WHITE SPACE

SOLUTIONS





MEETING ALL YOUR DIGITAL INFRASTRUCTURE REQUIREMENTS!

CHALLENGES IN STRUCTURED CABLING

A structured cabling system that has been designed and deployed effectively will include all the necessary cables and hardware to form a complete telecommunications infrastructure.

The type of structured cabling your data center needs will be determined by various factors, including the services you offer (bandwidth needs), your existing network equipment, and its layout. The top priorities for data centers are to ensure the network infrastructure is flexible, scalable, secure, and has the shortest possible business interruptions. Planning the network structure and selecting the right products to meet current and future requirements is a considerable challenge, and good quality structured cabling components are essential.

STRUCTURED CABLING SOLUTIONS

Pre-assembled solutions have become the norm. Multifibre cables usually with 12 or 24 fibers end on 12-fiber MPO/MTP® connectors or LC or SC duplex connectors. Pre-terminated cables simplify and allow much faster installation and provisioning of necessary connections even during operation. When the new servers, switches, or other active equipment are installed or moved, the cables are already in place and ready for connection. Pre-assembled systems are not limited to fiber optic cables. Pre-assembled solutions for copper cables are also becoming increasingly popular as trunk-solutions with jacks on both ends or as multi-patch trunks for fast and easy connection.



DIFFERENT SOLUTIONS FOR DIFFERENT CABLING AREAS

Within the data centers, different areas have different requirements for density, performance, and technology. The increasing demand for bandwidth and the rapid changes in active equipment technology and interfaces are also setting new standards for structured cabling inside and outside the boundaries of the data center. The requirements for the main connection points of several data centres and the connection points to the outside world are completely different in many situations than in the classic white space of a data center.

WE HAVE SOLUTIONS FOR EVERY AREA AND WE ARE HAPPY TO SUPPORT YOU

As a specialist in data center solutions and structured cabling, we offer you a comprehensive portfolio of solutions that can meet all your digital infrastructure requirements. In order to make this clearer and more intuitive, this catalogue is divided into precisely these core areas - we will be happy to advise and support you in making the right product selection if required.



A variety of needs **covered!**

	GL	OBAL ADVANTAG	ies	PRODUCT CRITERIA	
	EASY & FAST Installation	MODULARITY & Scalability	VERY HIGH Flexibility	PRE-TERMINATED & SPLICE Solutions	FIBER & Copper Solutions
MEET-ME Room	~	~		~	
ADVANCED Connectivity	~	~	~		
DATA CENTER STRUCTURED CABLING SOLUTION	~	~		~	~
HIGH- Performance Computing	~	~		~	

PRODUCT CRITERIA					CUSTOMER ADVANTAGES	
PASSIVE FIBER Solutions with Highest density	PASSIVE FIBER Solutions with Highest quality	SOLUTIONS READY For New DD Transceiver	SOLUTIONS READY For Bandwidth 400G+	CONNECTION TO PROVIDERS AND/OR OTHER BUILDINGS / DATA CENTERS	SERVICE & Support	25-YEAR WARRANTY FOR APPLICATION & PERFORMANCE
~				~	~	~
~	~	~	~		~	~
					~	~
	~		~		~	~

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MEET-ME ROOM FIBER SOLUTIONS



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An ever-increasing number of data centers are being used at ever-higher bandwidths to meet the growing demand for computing capacity. And whether it's a regional data center, a colocation data center or a hyperscaler, access to the outside world and therefore fiber connectivity is vital.

A Meet-Me Room (MMR) is a secure place where customers can connect to one or more carriers or to several customer cages throughout a campus. This area enables cable companies, ISPs, and other providers to cross-connect with tenants in the data center. An MMR contains cabinets and racks with carriers' hardware allowing quick and reliable data transfer. MMRs physically connect hundreds of different companies and ISPs located in the same facility. This peering process is what makes the internet exchange possible. The Meet-Me Room eliminates the round-trip traffic has to take and keeps the data inside the facility. Packets do not have to travel to the ISP's main network and back. Eliminating local loops makes data exchange more secure while also lowering costs.

All colocation data centers house an MMR. Most data centers are carrier-neutral. Being carrier-neutral means tenants can choose from a wide selection of network providers. When there are more carriers, customers are more likely to contract with that data center. The main reason is that customers can improve flexibility, redundancy, and optimize their connection by having multiple choices for providers.

The benefits of Meet-Me Rooms include:

- **Reduced latency:** High-bandwidth, direct connection decreases the number of network hops to a minimum. By eliminating network hops, latency is reduced substantially.
- **Reduced cost:** By connecting directly through a Meet-Me Room, carriers bypass local loop charges. With many carriers in one place, customers may find more competitive rates.
- Quick expansion: MMRs are an excellent method to provide more fiber connection options for tenants. Carrier-neutral data centers can bring more carriers and expand their offering.

LEGRAND'S RESPONSE

The Legrand LCS³ Meet-Me Room concept is designed to provide high quality, high density, and high performance at all levels.



LCS³ Meet-Me Room solutions

The Legrand LCS³ Meet-Me Room portfolio offers a fully scalable solution that seamlessly responds to both the high fiber numbers used in this type of environment and the high quality and reliability that comes with it.

Meet-Me Room fiber solutions > LCS³ Meet-Me Room solutions

MEET-ME ROOM SOLUTIONS COMBINING HIGH QUALITY AND ASTUTENESS

- Products are selected and tested to exceed standards' specifications.
- The LCS³ Meet-Me Room fiber components ensure high levels of quality and performance at all times.



 The innovative concept offers the possibility of adding extra functionalities where necessary, such as WDM Mux/Dmux or PON integration.
With this, the concept also offers excellent application possibilities in so called Telco environments or for example on-premise connectivity.



TYPICAL DEPLOYMENT OPTIONS LEGRAND MEET-ME ROOM PORTFOLIO

MEET-ME ROOM SOLUTIONS EASE OF WORK AT ALL LEVELS

A good network does not only stand or fall on the quality of its connectivity solution; all preconditions must also be fulfilled correctly.

Simple installation

- The LCS³ Meet-Me Room solutions have various mounting options, depending on the installation type (on a wall, uprights, etc.).
- All components can be assembled and disassembled simply and quickly thanks to adjustable uprights, stubs that can be positioned according to your needs...

Adjustable positioning of the 19" mounting brackets, enabling depth adjustment





Simple maintenance

• A unique advantage of the ODF patch panels is the ability to use them fully front-loaded. Patch cabling and incoming cabling are fed in from the front, separated from each other, so that moves, adds and changes are easy to perform.



• The ODF patch panels are equipped with a slide-forward function, which makes the patch surface easily accessible, even in case of full patching. Each cassette can be pulled independently 40mm to the front in order to facilitate adds, moves or changes.



FULLY PRE-ASSEMBLED SOLUTION & EASY SCALABILITY Future-proof solutions based on a modular platform that is easy to upgrade with new functionalities by extending the installation with extra cassettes.

Optimized and simplified patching

A good network does not only stand or fall with a good connectivity solution, also all preconditions have to be fulfilled correctly. The Legrand Meet-Me Room portfolio therefore consists of an Optical Distribution Frame (ODF) with optimized patch management, especially designed for high density applications. Even with more than 4,000 patches in an ODF frame, this allows the patches to be ranked in a structured way.





patch panels are equipped with a slide-forward function, which makes the patch surface easily accessible, even in case of full patching.





Legrand cabling system, LCS³ Meet-Me Room solutions

cassettes, frames and accessory



Can be used in combination with other LCS³ solutions to create an optimal connectivity solution for the entire data center

Pack	Cat.Nos	ODF splice-patch cassettes
		Designed for fast and easy splicing of large amounts of fibers Fully scalable: up to four cassettes on 1U allow for finishing up to 96 fibers, including Air Blown Fibers Completely preloaded delivery including adapters, pigtails, splice trays, heat shrink splice protectors and mounting materials
1 1	C40001 C40002	24 fibers - single-mode - LC/PC cassettes Left splice-patch cassette Right splice-patch cassette
1 1	C40003 C40004	24 fibers - single-mode - LC/APC cassettes Left splice-patch cassette Right splice-patch cassette
1	C49001	Empty base panel Empty base panel (1U) for ODF splice-patch cassettes
		ODF patch-open end cassettes
		Designed for situations where a distribution box or outside-plant splice box is used for splicing Cable diameter 4.5 mm: can be used outside plant in combination with a (multi)duct Cassettes equipped with an open-end cable length 15 m (other lengths available on request)
1 1	C42001 C42002	24 fibers - single-mode - LC/PC cassettes Left patch-open end cassette Right patch-open end cassette
1 1	C42003 C42004	24 fibers - single-mode - LC/APC cassettes Left patch-open end cassette Right patch-open end cassette
1	C49002	Mounting plates 19" mounting plates for ODF patch-open end cassettes

		ODF frames
		Dimensions: H 2050 x W 900 x D 400 mm 42U
		Completely closed: the most critical connections in the data center are well protected against external influences
		Delivered fully pre-assembled including side panels, back panel, doors, roof and integrated cable management
1 1	C44001 C44002	Frame with cable management on the left Frame with cable management on the right
		Accessory
25	C49004	Heat shrink splice protectors 40mm

ADVANCED CONNECTIVITY FIBER SOLUTION



Bandwidths in data centres are constantly increasing. The technology for transmitting data rates of up to 400 GBit/s and beyond is already in the starting blocks. Parallel to the data rates, the requirements for cabling solutions are also increasing. Those who want to make the fiber optic network in their data centre and fiber optic backbone future-proof, scalable, and at the same time application-neutral should rely on future-oriented technology.

With increasing data rates, the fiber optic cabling systems currently available are reaching their limits. The attenuation budgets to be met as well as flexibility to adapt to new active components and cabling structures are obstacles that cannot be overcome. In addition, these systems are incredibly complicated due to the variety of available components and polarities.

LEGRAND'S RESPONSE

The Infinium acclAIM cabling system closes exactly this gap and at the same time increases link performance many times over.



Infinium acclA/M fiber solutions

Infinium accIAIM redefines connectivity by replacing preterminated cassette-based solutions with direct connections eliminating components, process, and cost. Infinium accIAIM delivers the only connectivity on the market with a near lossless link, almost unlimited scalability, and no gender considerations. The Direct Mating Breakout and Application Defined Polarity vastly improves density and flexibility and enables Sustainable Migration improving system life-cycle tremendously.

INFINIUM acclAIM REDEFINED CONNECTIVITY

The acclAIM[™] Alignment Independent Multifiber (AIM) fiber interconnect system is designed to mate multiples of 8-fiber trunk cable connectors directly to arrays of twin-fiber patch cord connectors using a "conversion adapter".

Minimize loss - maximize optical headroom

- Lowest loss pre-term solution: insertion loss near zero
- Minimize or eliminate the need for splicing
- Maximize optical headroom to overcome barriers to performance

Design Smarter – Longer Lifecycle

Simplicity of design combined with application-defined onsite polarity adjustment, fewer components, and near-lossless performance enables accl*AIM* to provide a multi-generational lifecycle with a single installation of a sustainable building asset for decades to come

Ultra-High Density Plus (UHD+)

Make the most of each rack unit (RU) with UHD+ offering up to 192 fibers per RU (33% more than High Density)

Simplify connectivity

- No gender considerations no pins, just direct connections
- Direct mating breakout acclAIM connectors mate directly to an array of 2-fiber mdc duplex patch cords
- Application defined polarity polarity can be adapted to nearly any link configuration; preplanned, on-site, or on the fly with no options to determine when ordering or designing
- Improved accessibility with the increased density of each connector and a smaller footprint enabled by accl*AIM*, there is more room to work on each panel

Approaching infinite scalability

Based on the simplified design, unparalleled performance, and architectural flexibility, Infinium accl*AIM* has an almost limitless migration path

Go live faster

Easy to stock and short lead times for conversion adapters enable rapid or emergency deployment

CUT COST. CUT COMPLEXITY. CUT CASSETTES.



REDUCE LABOR - LOWER COST

- 40% faster install
- 60% faster removal
- Single link testing after mating
- Faster moves, adds & changes

INFINIUM acclAIM SOLUTION COMPONENTS





INFINIUM acclAIM **CONNECTOR COMPARISON**

Infinium acclAIM utilizes a direct mating breakout - eliminating the need for a cassette to breakout multi-fiber cable.



DIME MEASUREMENT: 0.705 in / 17.91 mm

acclAIM

INFINIUM acclAIM SIMPLIFIED INTERFACE





INFINIUM accl*AIM* DENSITY

UHD+ Ultra-High Density Plus 192 Fibers/RU

> HD High Density 96 Fibers/RU



acclAIM Adapters Shown in INFC02U-M4-E Enclosure

INFINIUM accl*AIM* CONNECTOR & TRUNK



INFINIUM acclAIM CONVERSION ADAPTER PANEL - HDFP





INFINIUM acclAIM ERGONOMICS ADVANTAGE

- Easy-grip and release connectors.
- The acclAIM solution delivers more hand/finger clearance than LC Patching acclAIM with MDC offers 1.5 in of space vs. 1/8 in of space with LC.
- With LC connectors, technicians must reach almost an inch further into the cables to engage the latch vs. the acclAIM solution with MDC connectors.
- Less force required for insertion and removal than current connectivity options.

