

WHEN SECURITY IS ON THE LINE

TRUST FIBRE TO THE DESKTOP SOLUTIONS FROM BLACKBOX



WHEN IS FIBRE BETTER

Although the advantages fibre optic cable offers are evident, CATx copper cable continues to dominate horizontal cabling for enterprise-level public and private sector installations. By incorporating fibre into existing copper infrastructures with fibre to the desktop, organisations can significantly enhance security, expand bandwidth, and extend the reach of their networks.



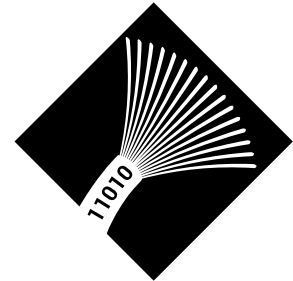
SECURITY

Safeguard the security of sensitive data by eliminating risk of intrusion through copper's electromagnetic emissions.



REACH

Break free from the 100-metre limit of copper cable and expand reach to tens of kilometres with fibre cable.



BANDWIDTH

Transmit data along glass filaments with fibre optic cable and enjoy virtually unlimited bandwidth at 1-10-100-Gigabit speeds.



RELIABILITY

Ensure that your existing network is ready for the demands of emerging technologies with the flexibility of fibre.



COST OF OWNERSHIP

Future-proof your network with fibre to the desktop; there is no need to upgrade and maintenance costs are minimal.

WHY BLACK BOX

FINANCIAL STRENGTH

Over €1 billion annual revenue; publicly traded (BBOX).

EXPERIENCE

Providing leading technology solutions since 1976, Black Box helps more than 175,000 customers in 150 countries build, manage, optimise, and secure IT infrastructures.

WARRANTIES

Multi-year warranties with multi-year extensions and replacement are available.

EXPERTISE

Black Box project engineers provide assistance with system assessment, design, deployment, and training.

BREADTH

One of the industry's largest selections of fibre-to-the-desktop components, including many in-stock products that can be shipped the day they are ordered.

SUPPORT

Reflecting our commitment to complete satisfaction, our dedicated team of highly trained support technicians is available free of charge, 24-hours a day, every day of the year.

CONTACT US

website: BLACKBOX.EU

phone: 00800-22552269 (CALLBBOX)



FIBRE NETWORK IMPLEMENTATIONS

INDUSTRY-SPECIFIC APPLICATIONS



DEPARTMENT OF DEFENSE

Highly reliable with unsurpassed bandwidth, speed, and security—fibre to the desktop is a perfect fit for defense.



INDUSTRIAL AUTOMATION

Dirt, dust, moisture, vibrations, and extreme temperatures are no match for industrial-strength fibre to the workstation.



FINANCIAL CENTRES

With unmatched speed and bandwidth, fibre to the desktop keeps sensitive equipment and data safe and secure.



RETAIL POINT-OF-SALE

Fibre to the PoS provides reliable and secure remote user access to system resources that are safely tucked away.



ENTERPRISE-LEVEL BUSINESSES

Grow your business with fibre to the desktop's unmatched speed, reliability, security, and cost of ownership.



MISSION-CONTROL CENTRES

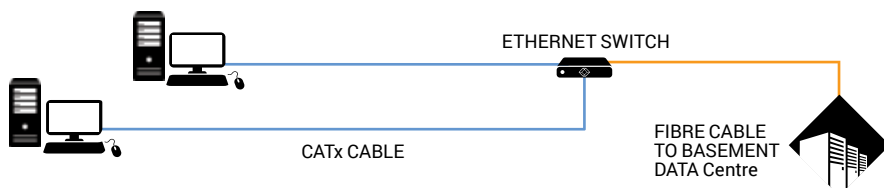
The reliability, speed, bandwidth, and security benefits of fibre to the desktop are ideal for command and control centres.



