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LISA FIBRE MANAGEMENT

HIGH-DENSITY, CENTRALISED FIBRE MANAGEMENT



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LiSA High-Density Fibre Management System



At the heart of the HUBER+SUHNER LiSA high-density fibre management system is the Cable Distribution Rack (CDR). An advanced Optical Distribution Frame (ODF) that provides centralised management of inter-connects and cross-connections within Meet Me Rooms and Main Distribution Area of Data Centres.

The CDR offers fast, flexible and future-proofed management of fibre optic cables. It's modular design enables it to grow and adapt to ever-changing bandwidth demands.

It's modular design not only looks immaculate, but also provides easy access to installed fibre cables. Built around rear-mounted 19" rails all components can be accessed from the front of the rack. Access can be further enhanced by the removal of doors and side panels, which can be achieved without the need of any tools.

Tamper-proof 2-point locking provides security, while 47U of mountable area provides ample space for managing fibre cables. It's 300mm depth provides a small footprint that saves valuable floor space for greater revenue generating racks.

KEY FEATURES

- High quality look and feel
- Robust & lightweight aluminium construction
- Rear mounted 19" rails (improved access)
- Tamper-proof 2-point locking system
- Fast and easy removal of doors and side panels (no tools)
- 47U of internal mounting space
- Dedicated patch cord management area
- Up to 3,240 fibers per rack with LC connectivity
- Up to 25,920 fibers per rack with MTP connectivity



Cable Distribution Rack (CDR)

The modularity of the CDR gives a higher degree of flexibility and enables the CDR to meet the requirements needed today, while also delivering on the future demands of tomorrow. CDR reduces complexity and can be pre-configured or if more configuration options are required customised.

Base Frame Variants



CDR300

The CDR300 is a 300mm wide rack that is supplied as a stand-alone cabinet for managing incoming cables or for patch cable storage / slack management. It also offers additional fibre management to the standard CDR900 when over-length cables need to be managed on both sides.



CDR600

The CDR600 houses the LiSA chassis into which fibre tray cassettes are installed. Incoming fibres can be managed top or bottom and run up the side channel. Tie-off plates can be affixed at any position. The CDR600 does not provide any over-length patch cord management. On its own the CDR600 provides the ideal solution for inter-connect topology or for splicing / MTP®-LC transition.



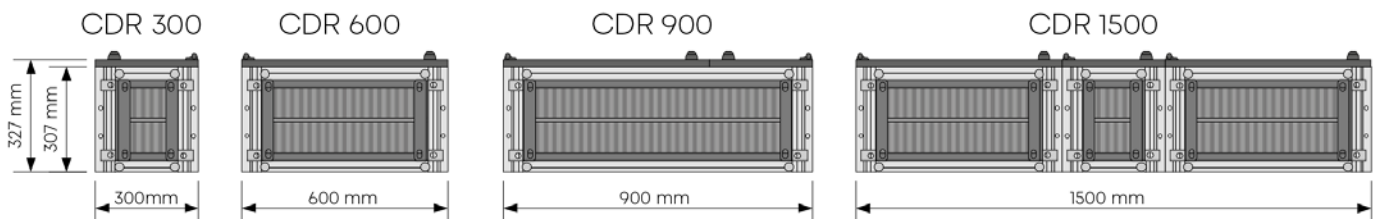
CDR900

The CDR900 has integrated patch cord management on the right-hand side of the main cabinet. It facilitates the installation of standard LiSA chassis for pigtail fusion splicing or MTP®-LC transitions. Ideal for cross-connect topology, the CDR900 is also available as a CDR1200 with additional patch cord management on the left.