>40% Faster Patch Cable Install

>60% Faster Patch Cable Removal



INFINIUM accl*AIM* INSTALL, MAINTENANCE & TESTING ADVANTAGE

- Faster cable installs and removal.
- acclAIM polarity is application-defined and can be adapted to nearly any link configuration; pre-planned, on-site, or on the fly vs. cassettes which must be pre-planned or reordered to change polarity.
- Patch cord polarity switching with acclA/M takes 6 seconds vs. LC Duplex which takes 48 with the potential of lost components acclA/M solution with MDC patch cords saves 42 seconds on average vs. LC duplex and days faster than reordering a cassette to correct polarity.
- No cassette to inspect before mating.
- No front / rear connector troubleshooting one connection point.
- Adapters do not become obsolete if new grades of fiber are developed, can be reused indefinitely, and do not require delicate handling.
- Testing is completed with a single link after mating vs. testing both sides of a cassette, reducing significant time.



INFINIUM accl*AIM* PERFORMANCE ADVANTAGE

Core level performance - maximizing optical headroom

There is an inevitable correlation between maximizing optical performance margins (optical headroom) and optimizing overall costs from both an operational and procurement perspective*. Infinium accl*AIM* delivers dramatically more optical headroom than any other pre-terminated solution!

* Source: the "Quantum" Effect Paper, more information on multilaneinc.com



Performance advantage

Maximum allowable application attenuation



Industry standard
pre-terminated solutionInfinium acclAIM core solution
improvementBit error rate (errors over time)2.35E-07> 3.6 xTotal link loss (dB)7.20 dB> 1.0 dBFEC corrections (codewords)5.93E+05> 1.77 x

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Advanced connectivity fiber solution > Infinium acclAIM fiber solutions

Core level performance



INFINIUM acclAIM EASE OF INSTALLATION

A single screwdriver is the only tool required for installing the enclosure in a rack. The mounting brackets with pin locks allow the enclosure to slide conveniently between 4 horizontal mounting positions. The open-ended design of the mounting brackets allows the enclosure to be installed by one person. Simply pre-mount the rack screws at the proper location on the rack, place the enclosure's mounting brackets on the pre-mounted screws to hold it in place, then tighten the screws.

INFINIUM acclA/M BEAUTIFUL AESTHETICS

This enclosure features sleek styling that matches the design of Legrand racks, cabinets and other data center products and solutions, and a magnesium color scheme that fits all data center environments.









DESIGNED TO GROW WITH THE NETWORK

■ INFINIUM[™] Enhanced Fiber Enclosure

The Infinium Enhanced Fiber Enclosure is an ideal solution for fiber networks in data centers and building networks. The high-density footprint accommodates from 96 LC to 192 MDC fibers in 1U of rack space. This enclosure has many innovative features designed with the installer, contractor, and network professional in mind, providing a simplified process when installing or working within the enclosure.

- High Density, from 96 LC to 192 MDC connectors in 1U of rack space.
- Available in 1U, 2U, and 4U.
- Accommodates 4 mounting depth positions.
- Magnetic door latch.
- Versatile label card mounting locations (Door or Tray).
- Forward-sliding label card.
- 60/40 split toolless top cover.
- Toolless cable attachment arms.
- Pivot arms for fiber slack management.
- Magnesium color scheme.



1U Enclosure



2U Enclosure



4U Enclosure

INFINIUM acclAIM BETTER ACCESSIBILITY

The magnetic latching mechanism of the enclosure door enables a simple one-handed pull to open, and push to close access. The enclosure door is attached to the sliding drawer face and tray, allowing easy clearance from equipment or other enclosures mounted below. A tray lock mechanism ensures that the tray stays in place when patching or dressing the fiber. The 60/40 split-top cover allows access from above and features toolless removal.

INFINIUM acclA/M INCREASED VISIBILITY

A white tray in the front and integrated LED lighting in the rear, along with the split-top cover, provide maximum visibility when working within the enclosure.









INFINIUM acclAIM INTUITIVE CABLE MANAGEMENT

The unique pivot arms provide an innovative way to manage fiber slack storage. Each arm rotates out towards the rear of the enclosure and hosts a pivot disk that may be used with slack storage spools, fan-out kits, or attachment points for securing the Legrand HiLOC harness. The Cable Attachment brackets feature toolless adjustments for location based on which direction the cable is routed - either side of the enclosure, top or bottom. Simply make the adjustment for cable routing, load the grommet around the cable(s) and close the attachment cover.

INFINIUM acclA/M EASIER LABELING

The label card is incorporated into the front door, positioning the labels directly below the ports for simple labeling and easy port identification. Templates created for both Brother and Dymo printers are available for download.







INFINIUM accl*AIM* REIMAGINING FIBER CABLING

Cassette-based forms of cable management within mission-critical spaces all pose varying challenges around polarity, optical loss, rapid deployment, and costs. Without a compelling alternative solution, these issues have often been viewed as an accepted frustration. Here is where the Legrand team swans opportunity to make life better and more lucrative for critical infrastructure operators.

Legrand's Infinium accl*AIM* redefines connectivity by replacing pre-terminated cassette-based cabling solutions with direct connections, eliminating costly components and time-consuming processes. A first-of-kind, Infinium accl*AIM* is the only fiber cabling connectivity solution on the market that offers the lowest optical loss and a significantly simplified installation and configuration process (the product design requires end-users to order only three parts) that results in virtually unlimited scalability for critical infrastructure operators. Simply put, Legrand's Infinium accl*AIM* cabling solution takes the antiquated, inefficient, and messy way of connecting or mating cables within the data center and other -critical environments, and reimagining that connection to be simpler, smaller, more intuitive, better performing and easier to use. Everything is possible, you can build every needed network architecture and connect all your equipment by just using Infinium accl*AIM*.

STANDARD LINK CONFIGURATION (8F)



Advanced connectivity fiber solution > Infinium acclAIM enhanced fiber enclosure

ARRAY LINK CONFIGURATION (8F)





8F DISTRIBUTION LINK CONFIGURATION



CONVERGENT LINK CONFIGURATION (8F)



INFINIUM acclAIM advantages

- No cassette
- Better performance
- Higher patch field density
- Simpler polarity (no gender pins)

24F DISTRIBUTION LINK CONFIGURATION



Advanced connectivity fiber solution > Infinium acclAIM enhanced fiber enclosure

24F MIXED LINK CONFIGURATION (acclAIM ONLY)



INFINIUM acclAIM advantages

No cassette

- Better performance
- Higher patch field density
- Simpler polarity (no gender pins)

24F MIXED LINK CONFIGURATION (WITH MDC)



INFINIUM acclAIM advantages

- No cassette
- Better performance
- Higher patch field density
- Simpler polarity (no gender pins)

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HD Infinium[™] enhanced fiber enclosures

Infinium[™] acclAIM trunk cable assembly



INFC01U-M4-E



Example of trunk cable assembly

Pack	Cat.Nos	HD enhanced enclosures
		High density, up to 96 LC connectors in 1U of rack space Integrated LED lighting and white tray Forward-sliding label card 60/40 split toolless top cover Toolless cable attachment arms Pivot arms for fiber slack management Magnesium color scheme
		With M4 (Base 12) drawer face
1	INFC01U-M4-E	10
1	INFC02U-M4-E	2 U
1	INFC04U-M4-E	4 U
		-

Pack	Cat.Nos	Infinium™ Core
		Polarity: C Jacket type: Plenum Unit of measure: Meters / Feet
1 1 1	On demand ¹ On demand ¹ On demand ¹	OM5 8 fibers 24 fibers 48 fibers
1 1 1	On demand ¹ On demand ¹ On demand ¹	OM4 8 fibers 24 fibers 48 fibers
1 1 1	On demand ¹ On demand ¹ On demand ¹	OS2 8 fibers 24 fibers 48 fibers

1: For all pre-configured and customized options, consult us.
Infinium[™] acclAIM

fiber conversion adapter panels



HDFP-AME48AC

Pack	Cat.Nos	HDFP adapter panels
1 1	HDFP-AME24QC HDFP-AME48QC	QC Lime 3 LC for 24 fibers OM5 6 LC for 48 fibers OM5
1 1	HDFP-AME24LC HDFP-AME48LC	LC Aqua 3 LC for 24 fibers OM4 6 LC for 48 fibers OM4
1 1	HDFP-AME24AC HDFP-AME48AC	AC Blue 3 LC for 24 fibers OS2 6 LC for 48 fibers OS2

Infinium[™] acclAIM

technical characteristics

Trunk cable	assembly	
	Single-mode	Multimode
General specification	S	
Cable assembly type	Infinium acclAIM trunk	Infinium accIAIM trunk
Fiber category	9 µm Single-Mode (OS2)	50 µm Multimode (OM4/OM5)
Fiber category	United States	United States
Connector design (co	nnector -A, connector -B)	
Connector type	Infinium accIAIM	Infinium accIAIM
Connector color	Blue	Aqua (OM4) / Lime - coming soon (OM5)
Ferrule material	Ceramic	Ceramic
Boot color	Black	Black
Performance specific	ations - per connector (co	nnector -A, connector -B)
Insertion loss max.	0.30dB	0.50 dB
Return loss min.	55 dB	26 dB
Cable design		
Jacket color	Yellow	Aqua (OM4) / Lime - coming soon (OM5)
Polarity	С	С
Fiber Specifications		-
Wavelengths	1310/1550/1625 nm	850/1300 nm

Fiber conversion adapter panels

General information

Color	OM4 (MM) Aqua, OM5 (MM) Lime, OS2 (SM) Blue	
Country of Origin	Mexico	
Туре	50 µm Multimode (OM4 or OM5) / 9 µm Single-Mode (OS2)	

Dimensions

Width	3.45 in / 87.63 mm
Height	1.14 in / 28.96 mm
Depth	1.02 in / 25.9 mm

Technical information

Adapter Front / Rear	MDC (4) per conversion adapter / acclAIM (1) per conversion adapter
Compatibility	Infinium HD-E Enclosure and RFPHD Panels - (4) Conversion Adapter Panels per RU
Density	Conversion Adapters per Panel (3) Hign Density (HD), (6) Ultra- High Density Plus (UHD+)
Fiber Count	48F (6 acclAIM UHD+), 24F (3 acclAIM)

DATA CENTER STRUCTURED CABLING SOLUTION



With the complexities of today's data centers, as well as the promise of higher speeds and technological breakthroughs in the not-too-distant future, it's no wonder that the importance of structured cabling is also increasing.

In contrast to the many limitations inherent in point-to-point connections, structured cabling — or the use of smaller standardized subsystems — allows easier individual connections to be found, moved, and generally managed. Clearly, for forward-thinking data centers, structured cabling infrastructure is the way to go when it comes to data cabling solutions.

UPTIME

With newer data centers, access to critical information is the business's lifeblood, which means that uptime requirements — often with a rating as high as 99 percent — must be supported by the cabling system you install.

SCALABILITY

Whatever cabling solution you choose today will undoubtedly be required to make room for more bandwidth and higher speeds in the future. Scalability is as essential in your cabling infrastructure as it is to the equipment it connects.

FUTURE-PROOF

Along with scalability, your cabling system must be easy to adapt for future equipment changes, such as the push for more modular device usage and migrations to the cloud and virtual services.

LEGRAND'S RESPONSE

The LCS³ cabling system is a modular and flexible connection and distribution system for:

- copper and fiber optic technology
- 19" installation
- pre-assembled copper and fiber trunking technology
- splicing technology and on-site assembly of copper connection modules

The overall system is designed in such a way that the various basic housings and basic support systems for accommodating the module housings can be configured for the most diverse areas of use and application conditions via standardised components and individual parts.

This very high degree of flexibility means that customer-specific requirements can be configured individually.



LCS³ system: Performance

Legrand's LCS³ system offers you a complete range of copper solutions as well as fiber optic solutions designed to deliver advanced network performance:

- ▶ 25 Gbps and 40 Gbps Ethernet applications (Copper system)
- 40 Gbps, 100 Gbps and 400 Gbps Ethernet applications (Fiber optic system)
- MTP/MPO high density and up to Cat. 8 solutions (Copper and Fiber optic systems)

50 | LCS³ system: Efficiency

54 LCS³ system: Scalability & Maintenance

INSTALLATION KITS

Zero-U kit for universal fixing

The Zero-U kit Cat.No 0 321 03 enables you to mount cassettes on 19" uprights, raised access floors, wire and sheet metal cable trays, structural uprights of the enclosure, etc.

The kit can take up to 2 slim High Density cassettes Cat.Nos 0 321 68/69/70 or 1 universal High Density cassette Cat.No 0 321 59 or 0 321 60.

- Efficient solution to optimize space without the need to add an enclosure.
- Compatible with 1U, 2U and 4U High Density modular panels.
- Easy mounting on cable trays (such as Cablofil) thanks to quick-fixing solutions.



1U to 4U kit for overhead fixing

No space available in your LCS³ enclosure? The innovative kit Cat.No 0 321 89 enables you to fix the High Density modular panels on wire cable trays, above the enclosure.

- Perfect toolless fitting on cable trays. It can also be installed on roofs of racks.
- Maintains duplex multimode fiber architecture.
- Scalable (move, add, change) and efficient (space optimization) system.
- Easy installation and maintenance.
- Can be equipped with fiber optic and copper solutions.
- Compatible with automatically removable cassettes.
- Accommodates the same solutions as 19" patch panels.



HIGH DENSITY MODULAR PANELS

From 1U to 4U

Optimize space and connectivity with our three HD modular panels! These quick-fixing solutions (automatic mounting and automatic grounding on 19" uprights) offer you optimum capacities per U: 96 in LC version, 48 in SC version, and 24 in ST version! Keeping link connections accessible and manageable, they offer slim and mix-media cassettes.