EVOLUTIONARY FIBRE OPTIC SOLUTIONS

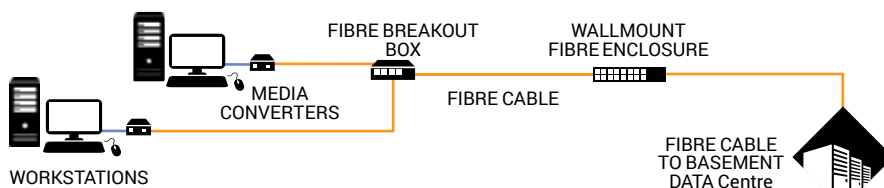
BLACK BOX OFFERINGS

FIBRE TO THE DESKTOP



FIBRE TO THE FLOOR

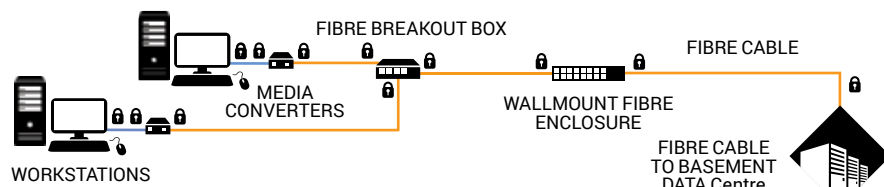
Enhance floor-to-floor and office-to-office security by replacing vertical or trunk copper feeds with up to 40 Gb lossless single path, redundant path, or self-healing fibre optic cables and electronics.



STAGE 1: FIBRE TO THE DESKTOP

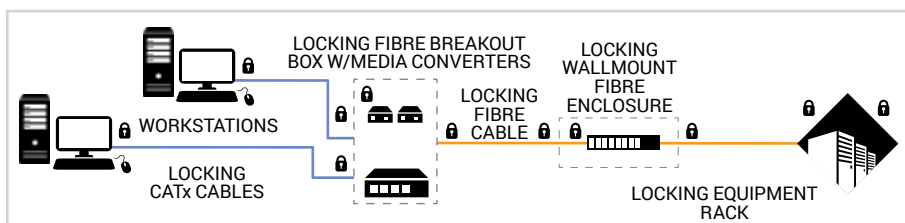
Improve security, reliability, bandwidth, and total cost-of-ownership by extending the benefits of fibre to the floor with fibre to the desktop with pre-terminated, certified fibre optic cable and media converters.

SECURE FIBRE TO THE DESKTOP



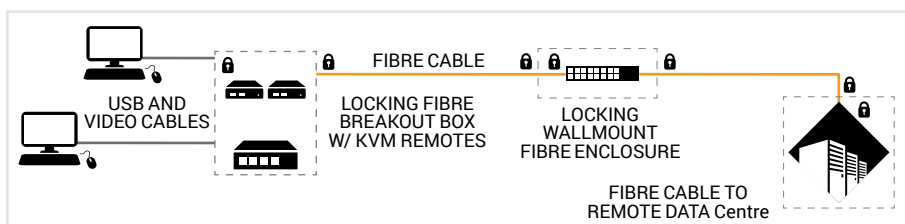
STAGE 2: INTERMEDIATE PHYSICAL SECURITY

Eliminate physical threats with locking connectors at each junction for fibre and copper endpoints.



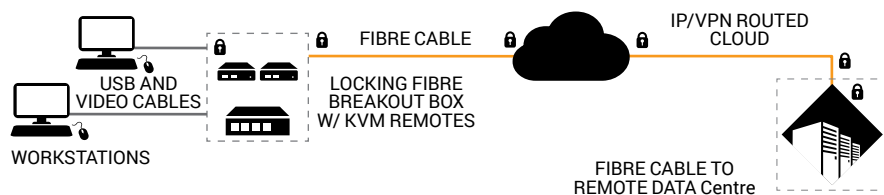
STAGE 3: ADVANCED PHYSICAL SECURITY

Further enhance security by preventing any physical access at fibre or copper interconnection points with secure locking enclosures, locking connectors, and telecom room locking cabinets.



