-FC - Orange
FPC-SM-ST-ST-5M-1	16ft (5m) LSZH Fiber Optic Patch Cord - SM/ST-ST - Yellow
FPC-SM-SC-SC-5M-1	16ft (5m) LSZH Fiber Optic Patch Cord - SM/SC-SC - Yellow
FPC-SM-ST-SC-5M-1	16ft (5m) LSZH Fiber Optic Patch Cord - SM/ST-SC - Yellow

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Industrial Communication Solutions RUGGED. SIMPLE. RELIABLE.

For the past decade, CommFront has built a reputation as a major supplier of rugged and reliable, yet simple, data communication products and solutions. From factories to energy plants, shipyards to transportation terminals, and server rooms to laboratories, CommFront provides complete solutions for data and device connectivity, conversion, protection, extension, and research. CommFront offers the broadest selection of rugged, simple, and reliable data communication and machine-to-machine (M2M) connectivity products, ranging from legacy serial communications to modern TCP/IP communications, copper wire to optical fiber, and D-sub to USB connectivity.

CommFront products have been proven to be reliable and are widely used in critical areas that require safe, reliable, and uninterrupted operation, including:

- Factory Automation
- Building Automation
- Energy Plants
- Shipyards and Marine
- Transportation
- Industrial and Commercial Buildings
- PoS, ATMs, and Banks
- PLC, RTU, HMI, and SCADA Systems
- Security and Surveillance
- Instrumentation
- IT Networks
 - Laboratories

Pushing our products to the limit, so you don't have to

Data networks are widely used in automation, control, and communication systems that perform many important tasks ranging from production, automation, communications, security, surveillance, to research. Data networks are mission-critical, and even the shortest downtime or delay can be very costly; furthermore, data networks consist of many different components and are often used over long distances in an electrically noisy environment. Engineering, testing, and troubleshooting can be very time-consuming and challenging. At CommFront, we push our products to their limit over a 3-to-6-month assessment and certifying process, complete with functionality, reliability, and EMC/EMI tests. We test radiation, emissions, and immunity to guarantee the safety of our human users and compatibility with their devices. The industry has many certifying agencies, ranging from the reputable to the less reputable, and from 3 months to 3 days of certification time. CommFront chooses to partner with SGS and TUV because they have the strictest rules and regulations for product testing and certifications. Both SGS and TUV are the Nationally Recognized Testing Laboratories [NRTLs] in North America (approved by the Occupational Safety & Health Administration [OSHA]) and the Notified Bodies in the European Union, the most meticulous and recognized certifying labs in the industry. This makes our products worry- and hassle-free for safety, compatibility, and interfacing with mission-critical equipment.

A reliable data network starts with choosing the right solutions and partners. CommFront engineers have the rich field experience and in-depth knowledge to understand your problems, how to solve them, and most importantly, how to prevent them – right from the design stage. We design and engineer our products not just on the product level but also from the system perspective, for we believe that data communication products do not function by themselves; rather, they are part of a system. Any supplier can sell you a product, but only CommFront is equipped with the rich field experience, world-class certifications, proven track record, and strict ISO quality management system to ensure your total satisfaction.

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THE KEYS TO OUR EXCELLENCE

- Industrial Ruggedness
- Certification by World-Class Labs
- Designed & Manufactured to ISO Standards
- Lead-Free RoHS Compliance
- Applied Reliability Engineering

- Proven Track Record
- 5-Year Replacement Warranty
- 30-Day Money-Back Guarantee
- Free Worldwide Shipping
- Intensive and Fast Support

SAFETY ASSURANCE



CommFront products are strictly certified by SGS/TUV – the world's leading inspection, testing, and certification companies.

QUALITY ASSURANCE

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CommFront products are designed and manufactured to ISO 9001 standards. Our quality control system is strictly certified by SGS (Cert No. SG12/04213).

WARRANTY & GUARANTEE



CommFront products have been proven to be reliable. We back our high-quality products with a 5-year replacement warranty and a 30-day risk-free money-back guarantee.

OUR CLIENTS

Throughout the years, CommFront has gained a sterling reputation in the industry, and its clients include many industry leaders. Below are some of our satisfied customers from around the world, just to name a few:

ABB Advanced Control Systems Allied Electronics Applied Materials AT&T BAE Systems Boeing Cisco Emerson Power Fluke General Electric Google Inc. Harris Corp. Hewlett Packard Honeywell Corp. IBM Corp. Intel Corp. ITT Corp. Johnson Controls L-3 Communications LG Corp. Lockheed Martin Microsoft Mitre Corp. MIT Laboratory Motorola NASA Nissan Northrop Grumman Panasonic Qualcomm Raytheon Corp. Rockwell Collins Samsung Schneider Electric Seagate Siemens Corp. Singapore Technologies Sirius Satellite Spectra Energy Serveron Corp. Toshiba Toyota Thales Comm. Tyco Electronics University of Nebraska University of Wisconsin UL Laboratory US Robotics Vaddio Volvo Volkswagen

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INDUSTRIAL COMMUNICATION SOLUTIONS



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