4U HIGH DENSITY PANEL

Can hold up to 32 slim cassettes (into 16 supports)



Fiber optic is a transmission medium that enables a larger bandwidth to be used than copper cables. With fiber optic cables, transmission is based on the propagation of light pulses, generated by an LED or a laser source in the infrared band, along a glass fiber. Inside an optical fiber, the signal can either be propagated in a straight line, or be reflected many times. Straight line propagation mode is said to be zero order. Singlemode fibers only use one mode to propagate light. The diameter of their cores is between 8 and 10 μ m. Multimode fibers allow several propagation modes, and the diameter of their cores is 50 μ m or 62.5 μ m (the latter is hardly ever used now).

The diameter of the cladding is usually 125 µm. Multimode fibers are used in indoor installations and enable more economical devices to be used. They are subject to modal distortion when the different modes propagate at slightly different speeds, limiting the maximum distance at which the signal can be received correctly.

Singlemode fibers are used in outdoor installations as they can cover much longer distances and reach much higher speeds.

FIBER OPTIC SYSTEM MTP SOLUTIONS

High-speed solution

With data centers, increased data rates have become a priority requirement. The IEEE has introduced parallel optics as an alternative to higher bandwidth fiber, starting with 40Gbps and now reaching 800Gbps Ethernet.

To answer this need, Legrand has introduced the MTP (Multiple-Fiber Push-On/Pull-Off compatible MPO) fiber solution to the catalogue. It guarantees speed, resistance, high performance, and high density.



40/100/400 Gigabit ethernet connectivity and cable

Identified by IEEE, TIA and ISO/IEC as the solution for non-duplex applications. The term MPO is the generic name, while the term MTP is a specific higher performance version with lower insertion loss.

MTP connector features:

- a high-speed connection with 12 fibers (2x12 for 24 fibers and with cassettes 8 fibers compatible).
- precise and safe connection.
- optimized cable management.
- high-density fibers.
- scalable system for future upgrades.
- simple maintenance operations.
- ease of extraction. No complex installation on site plug and play.
- the MTP is a multi-core connector. 1 cable = 1 connector.



With standard active equipment, we need to convert the MTP to LC or SC



Optical performance

MTP° connectors	Multimode Ultra Performance*	Single-mode Ultra Performance*
IL/Master	0.1 dB typical (all fibers) 0.35 dB maximum (single fiber) ^{(2) (3)}	0.1 dB typical (all fibers) 0.35 dB maximum (single fiber) ^{(1) (4)}
IL Max/Random*	0.35 dB (single fiber)	0.35 dB (single fiber)
Optical return loss ⁽⁵⁾	> 20 dB	> 60 dB (8° angle-polished)

* Performance is guaranteed only with other components of the same Legrand range (Core, Ultra, and Quantum). Mixing ranges or using other brands' components may lead to a different system performance. The uncertainty value for field measurement with LSPM testing using a reference cord defined in ISO/IEC 14763-3 applies to field testing with proposed Legrand testing cords. Refer to the Fiber Optic Testing Guide for Legrand Solutions.

⁽¹⁾ As tested in accordance with ANSI/TIA-455-171 Method D3 / IEC 61300-3-4

⁽²⁾ As tested in accordance with ANSI/TIA-455-171 Method D1 / IEC 61300-3-4

 $^{\scriptscriptstyle (3)}$ As tested on 50µm fibers at a wavelength of 850 nm in accordance with IEC 61280-4-1

⁽⁴⁾ Complies with IEC 61755-3-31/GRADE B

 $^{\scriptscriptstyle{(5)}}\mbox{As tested in accordance with IEC 61300-3-6 and ANSI/TIA-455-107A}$

LC, SC, LC APC, SC APC connectors	Multimode Ultra Performance*	Single-mode Ultra Performance*
IL Max/Master*	0.15 dB	0.15 dB
IL Max/Random** ***	0.2 dB	0.25 dB
Typ. IL/Master*	0.08 dB	0.12 dB
Typ. IL/Random** ***	0.10 dB	0.12 dB
Return loss (UPC/APC)	> 25 dB	> 55/65 dB

* IEC 61300-3-4

** IEC 61300-3-34

*** Performance is guaranteed only with other components of the same Legrand range (Core, Ultra and Quantum). Mixing ranges or use of components of other brand may lead to a different performance of the system. The uncertainty value for field measurement with LSPM testing using a reference cord defined in ISO/IEC 14763-3 applies to field testing with proposed Legrand testing cords. Refer to the Fiber Optic Testing Guide for Legrand Solutions.

COMMON DATA CENTER APPROACHES

Multimode fiber systems have been the most cost-effective fiber solution to use in the data center because the transceivers are much less costly than single-mode transceivers. Multimode transceivers use a vertical cavity surface emitting laser (VCSEL) light source, which is easy to manufacture and package. Multimode fiber systems have a shorter reach than single-mode systems; however, surveys have shown that more than 80% of data centers links extend to 100m or less. Although single-mode cable is less expensive, after factoring in the total system cost of multimode versus single-mode, multimode is still far more cost-efficient.

Maximum data rate according to fiber type and number of cores used

	ОМЗ	OM4	OM5	OS1a	OS2
2-core	1Gbps: 550m 10Gbps: 300m 25Gbps: 70m 50Gbps: 70m	1Gbps: 550m 10Gbps: 400m 25Gbps: 100m 50Gbps: 100m 100Gbps: 100m	1Gbps: 550m 10Gbps: 400m 25Gbps: 100m 50Gbps: 100m 100Gbps: 100m	1Gbps to 400Gbps: 2km	1Gbps: 5km 10Gbps to 400Gbps: 10km
4-core	100Gbps: 70m	100Gbps: 100m 200Gbps: 100m	100Gbps: 100m 200Gbps: 100m	100Gbps: 500m	100Gbps: 500m
8-core	40Gbps: 100m 100Gbps: 70m 200Gbps: 70m 400Gbps: 100m	40Gbps: 150m 100Gbps: 100m 200Gbps: 100m 400Gbps: 100m	40Gbps: 150m 100Gbps: 100m 200Gbps: 100m 400Gbps: 150m	200Gbps: 500m 400Gbps: 500m 800Gbps: 500m	200Gbps: 500m 400Gbps: 500m 800Gbps: 2km
16-core	400Gbps: 100m 800Gbps: 70m	400Gbps: 100m 800Gbps: 100m	400Gbps: 100m 800Gbps: 100m	800Gbps: 100m 1.6Tbps: 500m	800Gbps: 2km 1.6Tbps: 2km

Data in orange: draft applications (distances may vary at time of publication)

FIBER OPTIC SYSTEM **CASSETTES**

Slim solutions for greater connectivity

Optimize space and increase the connectivity capacity of your infrastructure with slim cassettes! They are easy to install and maintain from the rear and front, and they are agile and flexible under all circumstances.

- Mounting either on High Density modular panels or in a Zero-U kit.
- Single-mode and multimode MTP solutions that can be mixed on the same support.
- Sliding cassettes individually removable from front and rear: accessible and easily manageable.
- Equipped with extraction button for easy maintenance: reduced time, cost and risk of MAC.
- High-performance with low insertion loss.
- Universal polarity offers flexibility in case of changes.

ТҮРЕ	CAT. NO
12 LC OM5 multimode	On demand
12 LC OM4 multimode	0 321 69
12 LC OM3 multimode	0 321 68
12 LC OS2 single-mode	0 321 70
Blanking module	0 321 39



OM4 multimode slim cassette - Cat.No 0 321 69



OS2 single-mode slim cassette - Cat.No 0 321 70



Slim cassettes are to be mounted on HD modular panels with support Cat.No 0 321 38. The support can take up to two slim cassettes.

Slim cassettes Cat.Nos 0 321 69/70 mounted on modular panel Cat.No 0 321 76 with support Cat.No 0 321 38

Ready for FUTURE APPLICATIONS!

Our on-demand OM5 offer meets all your requirements in terms of connectivity! The infrastructure can easily evolve from 25 G or 50 G to 100 G and to 400 G thanks to parallel and multiplexing applications.

OM5 multimode MTP adaptor



PERFORMANCE AND WAVELENGTH

OM3 and OM4 fibers are optimized according to the wavelength traditionally used: 850nm. To accept the four signals used in multimode WDM, OM5 has been redesigned to accept wavelengths from 850nm to 950nm. The diagrams below provide a graphical representation.

OM5 12 LC multimode block







SPLICING CASSETTE

PRETERMINATED CASSETTE

PUSH-BUTTON CASSETTE

Fast push-button system to facilitate upgrade and maintenance operations

COPPER CASSETTE

FIBER OPTIC SYSTEM **PANELS**

Modular panels

- Innovative quick-fixing solution.
- Modular blocks to adapt to modular panel or drawer: LC, SC, ST, LC, APC, SC APC.
- Possible to add modular blocks, blank panel, MTP adaptor.



HD Modular panels

- Cassettes slide in from front & rear.
- Fast push-button on cassette.
- Splicing cassette which takes all modular blocks.
- Mixture of fiber/copper on cassette panel.
- Trunk & cord management system.



LCS³ system: Efficiency

Legrand's LCS³ system offers you copper and fiber optic solutions designed to enhance your infrastructure's efficiency:

- ▶ 48 ports per unit for high density (Copper system)
- ▶ 90 LC per unit for high density (Fiber optic system)
- 144 LC per Unit for ultra-high density (Copper and Fiber optic systems)

54 LCS³ system: Scalability & Maintenance

COPPER SYSTEM PATCH PANEL HD SOLUTION UP TO 48 PORTS PER UNIT

High-density patch panel. It has changed from 24 to 48 ports, guaranteeing a reduced space occupied and making future upgrades easier. Designed to house four blocks of 12 connectors each.





QUICK-FIX system

Innovative quick-fixing solution:

- Push and connect system.
- Automatic earth connection.
- In-rack cabling optimized.
- Accessory for patch cords with rotating system for angle adjustment and label holder.

Compatible with all panels (flat, angled, HD)



COPPER SYSTEM PATCH PANELS

The patch panels have been designed and produced to optimize space, with up to 48 ports per unit, and make maintenance and future upgrades easier. They are available in both flat and angled versions.

They have a quick system for pulling out the unit and an innovative cable guiding system for tidy and easy cable management.



Block of 12 connectors for patch panel

Innovative cassettes

- Sliding cassettes: easier maintenance.
- Fast push-button extraction.
- Innovative modular cassette system.
- Easy maintenance: hands-free solution, cassette maintained after extraction.
- Easy to mix with Legrand fiber optic solutions.



Data center structured cabling solution > LCS³ system: Efficiency



Angled patch panel solution from 24 to 48 ports per unit

Patch panels with an angled design allow the cable to run into each side of the rack, creating a correct cable radius of curvature.

This avoids the need to manage the cables horizontally, and allows the patch cords to be carried directly in the vertical cavities.

Also available in the 24-port version



LCS³ system: Scalability & Maintenance

Legrand's LCS³ range offers you innovative systems to facilitate wiring and installation, while offering increased data rates with both the copper solution and the fiber optic solution.

COPPER SYSTEM RJ 45 CONNECTORS

The **TOOLLESS CONNECTORS** with toolless fast connection are available in all categories for installation on patch panels and in the workstation. A perfect connection can be obtained in a few seconds, guaranteeing the optimum performance of the link from the patch panel to the workstation.



COPPER SYSTEM OPTIMUM PERFORMANCE WITH CAT. 8

Cat.8 connectors

The toolless Cat. 8 STP connectors with transmission speed (bit rate) from 25 Gbps to 40 Gbps, are integral to the performance of the LCS³ system.

- In accordance with ISO/IEC 11801 series standards.
- Tested up to 2500 connection/disconnection cycles.
- A perfect connection in just a few seconds.



Connection & cabling

To maximize performance, combine the Legrand Cat. 8 connector with the Legrand Cat. 8 cable supporting up to 40 Gbps over a single cable.

The Cat. 8 cable is terminated with an improved dedicated RJ45 connector, which can support future performance.

The performance is 4 times better than that of a Cat.6a cable with up to 2000 MHz bandwidth.

- Double screening to avoid interference and loss of data.
- Dedicated to higher capacity in data centers and equipment rooms.
- Compliant with ISO/IEC 11801 series standards.

Data center structured cabling solution > LCS³ system: Scalability & Maintenance

Legrand guarantees the following performance on end-to-end links of Cat. 6a/Class Ea: 3dB margin on Channels, on Return Loss (RL) and Near End Cross Talk (NEXT) performance, for the complete frequency range, based on ISO/IEC limits.

- No marginal results (shown with Asterisk on test results) on Permanent Links.
- Valid on standard compliant 2 connectors channels.



Applications distances according to category of Cabling

	LCS ³ Cat.5e	LCS ³ Cat.6	LCS ³ Cat.6A	LCS ³ Cat.8
Frequency ⁽¹⁾	100MHz	250MHz	500Mhz	2000MHz
Application				
1000Base-T	100m	100m	100m	100m
2.5Gbase-T	Possible ⁽²⁾	Possible ⁽²⁾	100m	100m
5Gbase-T	Possible ⁽²⁾	Possible ⁽²⁾	100m	100m
10Gbase-T	N/A ⁽⁴⁾	Possible ⁽³⁾	100m	100m
25Gbase-T	N/A ⁽⁴⁾	N/A ⁽⁴⁾	Possible ⁽⁵⁾	30m
40Gbase-T	N/A(⁴⁾	N/A ⁽⁴⁾	Possible ⁽⁵⁾	30m

- ⁽¹⁾ Maximum frequency defined in the standards
- ⁽²⁾ Follow ISO/IEC TR 11801-9904 or TIA TSB 5021 to evaluate the possibility on installed links. Distance will depend on many factors.
- ⁽³⁾ Follow ISO/IEC TR 24750 or TIA TSB 155-A to evaluate the possibility on installed links. Distance will depend on many factors.
- (4) Not Available.
- ⁽⁵⁾ Follow ISO/IEC TR 11801-9905 to evaluate possibility on installed links. Distance will depend on many factors.