STAGE 4: HIGH-PERFORMANCE KVM

Effectively manage remote workstation access to secured data facilities with high-performance KVM, (keyboard, video, and mouse) combined with the benefits of fibre optic cable.



STAGE 4: HIGH-PERFORMANCE KVM OVER IP

Provide remote access to data with enhanced physical and virtual security, routing each desktop to a virtualised workstation in a secure IT facility via high-performance KVM over IP.



NETWORKING

CONNECTING COPPER AND FIBRE NETWORK COMPONENTS

MEDIA CONVERTERS

When integrating fibre into a copper network, Ethernet media converters connect workstations with copper ports to the fibre network.

These platform-agnostic devices are available in compact standalone models or larger chassis models. They work with any type of operating system or equipment and feature plug-and-play installation, power by USB or an AC adapter, and are available at several speeds.

STANDALONE – Smaller than your business card, standalone media converters are easily hidden on or near the desktop.

CHASSIS – Rackmounted chassis media converters are ideal for Ethernet aggregation in high-density environments.

USB – A common power source for media converters is through a USB cable plugged into a nearby USB port.

PoE – PoE media converters extend the reach of the link and can power devices like cameras, APs, or VoIP phones.

NETWORK INTERFACE CARDS

Network Interface Cards (NICs) convert data from copper to fibre at speeds of FE, GE, and 10 GbE from within a device.

NETWORKING EQUIPMENT	PART NUMBER
MEDIA CONVERTERS	
STANDALONE	LMC400/4000 SERIES
CHASSIS	LGC120 SERIES, LHC018A CHASSIS
POE	LPS500 SERIES
NETWORK INTERFACE CARDS	
GE	LH1690C-LC
10 GbE	LH3001-R2
ETHERNET – USB ADAPTERS	
MULTIMODE	LH702A-LC
MULTIMODE OR SINGLE-MODE	LH701A-SFP



SAFE, REMOTE COMPUTING

LOCATE COMPUTERS IN SECURE AREAS AND CENTRALISE MAINTENANCE

KVM EXTENDERS

There are numerous situations in which KVM extension – separating the user interface peripherals and monitor from the CPU and servers – is advisable or necessary.

When dealing directly with the public, users may be focused on in-person interactions with customers and have little regard for the safety and security of the computer systems that support their efforts, inviting the possibility of unauthorised access.

Situations where highly-sensitive information is being handled, creating a physical separation between user interfaces and computer hardware may not only be important, but imperative to maintain the security of the data.

KVM extension technology provides a convenient way to keep computer equipment and point-of-sale devices securely protected and out of sight. A KVM receiver, located on the desktop, protects user interface devices, such as keyboards, mice, and monitors, through transmission from the hardware, which is in a secure equipment room.

To support a range of scenarios, Black Box offers different types of KVM extenders:

POINT TO POINT – Point-to-point KVM extension keeps the hardware, which may generate unwanted heat and noise, isolated in a secure location.

OVER IP – IP extension provides worldwide access to equipment. It's safe, secure, and enables users to manage equipment locally, remotely, or globally.

INDUSTRIAL – Choose from an extensive selection of devices designed to operate in harsh environments and to resist extreme temperatures, moisture, and contaminants.

KVM EXTENDERS	PART NUMBER
POINT TO POINT	
SINGLE-HEAD DVI-D	ACS4001A-R2-SM
DUAL-HEAD DVI-D	ACS4201A-R2-SM
OVER IP	
AGILITY IP-BASED SINGLE-HEAD KIT	ACR1000A-R2
AGILITY DUAL DVI, USB, AND AUDIO	ACR1002A
INDUSTRIAL	
LRXI-MULTIMODE	ACU5600-MM
LRXI-SINGLE-MODE	ACU5600A-SM





LOCKDOWN YOUR COPPER INFRASTRUCTURE

GUARANTEED FOR LIFE

LOCKABLE CATx CABLE

You may also wish to add simple but effective security with lockable patch cables.