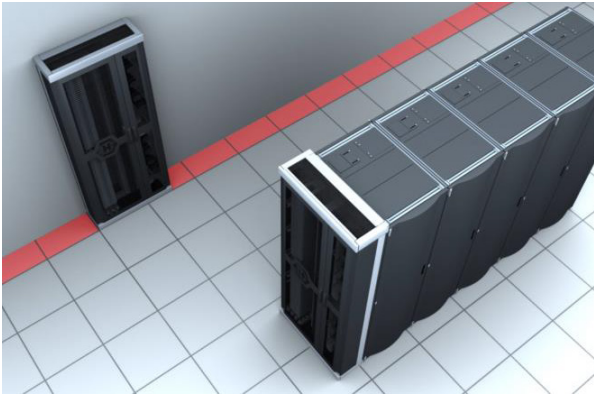


CDR1500

The CDR1500 is designed for the co-location market, where managing fibre connections requires a physical separation between the customer and provider side. The rack is especially designed for LiSA Double Access applications. The CDR1500 has a 3-rack design (600/300/600mm) which facilitates transportation, on-site handling and installation and thus helps installers to minimise installation time and costs.

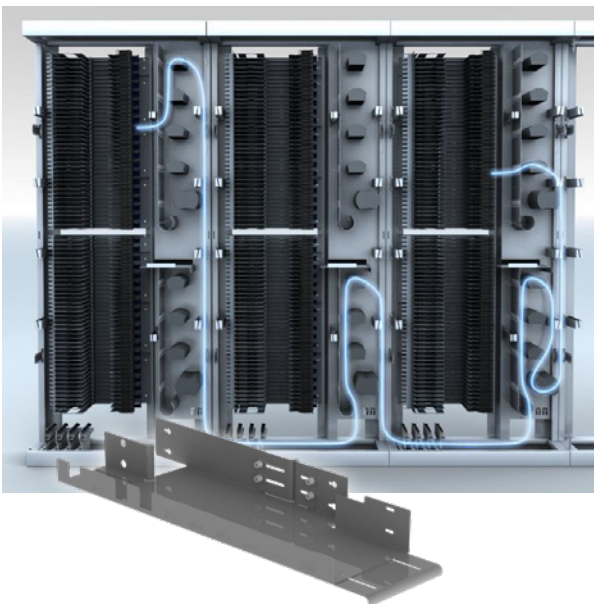


Rack Placement



The small footprint of the CDR allows greater flexibility on where it can be placed. This enables it to occupy floor space that cannot be utilised by revenue generating racks. CDRs can be positioned against an unused wall, back-to-back within the room, at the end of an equipment cabinet row or at the end of a hot / cold aisle containment pod (as they do not require cooling). This flexibility of saving space lowers cost and offers higher efficiency.

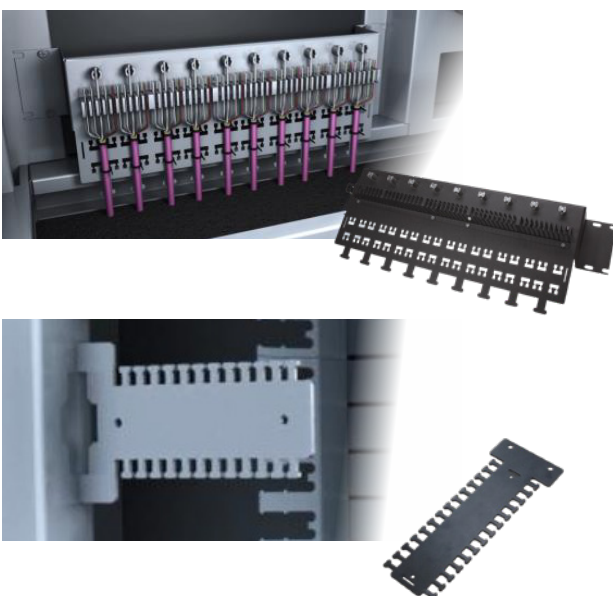
C-Frame Cable Routing



The CDR uses a C-Frame construction that allows all sub-elements to be installed and accessed from the front side. This important feature is key to the flexibility when it comes to CDR placement.

The C-Frame also provides easier access for cable routing and facilitates rack-to-rack patching without the patch cords having to leave the rack. Radius-protected drop-offs and corners maintain bend-radius limits of the cables.