TOOLLESS CONNECTOR CONNECTION PHASES





Take the wire housing



Pass the cable through the back of the wire housing



Cut the pairs



Install the wire housing without pushing



Push down the lever and lock the connector

COPPER SYSTEM PRE-TERMINATED COPPER TRUNK CABLE SOLUTION

In a data center, copper cables are an ideal solution as they can offer significant advantages in terms of capital expenditures, operating expenditures, and reliability. Pre-terminated copper trunk cables as a structured cabling option for quick and easy deployment in permanent link trunks and equipment port harnesses of data center architectures can be used for interconnect and cross-connect applications.



Different trunk solutions are possible for different applications

Jack-to-jack copper trunk

The use of pre-assembled copper Ethernet trunk cables from Jack to Jack requires the use of empty patch panels at both ends.

• Plug-to-plug copper trunk

Plug-to-Plug copper cables are used to establish a direct connection between active devices (e.g. between server and switch). They can also be used in an open workspace as a bundled patch cable group.

Jack-to-plug copper trunk

Jack-to-plug copper cables are used to extend switch ports and for cross-connect connections. They are plugged directly into the active components on one side and require the use of empty patch panels on the other side.

Examples of use

Interconnect

In general data center cabling, copper Ethernet trunk cables provide a permanent connection between patch panels at both ends - one end is in a switch/network cabinet, and the other is in a server cabinet.



Cross-connect

Cross-connect cabling usually uses a defined patch area (often with two or more adjacent patch panels) between the control/network cabinet and the server cabinets. Copper patch cables are used to connect the active devices and patch panels at the control/network cabinet, the cross-connect cabinet, and the server cabinet.



Data center structured cabling solution > LCS³ system: Scalability & Maintenance

Details

• Use

- Preterminated trunks made of 6x4 twisted pairs cables and 6 x RJ 45 connectors at each end. Designed for ease of installation and space saving in data center environment.
- Delivered with an individual test report.

Nota:

- this solution is not intended for the use of PoE. In the case of PoE, to be installed according to ISO/IEC 14763-2 and EN 50174-2. Contact Legrand for any temperature derating calculations linked to the environment or PoE.
- maximum patch cord length associated with these pre-terminated trunks: 5m

Description

Preconnectorised solution composed of:

- 1 surgain cable 6 x 4 pairs
- 6 RJ 45 LCS³ connectors at each extremity (protected in bubble bags)
- factory recipe
- cable tracking 1 to 6

Installation



To be installed in LCS³ copper cassette To be ordered separately

• Technical, mechanical and electrical features Refer to components technical data sheets.

• Environmental features

Refer to components technical data sheets.

COPPER SYSTEM CABLES

The cable is one of the most critical components in horizontal wiring for the performance of the whole link, in terms of both the product's quality and the installation's conformity. Any cable installation error will seriously compromise the performance of the installation. For structured cabling systems, the standard requires the use of category 5e, 6 and 6a (100 MHz, 250 MHz and 500 MHz respectively) twisted, symmetrical 4-pair cables with an impedance of 100 Ω 1).

The cable can be of the following type:

- Unshielded U/UTP (Unshielded Twisted Pairs).
- Shielded F/UTP (Foiled Twisted Pairs).
- Double shielding SF/UTP or S/FTP.



NOTE 1): To date, category 7 is not very widely used, even though it is standardised and can offer high performance levels. It is used for reasons of form factor, cost, and where there are installation difficulties.

EXAMPLES OF LEGRAND CABLES

	Sheath	Storage/installation temperature	Operating temperature
Cat. 6A F/UTP 100 Ω	LSZH (zero halogen cables) conforming to standard NFC 32062, flame retardant conforming to standards IEC 332-1 and NFC 32070	0 to +50°C	-20 to +60°C
Cat. 6 U/UTP 100 Ω	PVC or LSZH cables conforming to standard NFC 32062, flame retardant conforming to standards IEC 332-1 and NFC 32070	0 to +50°C	-20 to +60°C
Cat. 6 F/UTP 100 Ω	PVC or LSZH cables conforming to standard NFC 32062, flame retardant conforming to standards IEC 332-1 and NFC 32070	0 to +50°C	-20 to +60°C
Cat. 5e U/UTP 100 Ω	PVC or LSZH cables conforming to standard NFC 32062, flame retardant conforming to standards IEC 332-1 and NFC 32070	0 to +50°C	-20 to +60°C

NOTE: For all other types of cable, please contact the Legrand sales network

CPR CONSTRUCTION PRODUCTS REGULATION

The CPR regulation aims to guarantee the free circulation of products made in the European Union, adopting a harmonised technical language which can define the performance and essential features of all construction products.

Electrical cables are rarely the cause of a fire, but when they are involved, they may form a seriously hazardous component because of their large quantities and because they are found in all rooms of the building. With careful prevention and making state-of-the-art systems with safe and high-quality components in accordance with the CPR regulation, fire propagation, the lack of visibility in smokefilled rooms, and the diffusion of corrosive and toxic gases can be reduced or almost eliminated.

The CPR regulation (EU 305/2011) concerns all the products made to be permanently incorporated (installed/used) in buildings and other civil engineering works (e.g. homes, industrial and commercial buildings, offices, hospitals, schools, undergrounds, etc.). As part of the features considered important for the safety of constructions included in the CPR, the European Commission has decided to consider cables' Reaction to Fire and Resistance to Fire, recognising the importance of their behaviour and role in fire. The release of harmful substances is one of the performances considered important for cables; however, no minimum performance levels have been established at present because when typically used, the cables do not release harmful substances.

All the cables installed permanently in constructions, to transport power or for telecommunications, of any voltage level and with copper or fiber optic conductors, must be classified based on the classes of premises where they will be installed. The cables are classified in seven classes of Reaction to Fire: Aca, B1ca, B2ca, Cca, Dca, Eca and Fca identified by the subscript "ca" (cable) as a function of their decreasing performance. As well as this main classification, the European authorities have also regulated the use of the following additional parameters:

• \mathbf{a} = acidity which defines the hazard of the fumes for people and the corrosiveness for things. Varies from a1 to a3

• **s** = opaqueness of the smoke. Varies from s1 to s3

 d = dropping of incandescent particles which could propagate fire. Varies from d0 to d2.

A more severe check (System 1+) is required for the classes from Aca to Cca. It lays down the initial check and continuous monitoring of the product and checks of the manufacturing control system, while for the classes from Dca to Eca the check only lays down the initial product check (System 3). Class F, however, is based on the manufacturer's selfdeclaration (System 4).

Legrand cabling system, LCS³ cat. 8 flat patch panels - equipped and to be equipped

Automatic cassette removal

0 337 82

Equipped with new-generation Quick-Fix for automatic (screwless) mounting on enclosure and cabinet uprights Universal mounting on all cabinets or enclosures Panels ensure automatic earthing of each connector Equipped with four bundles guides fixed at the rear

Pack	Cat.Nos	Cat. 8 patch panel equipped with
		19" panel - 1U Equipped with 4 cassettes of 6 pre-fitted Cat. 8 LCS ³ RJ 45 connectors Automatic cassette removal by simple pressure Each connector can be removed individually T568A and B marking with colour codes Equipped with rear cable guide to hold cable during maintenance Supplied with coloured labels Compliant with ISO/IEC 11 801, EN 50173 and ANSI/ TIA 568 standards
1	0 337 82	Flat panel STP panel - Metal shielding - PoE++
		Patch panels 24 connectors - to be equipped 19" panels - 1U Equipped with rear cable guide to hold cables during maintenance
1	0 337 90	Flat panel with empty cassettes to be equipped with connectors With 4 automatically removable cassettes to be equipped with Cat. 5e to Cat. 8 RJ 45 connectors
1	0 337 91	Flat panel without connectors to be equipped with cassettes Can take a maximum of 4 automatically removable cassettes: - copper to be equipped with Cat. 5e to Cat. 8 RJ 45 connectors - fiber optic

Legrand cabling system, LCS³ cat. 8 angled patch panel to be equipped with connectors



0 337 92

Pack	Cat.Nos	Angled patch panel with 24 connectors
		19" panel - 1U Equipped with new-generation Quick-Fix for automatic mounting (screwless) on cabinet and enclosure uprights Universal mounting on all cabinets or enclosures Panels ensure automatic earthing of each connector Equipped with rear cable guide to hold cables during maintenance
		Angled patch panel to be equipped with
1	0 337 92	Can take up to 24 Cat. 5e to Cat. 8 RJ 45 connectors

MARK

Legrand cabling system, LCS³ cat. 8 connector, cords and cables

Legrand cabling system, LCS³ cat. 8 accessories

1010000

0 337 85	0 337 88	0 337 03	03
Pack	Cat.Nos	Cat. 8 RJ 45 connector for flat or	
6	0 337 85	angled STP panel Set of 6 STP RJ 45 Quick-connect connectors (no tools required) T568A and B marking with colour codes Compliant with ISO/IEC 11 801, EN 50173 and ANSI/TIA 568 standards To be installed in cassettes for flat panels or directly in an angled panel or a zone distribution box to be equipped	
		Cat. 8 cable for local networks	
500 ¹	0 337 88	Performance 2000 MHz Cable with 4 twisted pairs 100Ω LSZH sheath: zero halogen EIA/TIA colour code Compliant with ISO/IEC 11 801, EN 50173 and ANSI/TIA 568 standards Product conforming to the CPR regulations S/FTP - 4 pairs Length 500 m, supplied on a drum Weight 45 kg	
		Cat. 8 RJ 45 patch cords	
	LSZH	RJ 45/RJ 45 - straight Compliant with ISO/CEI 11801 and EIA/TIA 568 standards	
1	0 337 03	Shielded S/FTP, impedance 100 Ω Length 2 m Length 3 m	
		Marking kit	
200	0 518 90	Kit of 200 coloured rings for marking RJ 45 cords 4 colors (green/red/yellow/blue). 50 pieces of each color Rings to be clipped onto the patch cords	

1: in metre(s)

FFF	-1-1-	VO	-	EESEEE	
0 337 56		0 337 59	0 337 55	0 337 66	
V					
0 337 57	7		0 333	7 58	
Pack	Cat.Nos	Common acc panels	cessories for	flat and angled	
10	0 337 56	Port blanking Separable blar For covering 1 (High Density s	modules hking plate to 6 ports or 1 to solutions)	0 12 ports individually	
1	0 337 59	Cord management 2 cable guides to be clipped onto new-generation Quick-Fix Provide side cord management Label-holder for identification			
		Specific acc	essories for f	lat panels	
1	0 337 55	Cassette for fl Removable em connectors, tal Can be remove for ease of inst For equipping	lat panels to be apty cassette to b kes 6 Cat. 5e to ed by simple pre allation and main flat panels	equipped be equipped with Cat. 8 connectors ssing on the cassette, ntenance	
		Cassette with	shutters for fla	t panels to be	
1	0 337 66	Removable em connectors, tal	pty cassette to l kes 6 Cat. 5e to	be equipped with Cat. 8 connectors	

0 337 66	connectors, takes 6 Cat. 5e to Cat. 8 connectors
	Can be removed by simple pressing on the cassette,
	for ease of installation and maintenance
	Equipped with 6 individual shutters to protect RJ 45
	connectors contacts
	For equipping flat panels
	Blanking cassette
0 337 57	To be used to fill gaps in the panel

Specific accessory for angled panels 0 337 58 Optimises air flow management in the enclosure

Legrand cabling system, LCS³ cat. 6A flat patch panels - equipped

Legrand cabling system, LCS³ cat. 6A flat patch panels, to be equipped



Equipped with new-generation Quick-Fix for automatic (screwless) mounting on enclosure and cabinet uprights Universal mounting on all cabinets or enclosures Panels ensure automatic earthing of each connector Equipped with four bundles guides fixed at the rear

Pack	Cat.Nos	Cat. 6A patch panels equipped with 24 RJ 45 connectors
		19" panel - 1U Equipped with 4 cassettes of 6 pre-fitted Cat. 6A LCS ³ RJ 45 connectors Automatic cassette removal by simple pressure Each connector can be removed individually T568A and B marking with colour codes Equipped with rear cable guide to hold cables during maintenance Supplied with coloured labels Compliant with ISO/IEC 11 801, EN 50173 and ANSI/ TIA 568 standards
		Flat panels 24 RJ 45 connectors - 1U - PoE++
1	0 337 70	UTP STP
1	0 001 12	



Equipped with new-generation Quick-Fix for automatic (screwless) mounting on enclosure and cabinet uprights Universal mounting on all cabinets or enclosures Panels ensure automatic earthing of each connector Equipped with four bundles guides fixed at the rear