3-Series CATx Patch Cables

Black Box lockable patch cables offer three levels of security—secure, locked, or none—depending if an optional locking pin is used in the LockPORT™ boot. The cables come with no locking pins for standard network connections.

Green Locking Pins—Secure Connections

Prevent accidental disconnects, particularly in manufacturing and industrial environments by inserting an optional green pin into the LockPORT boot. To release the cable, simply squeeze the butterfly tab on the green pin.

Red Locking Pins—Locked Connections

Prevent unauthorised access and tampering of mission-critical or publicly accessible ports by inserting an optional red pin into the LockPORT boot. The cable stays locked until released with a special Removal Tool (sold separately).

LockPORT™ RJ-45 Port Locks

Lock up unused RJ-45 ports and prevent unauthorised network access by inserting Port Locks into open ports. The locks can only be removed with the included removal key.

PREMIUM 3-SERIES LOCKABLE PATCH CABLES	CABLE TYPE
C5EPC60-GY-01	CAT5E UNSHIELDED, LZ0H
C5EPC60S-GY-01	CAT5E SHIELDED WITH F/UTP LZ0H
C6PC60-GY-01	CAT6 UNSHIELDED, LZ0H
C6PC60S-GY-01	CAT6 SHIELDED WITH SC/FTP LZ0H
C6PC80-GY-01	CAT6 (TAA) UNSHIELDED
C6APC80S-GY-01	CAT6A SHIELDED WITH F/UTP

ACCESSORIES	PACKAGE INCLUDES
LP40-GN-XXPAK	GREEN SECURE PINS -XX=10/25 PACK
LP50-RD-XXPAK	RED LOCKING PINS XX=10/25 PACK
KEY-CL	LOCKING PIN REMOVAL KEY
PL-AB-BK-25PAK	BLACK RJ-45 PORT LOCKS, 25 PACK, INCLUDES REMOVAL TOOL
PL-AB-RD-25PAK	RED RJ-45 PORT LOCKS, 25 PACK, INCLUDES REMOVAL TOOL
RT-AB-CL	EXTRA PORT LOCK REMOVAL KEY



HIGH-PERFORMANCE OPTICAL CABLES

GUARANTEED FOR LIFE

FIBRE CABLE

Black Box offers one of the largest selections of fibre cable in the industry.

Standard Fibre Patch Cables

Black Box provides a wide selection of standard fibre patch cables.

Ruggedized Fibre Patch Cables

The more robust alternative to standard fibre patch cables with great protection against kinking and crushing, two common problems when installing fibre. In spite of the extra strength and durability, the cable is still flexible and compact.

Multicolor Fibre Patch Cables

Color-code network connections. Choose from more than 3,000 standard SKUs in 12 colors.

LockPORT™ LC Port Locks

Lock up unused LC ports and prevent network access by inserting Port Locks into open LC ports. The locks can only be removed with the included removal key.