Cable Fixation



These high-density CDRs are designed to support multi-fibre loose-tube breakout fibre cables. Breakout fixing plates are mounted in the bottom or top of the rack to suit cables coming from under the raised floor or from overhead trunking. Cable jackets are fixed to the tie-off plate while the loose-tubes containing the fibres are passed through crush resistant, bend limiting protective conduit run up the side of the CDR. Additional Tie-off plates can be positioned at any height ensuring that cables are fully secured and supported.

LiSA Cable Tray Chassis & Cassettes



LiSA chassis attach to the rear-mounting 19" profiles of the CDR and are designed for high-density applications supporting splice, patch, transition, splitter or WDM cassettes.

The 19" fixings at the rear of the LiSA chassis provide full access for all incoming and outgoing fibres and the integrated service loops allow the LiSA cassettes to be inserted and retracted quickly and easily.



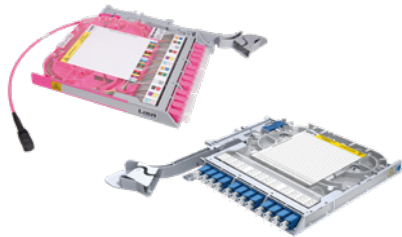
Cassettes are hinged allowing them to provide easier access to the fibre connections. Ports face sideways to protect users from harmful lasers. Patch cord routing within the tray ports of the LiSA chassis ensures that when a tray is withdrawn and refitted there is no stress on the cords or connections.

LiSA chassis comes in various U heights including 1U, 2U, 3U, 6U and 7U.



LiSA tray cassettes are the side-facing connectivity "blocks" that are inserted into LiSA chassis. Designed for speed and ease of installation and improved accessibility, LiSA cassettes can be installed and removed in under 10 seconds. Incoming backbone cables are connected on the incoming side, while patch cords link ports on the opposite side of the LiSA chassis. Colour coding provides clear and easy identification, and allows cassettes for different applications to be used in the same CDR.

Splicing cassettes facilitate the fusion splicing of 24 individual heat-shrink or sandwich splices. Storage areas provide space for 1.5 metres of fibre, which can be easily identified by colour and label. The splicing module is suitable for all Optipack 8, 12 and 24-strand cables and can also accommodate bend-limiting.



LiSA transition cassettes convert MTP® backbone cables to small-form-factor connections, such as LC-duplex and SC. Transition modules are available in configurations with 12 or 18 ports. Depending on the requirements, up to 4 x MTP®-8, 3 x MTP®-12 or 1 x MTP®-24 can be handled.