Cat.Nos	19" flat patch panels - to be equipped
	19" panels - 1U Equipped with rear cable guide to hold cables during maintenance Automatic cassette removal by simple pressure Each connector can be removed individually
	Flat panel with empty cassettes to be equipped
0 337 90	with connectors Equipped with 4 automatically removable cassettes, takes up to 24 Cat. 5e to Cat. 8 RJ 45 connectors
0 337 91	Empty flat panel to be equipped with cassettes Takes a maximum of 4 automatically removable cassettes: - copper to be equipped with Cat. 5e to Cat. 8 RJ 45 connectors - fiber optic
0 337 93	High Density flat panel with empty cassettes to be equipped with connectors Equipped with 4 High Density cassettes, takes up to 48 Cat. 5e to Cat. 6A RJ 45 connectors
	10" flat patch panels - to be equipped
0 337 98 0 337 99	10" panels - 1U Takes up to 6 Cat. 5e to Cat. 8 RJ 45 connectors Takes up to 12 Cat. 5e to Cat. 6A RJ 45 connectors
	Cat.Nos

Legrand cabling system, LCS³ cat. 6A

angled patch panels to be equipped, connectors



0 337 75

Equipped with new-generation Quick-Fix for automatic (screwless) mounting on enclosure and cabinet uprights. Universal mounting on all cabinets or enclosures Panels ensure automatic earthing of each connector Equipped with four concentric strand guides fixed at the rear

Pack	Cat.Nos	Angled patch panels - to be equipped
		19" panels - 1U
1	0 337 92	Angled patch panel to be equipped with connectors Takes up to 24 Cat. 5e to Cat. 8 RJ 45 connectors
1	0 337 94	High Density angled panel to be equipped with connectors Takes up to 48 Cat. 5e to Cat. 6A RJ 45 connectors
		Cat. 6A High Density RJ 45 connectors Quick-connect connection (no tools required) T568A and B marking with colour codes Compliant with ISO/IEC 11 801, EN 50173 and ANSI/ TIA 568 standards To be installed in cassettes for flat panels or directly in an angled panel or a zone distribution box to be equipped Set of 6 PL 45 connectors
6 6	0 337 73 0 337 75	UTP STP

Legrand cabling system, LCS³ cat. 6A accessories

0 337 56		0 337 59 0 337 55 0 337 66				
0 337 57		0 337 58				
Pack	Cat.Nos	Common accessories for flat and angled				
10	0 337 56	Parters Port blanking modules Separable blanking plate For covering 1 to 6 ports or 1 to 12 ports individually (High Density solutions)				
1	0 337 59	Cord management 2 cable guides to be clipped onto new-generation Quick-Fix Provide side cord management 1 abel-holder for identification				
		Specific accessories for flat panels				
1	0 337 55	Cassette for flat panels to be equipped Removable empty cassette to be equipped with connectors, takes 6 Cat. 5e to Cat. 8 connectors Can be removed by simple pressing on the cassette for ease of installation and maintenance For equipping flat panels				
1	0 337 66	Cassette with shutters for flat panels to be equipped Removable empty cassette to be equipped with connectors, takes 6 Cat. 5e to Cat. 8 connectors Can be removed by simple pressing on the cassette for ease of installation and maintenance Equipped with 6 individual shutters to protect RJ 45 connectors contacts For equipping flat panels				
1	0 337 95	High Density cassette for flat panels to be equipped Removable empty cassette to be equipped with connectors, takes 12 Cat. 5e to Cat. 6A connectors Can be removed by simple pressing on the cassette for ease of installation and maintenance For equipping flat panels				
1	0 337 57	Blanking cassette To be used to fill gaps in the panel				
		Specific accessory for angled panels				
1	0 337 58	Cover Optimises air flow management in the enclosure				

Legrand cabling system, LCS³ cat. 6A and cat. 7

cables and cords



Legrand cabling system, LCS³ fiber optic 19" fiber optic drawers

0 321 62		۲ ۲ ۲ ۲	0 321 34		0 321 10 0 321 11
Pack	Cat.Nos	Equipped 19" fiber optic drawers	Pack	Cat.Nos	Fiber optic blocks
1 1 1 1 1 1 1 1 1 1	0 321 61 0 321 62 0 321 63 0 321 64 0 321 65 0 321 66 0 321 67 0 321 71 0 321 72 0 321 73 0 321 74	Metal 19" pre-equipped fiber optic drawers, 4 cable entries, supplied with screw fixing kit, 2 cable glands (Ø 13.5 and 16 mm), coiling system and splice cassette Panel and optical ports marked on dedicated marking area Sliding End stop at a 30° angle Maximum capacity: 48 fibers in LC version, 24 fibers in ST and SC versions Depth 220 mm, height 1 U SC duplex for 24 multimode fibers LC duplex for 24 multimode fibers SC duplex for 24 multimode fibers SC duplex for 24 single-mode fibers LC duplex for 24 single-mode fibers LC duplex for 48 single-mode fibers SC APC duplex for 48 single-mode fibers SC APC duplex for 48 single-mode fibers SC APC duplex for 48 single-mode fibers LC APC duplex for 48 single-mode fibers SC version Depth 260 mm, height 1 U LC duplex for 72 multimode fibers SC duplex for 72 multimode fibers SC duplex for 72 single-mode fibers SC duplex for 73 multimode fibers SC duplex for 73 single-mode fibers SC duplex for 74 single-mode fibers SC duplex for 74 single-mode fibers Rotating Supplied with reversible left or right opening Maximum capacity: 72 fibers in LC version, 36 fibers in SC version Depth 260 mm, height 1 U LC duplex for 72 multimode fibers SC duplex for 73 single-mode fibers S C duplex for 74 single-mode fibers S C duplex for 75 single-mode fibers S C duplex for 76 single-mode fibers S C duplex for 78 single-mode fibers S C duplex for 79 single-mode fibers S C duplex for 70 single-mode fibers	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 321 17 0 321 10 0 321 11 0 321 12 0 321 13 0 321 14 0 321 15 0 321 15 0 321 16 0 321 33 0 321 19 0 321 27 0 321 20 0 321 21 0 321 23 0 321 24 0 321 25 0 321 34 0 321 36 0 321 37	To be clipped directly onto modular fiber optic drawers to be equipped Cat.Nos 0 321 00/01 or onto fiber optic splice cassette Cat.Nos 0 321 41 Single-mode fiber blocks (9/125 µm) ST block for 6 single-mode fibers SC duplex block for 6 single-mode fibers SC duplex High Density block for 12 single-mode fibers SC APC duplex block for 6 single-mode fibers LC duplex block for 6 single-mode fibers LC duplex block for 12 single-mode fibers Single-mode 4 MTP ¹ feedthrough adaptor, key up/ key down Single-mode 8 MTP ¹ feedthrough adaptor, key up/ key down ST block for 6 multimode fibers SC duplex High Density block for 12 multimode fibers LC duplex block for 6 multimode fibers SC duplex High Density block for 12 multimode fibers LC duplex block for 6 multimode fibers SC duplex High Density block for 24 multimode fibers LC duplex block for 6 multimode fibers SC duplex High Density block for 24 multimode fibers LC duplex block for 6 multimode fibers LC duplex High Density block for 24 multimode fibers Multimode 4 MTP ¹ feedthrough adaptor, key up/ key down Multimode 8 MTP ¹ feedthrough adaptor, key up/ key down Multimode 8 MTP ¹ feedthrough adaptor, key up/ key down LC duplex block for 6 multimode fibers - aqua LC duplex block for 12 multimode fibers - aqua
1 1 1 1	0 321 02 0 321 04 0 321 06 0 321 00 0 321 01	entries, supplied with 2 cable glands (Ø 13.5 and 9 mm), coiling system Equipped with the new-generation Quick-Fix system for automatic (screwless) mounting on enclosure or cabinet uprights Supplied with numbered labels Maximum capacity: 96 fibers in LC version, 48 in SC version or 24 in ST version Depth 290 mm, height 1U Sliding, equipped End stop at a 20° angle SC duplex for 24 multimode fibers LC duplex for 24 multimode fibers SC duplex for 24 single-mode fibers Sliding, to be equipped with fiber optic blocks Takes any fiber optic block, up to 4 blocks maximum. End stop at a 20° angle Empty drawer Sliding, to be equipped with fiber optic blocks - angled Takes any fiber optic block, up to 4 blocks maximum. End stop at a 20° angle Empty drawer	, 1 1 1 1 1	0 321 32 0 321 28 0 321 29 0 321 30 0 321 31	RJ 45 copper block for fiber optic drawer To be clipped directly onto modular fiber optic drawers to be equipped Cat.Nos 0 321 00/01 Allows the mixing of fiber optic and copper Takes up to 5 RJ 45 connectors Accessories for fiber optic drawer to be equipped Accessory for receipt of a fan-out To be clipped onto the back of the drawer Enables the entry of preterminated links Blanking plate Blanking plate Blanking plate Cassette for pigtails Capacity: 24 fibers Coiling kit 1 accessory 1: MTP is a registered trademark of US Conec Ltd

Clegrand

Legrand cabling system, LCS³ fiber optic

19" High Density fiber optic panels (1/2/4 U) and patching kits



Legrand cabling system, LCS³ fiber optic

19" UHD¹ fiber optic drawers

0 321	0 321 50 55		321 90 0 321	94	
Pack	Cat.Nos	UHD ¹ modular fiber optic drawers, to be	Pack	Cat.Nos	UHD ¹ modular fiber optic drawers, to be
1	0 321 51	equipped with 12-fiber cassettes Fixed modular chassis for holding cassettes 4 U maximum capacity (holds up to 48 cassettes): 576 LC fibers 2 U maximum capacity (holds up to 24 cassettes): 288 LC fibers 1 U maximum capacity (holds up to 12 cassettes): 144 LC fibers Fiber optic drawer with cord management at the front for 12-fiber cassettes			equipped with 8-fiber cassettes Fixed modular chassis for holding cassettes 4 U maximum capacity (holds up to 72 cassettes): - 576 LC fibers 2 U maximum capacity (holds up to 36 cassettes): - 288 LC fibers 1 U maximum capacity (holds up to 18 cassettes) - 144 LC fibers Fiber optic drawers with cord management at the front and back for 8-fiber cassettes Deapth: 505 mm
	0.021.01	Fiber optic drawers with cord management at the front and back for 12-fiber cassettes	1 1 1	0 321 90 0 321 91 0 321 92	1 U 2 U 4 II
1 1 1	0 321 50 0 321 52 0 321 53	Depth: 595 mm 1 U 2 U 4 U	1	0 321 92	UHD ¹ 8-fiber cassettes
		UHD ¹ 12-fiber cassettes Clip directly into fiber optic drawers Cat.Nos. 0 321 50/51/52/53 Cassettes slide into above chassis Cassettes can be removed from the front and back MPO high-performance cassettes Low insertion loss < 0.35 dB			Cat.Nos. 0 321 90/91/92 Cassettes slide into above chassis Cassettes can be removed from the front and back MPO high-performance cassettes Low insertion loss < 0.35 dB Universal polarity Multimode OM4 cassettes (50/125 µm) For 50/125 µm multimode installation. OM4 type
		A/C polarity Multimode OM4 cassettes (50/125 μm) For 50/125 μm multimode installation, OM4 type	1	0 321 93	MPO cassette (MTP ² compatible) 8 OM4 LC fibers, universal polarity
1	0 321 54	MPO cassette (MTP ² compatible) 12 OM4 LC fibers, polarity A/C Single-mode OS2 cassette (9/125 um)	1	0 321 94	For 9/125 μm single-mode installation, OS2 type MPO cassette (MTP ² compatible) 8 OS2 LC fibers, universal polarity
1	0 321 55	For 9/125 µm single-mode installation, OS2 type MPO cassette (MTP ² compatible) 12 OS2 LC fibers, polarity A/C			Adaptors for 8-fiber UHD ¹ installation Clip into UHD ¹ fiber optic drawers for 8-fiber
		Adaptors for 12-fiber UHD ¹ installation Clip into UHD ¹ fiber optic drawers for 12-fiber	1	0 321 95	cassettes Cat.Nos 0 321 90/91/92 MPO adaptors (MTP² compatible) Multimode 4 MTP ² adaptor - key up/key down
	0.224 50	MPD adaptors (MTP ² compatible)	1	0 321 96	LC adaptors
1	0 321 56	Single-mode 4 MTP ² adaptor - key up/key down	1	0 321 98	8 LC single-mode adaptor
1	0 321 58	LC adaptor 12 LC multimode adaptor	1	0 321 99	8 LC-APC single-mode adaptor 1: Ultra High Density 2: MTP is a registered trademark of US Conec Ltd

Clegrand

Legrand cabling system, LCS³ fiber optic

cables





Colour code: FOTAG Compliant with EN 50173-2 and ISO IEC 11801 standards Packed on a 2000 m reel except for tight-buffer OM4 Tight-buffer: "easy strip" Other configurations on request