Custom Pre-terminated Fibre

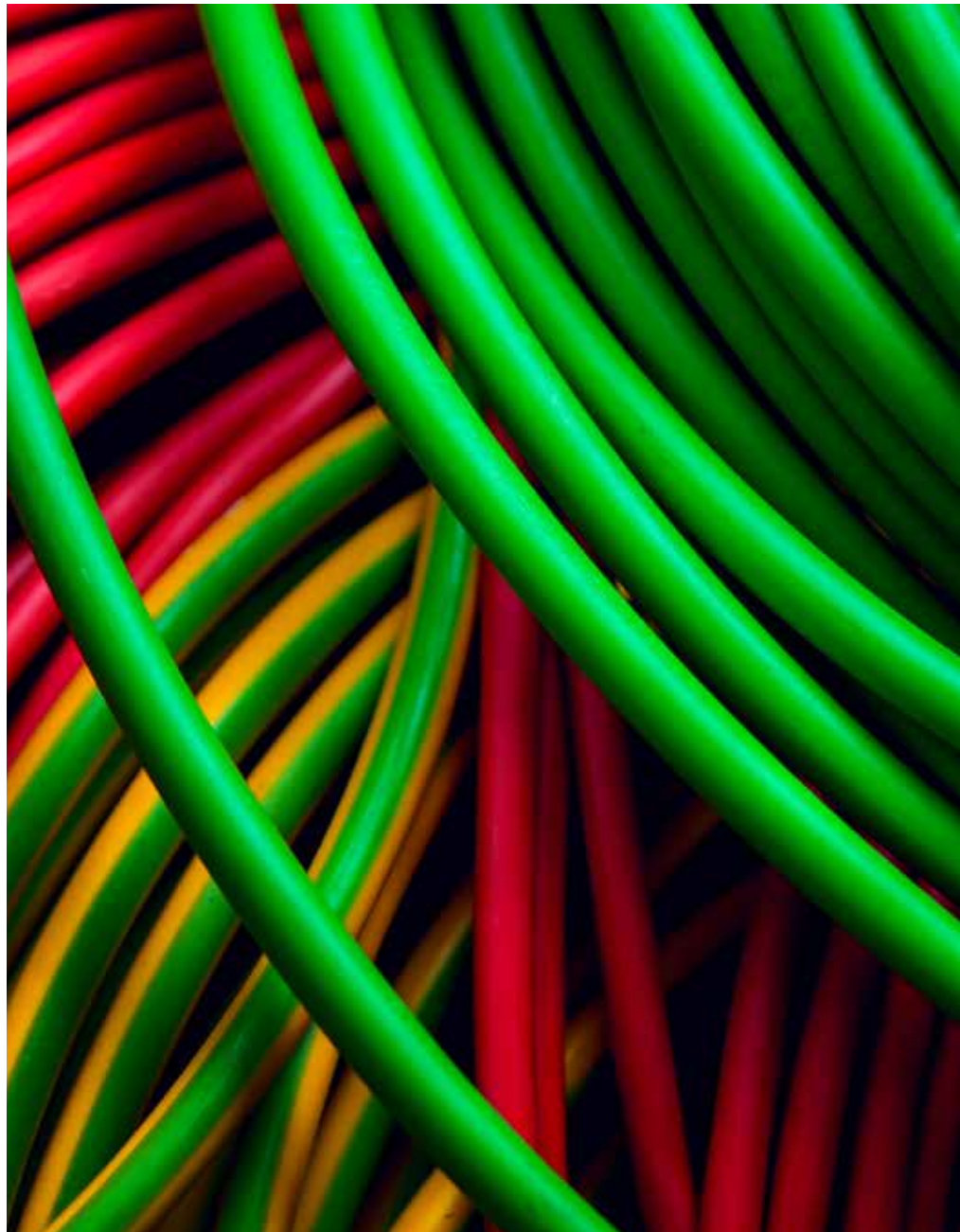
Expedite installations with plug-and-play custom preterminated fibre from Black Box. Please call or go to blackbox.eu/PreTermFibre.

PART NUMBERS	PRODUCT DESCRIPTION
EFE SERIES	STANDARD PATCH CABLE
FOLZH SERIES*	MULTICOLOR PATCH CABLE
EFE-XX-R SERIES**	RUGGEDIZED FIBRE PATCH CABLE

* More than 3,000 SKUs are available at blackbox.eu.

** XX replaces conector type: LCLC=070, LC-SC=071, LC-ST=072, ST-ST Duplex=073, ST-SC=074, SC-SC=075

ACCESSORIES	PACKAGE INCLUDES
PL-LC-BK-25PAK	BLACK LC PORT LOCKS, 25 PACK, INCLUDES REMOVAL TOOL
PL-LC-RD-25PAK	RED LC PORT LOCKS, 25 PACK, INCLUDES REMOVAL TOOL
RT-LC-BK	SPARE LC REMOVAL TOOL





LOCKING CABINETS PROTECT EQUIPMENT

GUARANTEED FOR LIFE

SECURE WALLMOUNT CABINETS

Wallmount cabinets provide a convenient, space-saving way to protect your most important network components.