Pack	Cat.Nos	Single-mode OS2 fiber optic cables (9/125 μm) - (OS1 compatible)	Pack	Cat.Nos	Multimode OM3 fiber optic cables (50/125 μm)
2000 ¹ 2000 ¹ 2000 ¹ 2000 ¹ 2000 ¹ 2000 ¹ 2000 ¹ 2000 ¹ 2000 ¹ 2000 ¹	Loose tube 0 325 02 0 325 12 0 325 12 0 325 14 0 325 51 0 325 18 0 325 18 0 325 18 0 325 18 0 325 18 0 325 13 0 325 15 0 325 15 0 325 25	For 9/125 µm single-mode installations, OS2 type Indoor/Outdoor Yellow LSZH sheath Glass strands 4 fibers - Euroclass Dca 6 fibers - Euroclass Dca 8 fibers - Euroclass Dca 12 fibers - Euroclass Dca 12 fibers - Euroclass Dca 24 fibers - Euroclass Cca 24 fibers - Euroclass Cca 24 fibers - Euroclass Cca Dutdoor Black PE sheath Glass strands for rodent-proofing, reinforced with corrugated steel 4 fibers 6 fibers 8 fibers 12 fibers 24 fibers 24 fibers	20001 20001 20001 20001 20001 20001 20001 20001	Loose tube Juffer 900 µm 0 325 37 0 325 38 0 325 39 0 325 53 0 325 53 0 325 53 0 325 53 0 325 40 0 325 41 0 325 42	For 50/125 µm multimode installations, OM3 type Suitable for 10 Gb Ethernet networks Bend insensitive Indoor/Outdoor Aqua LSZH sheath Glass strands Euroclass Dca 4 fibers 6 fibers 8 fibers 1 12 fibers 2 24 fibers 9 Lass strands for rodent-proofing, reinforced with corrugated steel 8 fibers 12 fibers 24 fibers 12 fibers 24 fibers 12 fibers 12 fibers 12 fibers
2000 ¹ 500 ¹ 2000 ¹ 2000 ¹ 2000 ¹ 1000 ¹ 1000 ¹	Loose tube 0 325 43 0 325 43 0 325 44 0 325 45 0 325 45 0 325 49 0 326 67 0 326 68 0 326 67 0 326 68	Multimode OM4 fiber optic cables (50/125 µm) For 50/125 µm multimode installations, OM4 type Suitable for 10 Gb Ethernet networks Bend insensitive Indoor/Outdoor Aqua LSZH sheath Glass strands 4 fibers - Euroclass Dca 6 fibers - Euroclass Dca - 500 m drum 6 fibers - Euroclass Dca - 1000 m drum 8 fibers - Euroclass Dca 12 fibers - Euroclass Dca 100 m drum 24 fibers - Euroclass Cca - 1000 m drum			

Outdoor Black PE sheath Glass strands for rodent-proofing, reinforced with corrugated steel 4 fibers 8 fibers 12 fibers

2000¹ 2000¹ 2000¹

0 325 46 0 325 47 0 325 48
preterminated links

OM4 and OM5 on request 1 320 41

 320
 69
 Lengtn 90 m

 320
 70
 Length 100 m

 320
 72
 Length 120 m

 320
 74
 Length 140 m

 320
 76
 Length 160 m

 320
 78
 Length 180 m

 320
 80
 Length 200 m

Supplied with pulling element. In coil up to 50 m, on a small drum between 51 m and 150 m, on a large drum over 151 m and up to 200 m Connection in fiber optic drawers. OM3 aqua LSZH sheaths. Supplied with test reports Possible to obtain

sustomised preterminated links: cable type

Pack	Cat.Nos	Core™ SC/SC tight-buffer OM3 links	Pack	Cat.Nos	Ultra™ Fan-out/Fan-out preterminated High
1 1 1	1 320 01 1 320 02 1 320 03	6 SC simplex - 6 SC simplex Length 10 m Length 20 m Length 30 m			Density fiber optic links With fan-out (2 mm output) for secure transition between the cable and the ends Low insertion loss for LC connector < 0.15 dB/ connector
1 1 1 1 1 1 1 1 1	1 320 04 1 320 05 1 320 06 1 320 07 1 320 08 1 320 09 1 320 10 1 320 12 1 320 14 1 320 18 1 320 18 1 320 20	Length 40 m Length 50 m Length 60 m Length 70 m Length 80 m Length 90 m Length 100 m Length 120 m Length 140 m Length 140 m Length 160 m Length 180 m Length 200 m	1 1 1 1 1 1 1	0 324 01 0 324 02 0 324 03 0 324 04 0 324 05 0 324 11 0 324 12 0 324 12 0 324 14	Connector Fan-out OM3 micro cables Description 6 LC duplex - 6 LC duplex 10 6 LC duplex - 6 LC duplex 20 6 LC duplex - 6 LC duplex 30 6 LC duplex - 6 LC duplex 40 6 LC duplex - 6 LC duplex 50 12 LC duplex - 12 LC duplex 10 12 LC duplex - 12 LC duplex 30 12 LC duplex - 12 LC duplex 30 12 LC duplex - 12 LC duplex 40
1	1 200 01	12 SC simplex - 12 SC simplex	1	0 324 15	12 LC duplex - 12 LC duplex 50
1 1 1 1 1 1 1 1	$\begin{array}{c} 1 \ 320 \ 21 \\ 1 \ 320 \ 22 \\ 1 \ 320 \ 23 \\ 1 \ 320 \ 24 \\ 1 \ 320 \ 25 \\ 1 \ 320 \ 26 \\ 1 \ 320 \ 26 \\ 1 \ 320 \ 27 \\ 1 \ 320 \ 28 \\ 1 \ 320 \ 29 \\ 1 \ 320 \ 30 \\ 1 \ 320 \ 32 \\ 1 \ 320 \ 30 \\ 1 \ 320 \ 32 \ 32 \ 32 \ 32 \ 32 \ 32 \ 3$	Length 10 m Length 20 m Length 30 m Length 40 m Length 50 m Length 60 m Length 70 m Length 80 m Length 90 m Length 100 m Length 120 m Length 140 m	1 1 1 1 1 1 1 1 1	0 324 21 0 324 22 0 324 23 0 324 24 0 324 25 0 324 31 0 324 32 0 324 33 0 324 34 0 324 35	Fan-out/Fan-out OS2 micro cablesDescriptionLength (m)6 LC duplex - 6 LC duplex106 LC duplex - 6 LC duplex206 LC duplex - 6 LC duplex306 LC duplex - 6 LC duplex406 LC duplex - 6 LC duplex5012 LC duplex - 12 LC duplex1012 LC duplex - 12 LC duplex2012 LC duplex - 12 LC duplex3012 LC duplex - 12 LC duplex3012 LC duplex - 12 LC duplex4012 LC duplex - 12 LC duplex50
1	1 320 36	Length 160 m Length 180 m			Ultra™ MTP¹/MTP¹ High Density
1	1 320 40 1 320 41 1 320 42	Core™ LC/LC tight-buffer OM3 links 6 LC simplex - 6 LC simplex Length 10 m Length 20 m			preterminated fiber optic links For connecting cassettes in High Density fiber optic panels and Ultra High Density drawers Female MTP ¹ , A polarity Low insertion loss for MTP ¹ connector < 0.35 dB/ connector
1 1 1 1 1	1 320 43 1 320 44 1 320 45 1 320 46 1 320 47 1 320 48 1 320 49 1 320 50	Length 30 m Length 40 m Length 50 m Length 60 m Length 70 m Length 80 m Length 90 m Length 100 m	1 1 1 1 1	0 324 41 0 324 42 0 324 43 0 324 44 0 324 45	MTP1 OM3 micro cablesDescriptionLength (m)12 MTP1-MTP1 fiber optics1012 MTP1-MTP1 fiber optics2012 MTP1-MTP1 fiber optics3012 MTP1-MTP1 fiber optics4012 MTP1-MTP1 fiber optics50
1 1 1 1	1 320 52 1 320 54 1 320 56 1 320 58 1 320 60	Length 140 m Length 160 m Length 180 m Length 200 m	1 1 1	0 324 51 0 324 52 0 324 53 0 324 54	M IP' OS2 micro cables Description Length (m) 12 MTP¹-MTP¹ fiber optics 10 12 MTP¹-MTP¹ fiber optics 20 12 MTP¹-MTP¹ fiber optics 30 12 MTP¹-MTP¹ fiber optics 40
1 1 1 1 1 1 1 1 1 1 1	$\begin{array}{c} 1 \ 320 \ 61 \\ 1 \ 320 \ 62 \\ 1 \ 320 \ 63 \\ 1 \ 320 \ 64 \\ 1 \ 320 \ 66 \\ 1 \ 320 \ 66 \\ 1 \ 320 \ 66 \\ 1 \ 320 \ 67 \\ 1 \ 320 \ 68 \\ 1 \ 320 \ 70 \\ 1 \ 320 \ 70 \\ 1 \ 320 \ 70 \\ 1 \ 320 \ 74 \\ 1 \ 320 \ 74 \\ 1 \ 320 \ 76 \\ 1 \ 320 \ 78 \\ 1 \ 78 \ 78 \\ 1 \ 78 \ 78 \ 78 \ 78 \ 78 \ 78 \ 78 \ $	12 LC simplex - 12 LC simplex Length 10 m Length 20 m Length 30 m Length 40 m Length 50 m Length 60 m Length 70 m Length 80 m Length 90 m Length 100 m Length 120 m Length 140 m Length 180 m	1	0 324 55	12 MTP ¹ -MTP ¹ fiber optics 40 1: MTP is a registered trademark of US Conec Ltd

Legrand cabling system, LCS³ fiber optic Legrand cabling system, LCS³ fiber optic **High Density preterminated links**



Supplied on a drum Micro cables for high density cassettes Aqua (OM3) and yellow (OS2) LSZH sheaths Supplied with test reports (photometry) Other configurations on request

Clegrand

Legrand cabling system, LCS³ fiber optic Legrand cabling system, LCS³ fiber optic Core[™] fiber patch cords



Fitted at each end with 2 connectors with ceramic ferrule Individually packed and tested (report supplied) Max. optical losses/Master: 0.25 dB LSZH Zipcord sheath

Ultra[™] fiber patch cords



Fitted at each end with 2 connectors with ceramic ferrule Individually packed and tested (report supplied) Max. optical losses/Master: 0.15 dB LSZH Zipcord sheath

Pack	Cat.Nos	OS2 single-mode fiber optic cords (9/125 μm)	Pack	Cat.Nos	OS2 single-mode fiber optic cords (9/125 µm)
		For 9/125 μm single-mode installations, OS2 type Yellow sheaths			For 9/125 µm single-mode installations, OS2 type Yellow sheaths
3 3 3	0 326 00 0 326 01 0 326 02	SC/SC duplex cords Length: 1 m Length: 2 m Length: 3 m	5 5 5	0 325 27 0 325 28 0 325 29	SC/SC duplex cords Length: 1 m Length: 2 m Length: 3 m
3 3 3	0 326 03 0 326 04 0 326 05	SC/LC duplex cords Length: 1 m Length: 2 m Length: 3 m	5 5 5	0 325 30 0 325 31 0 325 32	SC/LC duplex cords Length: 1 m Length: 2 m Length: 3 m
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 326 28 0 326 06 0 326 07 0 326 08 0 326 29	LC/LC duplex cords Length: 0.5 m Length: 1 m Length: 2 m Length: 3 m	5 5 5 5	0 325 33 0 325 34 0 325 35 0 325 36	LC/LC duplex cords Length: 1 m Length: 2 m Length: 3 m Length: 5 m
3	0 326 00	OM3 multimode fiber optic cords (50/125 μm) For 50/125 μm multimode installations, OM3 type Aqua sheaths SC/SC duplex cords	3 3 3 3 3	0 326 86 0 326 87 0 326 88 0 326 89 0 326 92	LC/LC Uniboot duplex cords Reversible polarity Length: 1 m Length: 2 m Length: 3 m Length: 5 m Length: 10 m
3	0 326 09	Length: 2 m			OM4 multimode fiber optic cords (50/125 μm)
3 3 3	0 326 12 0 326 13 0 326 14	SC/LC duplex cords Length: 1 m Length: 2 m Length: 3 m	3 3	0 326 30 0 326 31	For 50/125 µm multimode installations, OM4 type Aqua sheaths SC/SC duplex cords Length: 1 m Length: 2 m
3 3 3	0 326 15 0 326 16 0 326 17	Length: 1 m Length: 2 m Length: 3 m	3 3 3	0 326 32 0 326 33 0 326 34	Length: 3 m LC/LC duplex cords Length: 0.5 m Length: 1 m
		OM4 multimode fiber optic cords (50/125 μm)	3	0 326 35 0 326 36	Length: 2 m Length: 3 m
		For 50/125 µm multimode installations, OM4 type Aqua sheaths	3	0 326 37	Length: 5 m
5 5 5	0 322 60 0 322 61 0 322 62	SC/SC duplex cords Length: 1 m Length: 2 m Length: 3 m	3 3 3 3	0 326 95 0 326 96 0 326 97 0 326 98	Length: 2 m Length: 3 m
5 5 5	0 322 63 0 322 64 0 322 65	SC/LC duplex cords Length: 1 m Length: 2 m Length: 3 m	3	0 326 99	Length: 5 m

- LC/LC duplex cords

 0 322 66
 Length: 1 m

 0 322 67
 Length: 2 m

 0 322 68
 Length: 3 m
- 5 5 5

Llegrand

Legrand cabling system, LCS³ fiber optic Legrand cabling system, LCS³ fiber optic pigtails, glue-on connectors and fan-out units case and quick-connect connectors



Pack	Cat.Nos	Core™ pigtails
		LSZH For making quick, reliable and high- performance fiber optic cable connections on site: - OM2/OM3/OM4 IL Typical/Master = 0.15 dB - OS2 IL Typical/Master = 0.18 dB Compatible with all commercially-available splicers
1 1 1	$ \begin{smallmatrix} 1 & m \\ 0 & 322 & 20 \\ 0 & 322 & 21 \\ 0 & 322 & 22 \\ 0 & 322 & 22 \\ \end{smallmatrix} \left \begin{smallmatrix} 2 & m \\ 0 & 322 & 23 \\ 0 & 322 & 24 \\ \end{smallmatrix} \right $	50/125 μm - OM3 (PC) SC connectors LC connectors ST connectors
1 1 1	0 322 30 0 322 33 0 322 31 0 322 34 0 322 32	50/125 μm - OM4 (PC) SC connectors LC connectors ST connectors
1 1 1 1	0 322 40 0 322 45 0 322 41 0 322 46 0 322 42 0 322 48 0 322 43 0 322 47 0 322 44 0 322 49	9/125 µm - OS2 (APC or UPC) - OS1 compatible SC-APC connectors SC-UPC connectors LC-APC connectors LC-UPC connectors ST-UPC connectors
		Sets of 12 LC pigtails
1 1 1	0 326 24 0 326 26 0 326 71	1m length - 12 different colors 12 OS2 LC-UPC pigtails 12 OM3 LC-UPC pigtails 12 OM4 LC-UPC pigtails
		Heat-shrinkable sleeve for pigtails
1	0 327 44	40 mm - pack of 50 sleeves
		connectors
10 10	0 331 47 0 331 00	Supplied with 900 µm sleeve Connectors with ceramic ferrule Typical attenuation: 0.3 dB SC connectors LC connectors
		Fan-out units
1 1	0 330 48 0 330 49	For 900 μm sheathing of optical fibers Take 250 μm fiber diameters 6-fiber fan-out unit 12-fiber fan-out unit

0 322 70 0 322 72 0 322 75 0 322 73 1 0 322 83 0 322 81 0 322 85 le Cat.Nos Tool case for preparing optical fiber for Pack quick-connect fiber optic connectors Provides the tools required for preparing optical 0 322 70 cables, for carrying out initial tests of the connection of fibers to connectors and accessories for easy connection in all situations Comprises: - Precision cleaver - Kevlar stripping and cutting tool Visual fault locator
Installation instructions and video - Accessories (cleaners, felt tip pen, bin, etc) **Quick-connect connectors** Connection can be made with case Cat.No 0 322 70 Quick-connect, reliable and reusable up to 5 times To be used to lock the fiber inside the connector An indicator light is used to test the connection No glue or polishing needed Can be installed on 900 µm fiber optics For 250 µm fiber, use the special tubes supplied with the connectors; typical IL: multimode OM3/OM4 = 0.1 dB and single-mode OS2 = 0.2 dB (PC) and 0.3 dB (APC) OM3/OM4 multimode connectors Set of 12 connectors LC PC 50/125 µm, 900/250 µm SC PC 50/125 µm, 900/250 µm 12 12 0 322 71 0 322 72 **OS2 single-mode connectors** Set of 12 connectors LC UPC 9/125 µm, 900/250 µm SC UPC 9/125 µm, 900/250 µm SC APC 9/125 µm, 900/250 µm 12 12 0 322 73 0 322 74 0 322 75 12 Precision cleaver for updating case Cat.Nos 0 326 90 0 322 80 Enables precision-cutting of fiber optics and the use of quick-connect connectors Cat.Nos 0 322 71 to 1 0 322 75 with case Cat.No 0 326 90 Fiber optic cleaning accessories MPO/MTP¹ ferrule cleaner 0 322 83 LC ferrule cleaner (PC/APC) SC ferrule cleaner (PC/APC) LC replacement cartridge SC replacement cartridge 0 322 81 0 322 82 0 322 82 0 322 84 0 322 85 0 322 76 0 322 77 Fiber stripper Wipes 322 78 Cleaning spray

1: MTP is a registered trademark of US Conec Ltd

HIGH-PERFORMANCE COMPUTING (HPC) FIBER SOLUTIONS



With increasing density and power in HPC, the requirements for the structured cabling components are growing in two ways:

PERFORMANCE

HPC deals with the highest possible bandwidths and transmissions. Therefore, it sets the highest demands on the quality of the detachable connections (coupling points) of fiber optic connections. The best possible quality and lowest possible insertion loss is the key to getting the highest possible reserves on the transmission line and ensuring safe and stable operation.

DESIGN

The high number of connections and cables must be safely handled on the front and the back sides of the connection panels. Cables must be prevented from interfering with the flow of cooling air in HPC racks at all times. In addition, the panel must allow easy access while maintaining high packing density. For this reason, it is also important to use patch cords of different lengths to reach each server in the rack without unnecessary excess length.

LEGRAND'S RESPONSE

Legrand's HPC structured cabling solutions combine both!



Infinium Quantum[™] fiber system

Our solution offers the lowest total system loss on the market, opening the opportunity to challenge the limits of what was previously impossible. With a total channel attenuation of 0.75 dB, the Solution is ideal for AI, hyperscale, cloud, supercomputing, and other high bandwidth demand environments.

84 | Infinium HD[™] enhanced fiber enclosure

STRUCTURED CABLING FOR HIGH PERFORMANCE COMPUTING



Accessibility

The magnetic latching mechanism of the enclosure door enables a simple one-handed pull to open and push to close access. The enclosure door is attached to the sliding drawer face and tray, allowing easy clearance from equipment or other enclosures mounted below. A tray lock mechanism ensures that the tray stays in place when patching or dressing the fiber. The 60/40 split-top cover allows access from above and features toolless removal.

Intuitive cable management

The unique pivot arms provide an innovative way to manage fiber slack storage. Each arm rotates towards the rear of the enclosure and hosts a pivot disk that may be used with slack storage spools, fan-out kits, or attachment points to secure the Legrand HiLOC harness. The Cable Attachment brackets feature toolless adjustments for location based on which direction the cable is routed either side of the enclosure, top or bottom. Simply make the adjustment for cable routing, load the grommet around the cable(s) and close the attachment cover.

Scalability

The scalable jumper management allows layers of management to be added only when needed, making it easy to keep patch cords neatly organized. The drawer faces are removable and replaceable, allowing the enclosure to easily convert between standard LM4 and optional M8 cassette and adapter footprints. This allows the enclosure scalability to support increasing bandwidth and higher speed requirements that utilize different cables, cassettes, or adapters.

INFINIUM QUANTUM™ THE INDUSTRY'S LOWEST TOTAL CHANNEL CONNECTION LOSS



No longer bound by Ultra Low Loss - Infinium Quantum has redefined performance in the data center with a total channel connection loss that is an order of magnitude greater than any other fiber system on the market today. Infinium Quantum changes everything by opening up the opportunity to **challenge what's possible**.

Characterized by performance, Infinium Quantum is engineered to enable greater sustainability, future-proofing, and the lowest total channel connection loss, highly configurable and scalable, with innovative features that simplify the process of installing or working with the system.

67% improvement over standard systems

- Single-mode total channel connection loss: 0.75dB.
- Single-mode total channel connection return loss: 49dB.
- Multimode total channel connection loss: 0.75dB.
- Multimode total channel connection return loss: 34dB.

Future proofing: open path to 400G and beyond

- Reducing or eliminating the need to replace link to meet demands of 400G and beyond.
- Reduce need for fusion splicing to obtain low link loss.
- Ability to add cross connections, signal drops, splitting, or switching components into the link for a particular transmission distance.

Innovative features: simplify installation, management, and configurability

- Options for 12 and 24 fiber connectivity.
- Better accessibility and visibility inside the enclosure.
- Improved cable management: Front, Side, Rear, Slack.

Sustainability: Corporate Social Responsibility

- Reduce overall energy consumption –up to 30% reduction in power consumption for transceivers.
- High performance infrastructure.
- Environmental stewardship.
- Contribute to LEED points.



INFINIUM QUANTUM™ UNPARALLELED PERFORMANCE

The Infinium Quantum fiber system solution must include several components.

Enclosures

• Infinium" HD-E (Enhanced) Fiber Enclosure.

The Infinium HD-E Fiber Enclosure is an ideal solution for fiber networks in data centers and building networks. The high-density footprint accommodates up to 96 LC fibers in 1U of rack space. This enclosure has many innovative features designed with the installer, contractor, and network professional in mind, providing a simplified process

when installing or working within the enclosure.

• M4 - 4 cassettes or adapter panels per RU.

- 96 LC connectors per RU.
- 384 fibers (12F MPO) per RU.
- 768 fibers (24F MPO) per RU.
- High Density, up to 96 LC connectors in 1U of rack space.
- Available in 1U, 2U, and 4U.
- Accommodates 4 mounting depth positions.
- Magnetic door latch.
- Versatile label card mounting locations (Door or Tray).
- Forward-sliding label card.
- 60/40 split toolless top cover.
- Toolless cable attachment arms.
- Pivot arms for fiber slack management.
- Magnesium color scheme.

Cassettes



- preterminated cassettes. Designed to support MTP to LC connectivity. Universal polarity for simple installation.
- Form Factor: M4.
- Mode: Single-Mode and Multimode.
- Fiber Count: 12 and 24.

Trunks

- Fully configurable and manufactured with an innovative furcation method.
- Mode: Single-Mode and Multimode.
- Length: Made to order 2m or greater.
- Breakout Configuration & Labeling.
- Jacket Type: Plenum or Non-Plenum, Indoor or Outdoor Rated.

Patch Cords

- Built to exceed industry standards for insertion and return loss.
- Mode: Single-Mode and Multimode.
- Length: Made to order 0.5m or greater.
- Jacket Type: Plenum or Non-Plenum.



INFINIUM QUANTUM™ PERFORMANCE ADVANTAGE

Developed for AI, Super Compute, and other High Bandwidth Applications

Legrand's Infinium Quantum offers a fiber optic solution designed to deliver the most advanced network performance, with a variety of density, enclosure, and application options for maximum compatibility. Our modular system is engineered with installation efficiency and performance in mind – providing the flexibility to design and efficiently install in any application.





High-performance computing (HPC) → Infinium Quantum[™] fiber system



Infinium HD[™] enhanced fiber enclosure

Designed to simplify installation and improve experience



INFINIUM HD[™] GREATER SCALABILITY

The scalable jumper management allows layers of management to be added only when needed, making it easy to keep patch cords neatly organized.

The drawer faces are removable and replaceable, allowing the enclosure to easily convert between standard LM4 and optional M8 cassette and adapter footprints. This gives the enclosure the scalability to support increasing bandwidth and higher speed requirements that utilize different cables, cassettes, or adapters.



INFINIUM HD™ BETTER ACCESSIBILITY

The magnetic latching mechanism of the enclosure door enables a simple one-handed pull to open, and push to close access. The enclosure door is attached to the sliding drawer face and tray, allowing easy clearance from equipment or other enclosures mounted below. A tray lock mechanism ensures that the tray stays in place when patching or dressing the fiber. The 60/40 split-top cover allows access from above and features toolless removal.





INFINIUM HD™ INCREASED VISIBILITY

A white tray in the front and integrated LED lighting in the rear, along with the split-top cover, provide maximum visibility when working within the enclosure.





INFINIUM HD™ INTUITIVE CABLE MANAGEMENT

The unique pivot arms provide an innovative way to manage fiber slack storage. Each arm rotates out towards the rear of the enclosure and hosts a pivot disk that may be used with slack storage spools, fan-out kits, or attachment points for securing the Legrand HiLOC harness. The Cable Attachment brackets feature toolless adjustments for location based on which direction the cable is routed - either side of the enclosure, top or bottom. Simply make the adjustment for cable routing, load the grommet around the cable(s) and close the attachment cover.

INFINIUM HD[™] EASIER LABELING

The label card is incorporated into the front door, positioning the labels directly below the ports for simple labeling and easy port identification. Templates created for both Brother and Dymo printers are available for download.







INFINIUM HD™ EASE OF INSTALLATION

A single screwdriver is the only tool required for installing the enclosure in a rack. The mounting brackets with pin locks allow the enclosure to slide conveniently between 4 horizontal mounting positions. The open-ended design of the mounting brackets allows the enclosure to be installed by one person. Simply pre-mount the rack screws at the proper location on the rack, place the enclosure's mounting brackets on the pre-mounted screws to hold it in place, then tighten the screws.

INFINIUM HD™ BEAUTIFUL AESTHETICS

This enclosure features sleek styling that matches the design of Legrand racks, cabinets and other data center products and solutions, and a magnesium color scheme that fits all data center environments.









DESIGNED TO GROW WITH THE NETWORK

■ INFINIUM[™] Enhanced Fiber Enclosure

The Infinium Enhanced Fiber Enclosure is an ideal solution for fiber networks in data centers and building networks. The high-density footprint accommodates up to 96 LC fibers in 1U of rack space. This enclosure has many innovative features designed with the installer, contractor, and network professional in mind, providing a simplified process when installing or working within the enclosure.

- High Density, up to 96 LC connectors in 1U of rack space.
- Available in 1U, 2U, and 4U.
- Accommodates 4 mounting depth positions.
- Magnetic door latch.
- Versatile label card mounting locations (Door or Tray).
- Forward-sliding label card.
- 60/40 split toolless top cover.
- Toolless cable attachment arms.
- Pivot arms for fiber slack management.
- Magnesium color scheme.