IP-Rated Wallmount Cabinets

Choose from IP-rated cabinets for protection against dust, dirt, oil, water and contaminants.

Low-Profile Wallmount Cabinets

Low-profile steel cabinets come with keyed front door locks and 19" EIA-310 rails with threaded or square hole rails. They are also quite compact with 48 to 68 cm widths, and 2U to 6U heights. They can hold up to 68 kg of equipment.

Select Wallmount Cabinets

Black Box Select Secure Wallmount Cabinets range from 6U to 10U and measure 56 cm wide by 60 cm deep. They have 19" EIA-310 rails with M6 square holes, locking front doors, and can hold up to 22,5 kg.

FREESTANDING CABINETS

Secure Freestanding Cabinets house network equipment in the data centre. Use sound attenuating cabinets in offices.

Select Data and Server Cabinets

These cabinets are available with multiple configurations, and hold 400 kgs. Choose from 15U, 24U, 38U, 42U and 47U heights, 600 or 700 cm widths, and 600 to 1000 cm depths.

Elite™ Cabinets

For a highly configurable, secure cabinet with many options, opt for Elite™. These cabinets feature front and back doors with multi-point and custom locks. Cabinets range from 24U to 45U high, and multiple depths, holding up to 1250 kgs.

CLIMATE-CONTROLLED CABINETS

Choose IP52 Climate-Controlled Cabinets to protect equipment from dust, dirt and water while maintaining an ideal equipment operating temperature. They come in 14U, 24U and 42U heights and air conditioner capacities from 870 to 2500 W.



CABINET FEATURES

TYPE	DESCRIPTION
LOW-PROFILE WALLMOUNT CABINETS	
RMT353A-R2	6U LOW-PROFILE SECURE WALLMOUNT CABINET
RMT355A-R2	2U LOW-PROFILE SECURE WALLMOUNT CABINET
SELECT WALLMOUNT CABINETS	
RM2411A	6U SELECT WALLMOUNT CABINET
RM2412A	8U SELECT WALLMOUNT CABINET
RM2413A	10U SELECT WALLMOUNT CABINET
IP-RATED WALLMOUNT CABINETS	
RM900A	NEMA 4X (IP66) EQUIPMENT CABINET (WIFI, WLAN, AP)
RMN400A	IP-RATED OUTDOOR CABINET
SELECT PLUS FREESTANDING CABINETS	
SC18U6060SGVSMNK	18 TO 47U, 600 OR 720 WIDTH, 600 TO 1000 DEEP, GLASS FRONT DOOR, PERIMETER REAR DOORS
SC18U6060SMMSMNK	18 TO 47U, 600 OR 720 WIDTH, 600 TO 1000 DEEP, MESH FRONT AND REAR DOORS
CUSTOM MADE	CALL US FOR DIFFERING REQUIREMENTS
ELITE FREESTANDING CABINETS	
EC24U	24U ELITE CABINET, MULTIPLE CONFIGURATIONS AVAILABLE, 1250 KG LOAD
EC38U	38U ELITE CABINET, MULTIPLE CONFIGURATIONS AVAILABLE, 1250 KG LOAD
EC42U	45U ELITE CABINET, MULTIPLE CONFIGURATIONS AVAILABLE, 1250 KG LOAD
CLIMATE-CONTROLLED CABINETS	
RM5008EU	14U CLIMATECAB, 680 W X 800 D, CONDITIONING UNIT UP TO 870 W, REMOVABLE SIDE PANELS
RM5007EU	24U CLIMATECAB, 969 W X 1066 D, CONDITIONING UNIT UP TO 1500 W, REMOVABLE SIDE PANELS
RM5030EU	42U CLIMATECAB, 969 W X 1066 D, CONDITIONING UNIT UP TO 2500 W, REMOVABLE SIDE PANELS