1U Enclosure



2U Enclosure



4U Enclosure

INFINIUM[™] CASSETTES

Infinium Ultra[™] cassettes

- Ultra low loss system
- Single-mode total channel connection loss: 1.2 dB
- Single-mode total channel connection return loss: 49 dB
- Multimode total channel connection loss: 1.0 dB
- Multimode total channel connection return loss: 19 dB
- High Density: 12 or 24-fiber cassette compatible with Infinium HD M4 enclosures
- Versatile installation: Infinium modular panel enables mixed media installations
- Fiber type: supports either single-mode OS2 or multimode Infinium Ultra fiber
- Polarization: universal

Infinium Quantum[™] cassettes

- Single-mode total channel connection loss: 0.75 dB
- Single-mode total channel connection return loss: 49 dB
- Multimode total channel connection loss: 0.75 dB
- Multimode total channel connection return loss: 34 dB
- High Density: 12 or 24-fiber cassette compatible with Infinium HD M4 enclosures
- Versatile installation: Infinium modular panel enables mixed media installations
- Fiber type: supports either single-mode OS2 or multimode Infinium Ultra fiber
- Polarization: universal









CASSETTE TERMINATION AND SPLICE OPTIONS

Pre-terminated cassettes

Legrand's pre-terminated cassettes are available in single-mode and multimode. Both are universal polarity for simple ordering and installation.

Splice cassettes

Legrand splice cassettes offer the convenience of working outside the enclosure with a patented removable splice manager that also aids in dressing the fiber.

Llegrand

HD Infinium[™] enhanced fiber enclosures

Infinium cassettes

High density pre-terminated cassettes



INFC01U-M4-E

Pack	Cat.Nos	HD enhanced enclosures
		High density, up to 96 LC connectors in 1U of rack space Integrated LED lighting and white tray Forward-sliding label card 60/40 split toolless top cover Toolless cable attachment arms Pivot arms for fiber slack management Magnesium color scheme
		With M4 (Base 12) drawer face
1	INFC01U-M4-E	10
1	INFC02U-M4-E	2 U
1	INFC04U-M4-E	4 U



LM4-LC12J-1A3UN





LM4-LC24J-2A2UN

LM4-LC12H

Universal polarity for simple installation Each cassette is designed to support MPO to LC connectivity Pre-terminated for fastest installation, highest performance and consistent factor quality Fiber port labeling provides easier administration Compact high density design Toolless installation

Pack	Cat.Nos	Infinium Quantum M4
		Industry leading performance is available only when mated with matched Infinium Quantum Trunk and Infinium Quantum Fiber Patch Cords
1 1 1	LM4-LC12J-1A3UN LM4-LC24J-2A3UN LM4-LC24J-1A3H1	Single mode IL ⁽¹⁾ Max/Random*: 0.375 dB 12 Fiber MTP to Duplex LC OS2 24 Fiber 2MTP to Quad LC OS2 24 Fiber MTP to Quad LC OS2
1 1	LM4-LC12H-1A4UN LM4-LC24H-2A4UN	Multimode IL ⁽¹⁾ Max/Random*: 0.35 dB 12 Fiber MTP to Duplex LC OM4 24 Fiber 2MTP to Quad LC OM4
		Infinium Ultra M4
1 1 1	LM4-LC12J-1A2UN LM4-LC24J-2A2UN LM4-LC24J-3C2UN	Single mode IL ⁽¹⁾ Max/Random*: 0.6 dB 12 Fiber MTP to Duplex LC OS2 24 Fiber 2MTP to Quad LC OS2 24 Fiber 3MTP to Quad LC OS2
		Multimode
1 1 1	LM4-LC12H LM4-LC24H LM4-LC24H-3C3UN	IL ⁽¹⁾ Max/Random [*] : 0,55 dB 12 Fiber MTP to Duplex LC OM4 24 Fiber 2MTP to Quad LC OM4 24 Fiber 3MTP to Quad LC OM4

1: Insertion Loss *When mated with the same Legrand range (Quantum, Ultra, Core) trunks and patch cords.

Clegrand

Adapter panels

Infinium Quantum[™] fiber patch cords







HDFP-BLANK

HDFP-LCD12CC

These high-density adapter panels fit within the M4 drawer face and provide a pass-through connection with LC duplex, LC quad, or MPO ports

Pack	Cat.Nos	M4 adapter panels
Pack 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cat.Nos HDFP-LCD12AC HDFP-LCD12CC HDFP-LCD12MB HDFP-LCD08LC HDFP-LCD08AC HDFP-SCD12AC HDFP-SCD12CC HDFP-SCD12LC	M4 adapter panels LC Duplex 6 LC Duplex for 12 fiber monomode OS2 Blue 6 LC Duplex for 12 fiber monomode OS2 Green 6 LC Duplex for 12 fiber multimode OM1 Beige 6 LC Duplex for 12 fiber multimode OM3 Aqua 4 LC Duplex for 8 fiber multimode OM3 Aqua HD, 4 LC Duplex CER Blue SC Duplex 6 SC Duplex for 12 fiber monomode OS2 Blue 6 SC Duplex for 12 fiber monomode OS2 Blue 6 SC Duplex for 12 fiber monomode OS2 Green 6 SC Duplex CER SM,1U,BLACK Aqua
1 1 1 1 1	HDFP-LCQ16AC HDFP-LCQ24CC HDFP-LCQ24AC HDFP-LCQ24MB HDFP-LCQ16LC HDFP-LCQ24LC	LC Quad 4 LC Quad for 16 fiber monomode OS2 Blue 6 LC Quad for 24 fiber monomode OS2 Green 6 LC Quad for 24 fiber monomode OS2 Blue 6 LC Quad for 24 fiber multimode OM1 Beige 4 LC Quad for 16 fiber multimode OM3 Aqua 6 LC Quad for 24 fiber multimode OM3 Aqua
		MPO adapter Base 12
1 1 1 1 1	HDFP-MPA72AA HDFP-MPA72CA HDFP-MPA72ED HDFP-MPA72LA HDFP-MPA96CA HDFP-MPA96ED HDFP-MPA96LA	6 MPO for fiber monomode OS2 Blue 6 MPO for fiber monomode OS2 Green 6 MPO for fiber monomode OS2 Grey 6 MPO for 72 fiber multimode OM3 Aqua 6 MPO for 96 fiber monomode OS2 Green 8 MPO for 96 fiber Aligned key Grey 8 MPO for 96 fiber multimode OM3, OM4 Aqua
1	HDFP-BLANK	Blank panel Black



 Pack
 Cat.Nos
 Patch cords

 on demand
 Fiber patch cords are built to exceed industry standards for insertion and return loss Available in A-B polarity, per TIA 568 standard Available with Plenum, riser, low-smoke zero halogen (LSZH), rated jackets (or CPR – rated for EU use) Bend-insensitive fiber for optimal cable management TAA/BAA Compliant TIA Channel Compliant

Ultra[™] fiber patch cords

Core[™] fiber patch cords



Fitted at each end with 2 connectors with ceramic ferrule Individually packed and tested (report supplied) Max. optical losses/Master: 0.15 dB LSZH Zipcord sheath

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Fitted at each end with 2 connectors with ceramic ferrule Individually packed and tested (report supplied) Max. optical losses/Master: 0.25 dB LSZH Zipcord sheath

Pack	Cat.Nos	OS2 single mode fiber optic cords (9/125 μm)	Pack	Cat.Nos	OS2 single mode fiber optic cords (9/125 $\mu m)$
		For 9/125 μm single mode installations, OS2 type Yellow sheaths			For 9/125 μm single mode installations, OS2 type Yellow sheaths
5 5 5	0 325 27 0 325 28 0 325 29	SC/SC duplex cords Length: 1 m Length: 2 m Length: 3 m	3 3 3	0 326 00 0 326 01 0 326 02	SC/SC duplex cords Length: 1 m Length: 2 m Length: 3 m
5 5 5	0 325 30 0 325 31 0 325 32	SC/LC duplex cords Length: 1 m Length: 2 m Length: 3 m	3 3 3	0 326 03 0 326 04 0 326 05	SC/LC duplex cords Length: 1 m Length: 2 m Length: 3 m
5 5 5 5	0 325 33 0 325 34 0 325 35 0 325 36	SC/LC duplex cords Length: 1 m Length: 2 m Length: 3 m Length: 5 m	3 3 3 3 3 3	0 326 28 0 326 06 0 326 07 0 326 08 0 326 29	LC/LC duplex cords Length: 0.5 m Length: 1 m Length: 2 m Length: 3 m Length: 5 m
2	0.000.00	Reversible polarity			OM3 multimode fiber optic cords (50/125 μm)
3 3 3	0 326 86 0 326 87 0 326 88 0 326 89	Length: 2 m Length: 3 m Length: 5 m			For 50/125 µm multimode installations, OM3 type Aqua sheaths
3	0 326 92	Length: 10 m	3	0 326 09	Length: 1 m
		OM4 multimode fiber optic cords (50/125 μm)	3	0 326 10 0 326 11	Length: 2 m Length: 3 m
		For 50/125 µm multimode installations, OM4 type Aqua sheaths	3	0 326 12	SC/LC duplex cords Lenath: 1 m
3	0.326.30	SC/SC duplex cords	3 3	0 326 13 0 326 14	Length: 2 m Length: 3 m
3	0 326 31	Length: 2 m	2	0.000.45	LC/LC duplex cords
	0 020 02	SC/LC duplex cords	3	0 326 15	Length: 1 m Length: 2 m
3	0 326 33 0 326 34	Length: 0.5 m Length: 1 m	3	0 320 17	Construction of the contract o
3	0 326 35	Length: 2 m Length: 3 m			For 50/125 um multimode installations. OM4 type
3	0 326 37	Length: 5 m LC/LC Uniboot duplex cords			Aqua sheaths
3 3 3	0 326 95 0 326 96 0 326 97	Reversible polarity Length: 0.5 m Length: 1 m	5 5 5	0 322 60 0 322 61 0 322 62	Length: 1 m Length: 2 m Length: 3 m
3	0 326 98 0 326 99	Length: 3 m Length: 5 m	5 5 5	0 322 63 0 322 64 0 322 65	SC/LC duplex cords Length: 1 m Length: 2 m
			5 5 5	0 322 63 0 322 66 0 322 67 0 322 68	Length: 3 m Length: 1 m Length: 2 m Length: 3 m



To configure Infinium trunk cable, **contact us for more information about the customized offer**

Legrand's 25-year warranty for applications & performance



Confident in the quality of our solutions, Legrand guarantees the applications and performance of our copper and fiber cabling systems for 25 years.

Subject to certain conditions described hereafter, the "25-year application warranty" provides assurance that all expected applications function on the Legrand structured cabling solutions for a period of 25 years, and the "25-year performance warranty" provides assurance of correct functioning of the Legrand structured cabling solutions for a period of 25 years.

25-YEAR APPLICATION WARRANTY

Legrand offers the end user the guarantee that **all applications defined in the standards will function on the corresponding channel*** of copper and fiber of Legrand structured cabling solutions. If the PoE option is requested, Legrand also guarantees distances for the copper applications under PoE.

For 25 years, Legrand guarantees, subject to certain cumulative conditions of assignment, all applications defined for corresponding channels of the Legrand structured cabling solutions composed of:

- Class E (Cat. 6), Class Ea (Cat.6A), Class I (Cat. 8.1) channels for copper
- OM3, OM4, OM5, OS1a / OS2 channels for fiber optic

Note: fiber applications are length and budget dependent.

25-YEAR PERFORMANCE WARRANTY

Legrand offers the end user the guarantee **all permanent links and channels*** (copper and fiber) from Legrand structured cabling solutions **will comply to standards for a period of 25 years.**

For 25 years, Legrand guarantees, subject to certain cumulative conditions of assignment, the performances of Legrand structured cabling solutions system classified as:

- Class E (Cat. 6), Class Ea (Cat.6_A), Class I (Cat. 8.1) permanent links for copper
- OM2, OM3, OM4, OS1 and OS2 for fiber optic
- * Channels are assemblies of the following components :
- copper: connectors, cables, field installable plugs, cords, preterminated cables
- fiber optic: pigtails, couplers, cables, cords, preterminated cable, cassettes

STRUCTURED CABLING

WARRANTY

YEARS

OUR DATA CENTER GLOBAL OFFER



GREY SPACE

WHITE SPACE

Llegrand

Covering all your IT infrastructure, cable management, and critical power needs!

With award-winning solutions from strong data center players, you benefit from optimal uptime of mission-critical operations. Our team of local specialists design and build innovative solutions, including enclosures, cooling, power, structured cabling, and access management, to meet your unique requirements.

l 🛛 legrand

Complete global solutions for digital and electrical infrastructure.

BORRI

Specialist in UPS for industrial applications and datacenters.

MINKELS

Turn-key hot/cold

aisle containment

and enclosures

for data center

infrastructures.

CABLOFIL

Using its global strength and market leading position, Cablofil has developed a complete range of cable management solutions.

modulan

Provider of fully customizable containment solutions. Maximum flexibility to cover customer needs.

COMP©SE Specialist in passive

data communication solutions, cabling of data centers, buildings and fiber optic infrastructures.

PowerControl

A leading provider of uninterruptible power supply (UPS) solutions, trusted by businesses worldwide to protect their critical power loads and avoid unplanned business downtime.

USystems provide cooling products that enhance data center cooling, providing these to global businesses, making their data centers more environmentally friendly.

optic infrastructures,

GEIGER.

data center design and DCIM (monitoring & management) service and implementation.

Data center fiber

Raritan.

Proven leader of intelligent PDUs, transfer switches, environmental sensors, serial consoles and KVM-over-IP Remote Access switches.

Voltadis offers support in electrical power supply systems for data centers' grey rooms including design, commissioning, equipment supply, and installation.



Leading specialist in customerdriven power, access and

control solutions for monitoring and managing critical IT assets.

ZUEGHINI

Zucchini has become a leading brand of cast resin transformers, offering one of the most comprehensive ranges on the market.

Starline.

Starline has grown to become a global leader in busbar power distribution equipment

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Llegrand

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