CONFIGURATION SERVICE

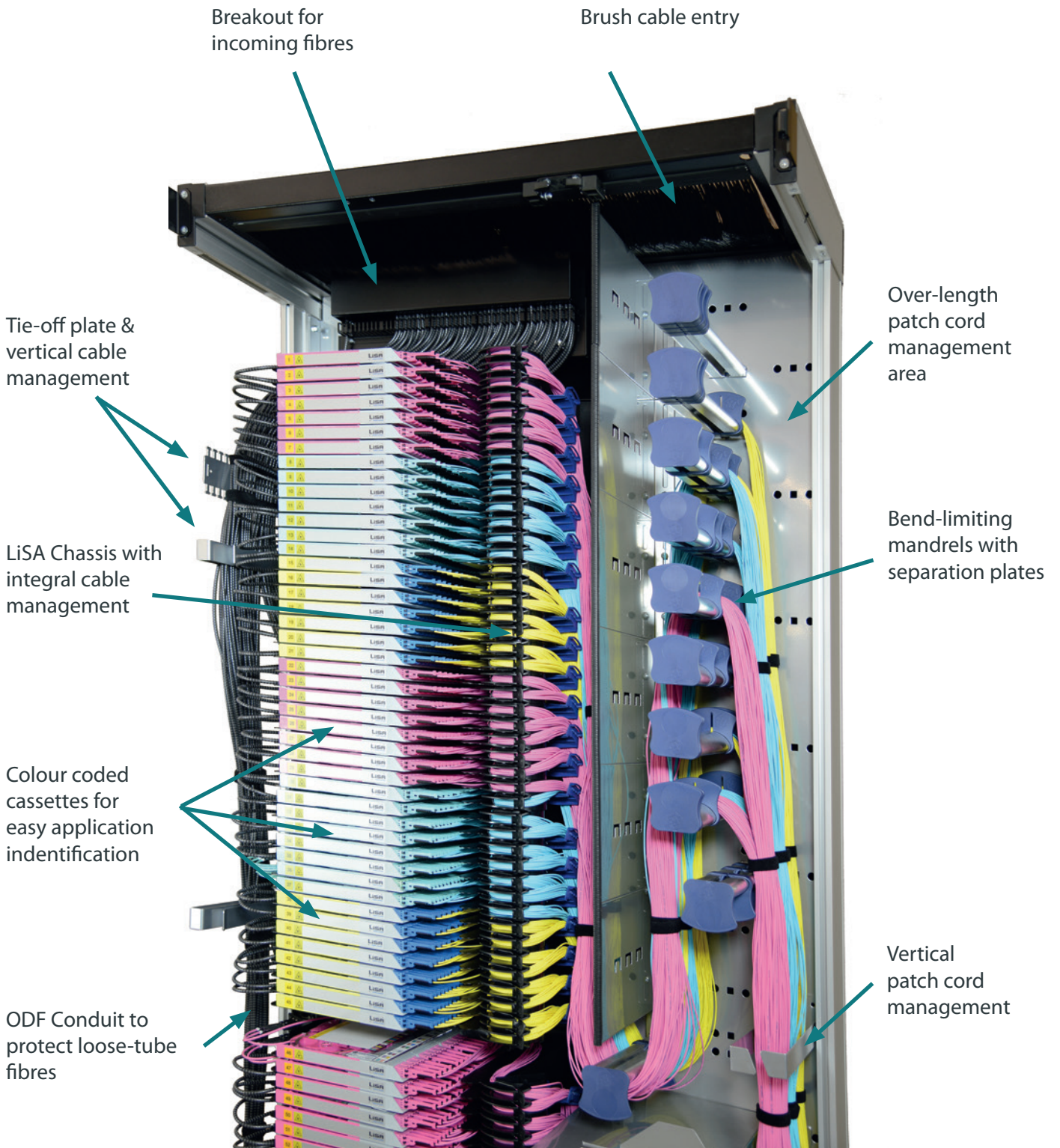
EDP Europe takes the stress out of installing a CDR by providing an off-site configuration service.

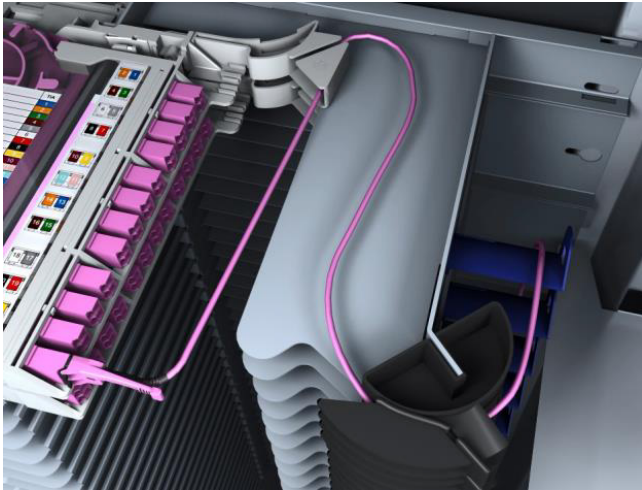
Our installation team will install the basic sub-elements such as breakout plates, tie-off plates, vertical cable managers and LiSA chassis. From this point ODF conduit will be pre-installed and dressed from the breakout plate to each individual tray port.

The CDR can then be delivered to site for a plug 'n' play installation of fibre cables and fibre cassettes.



Cable Management System





HUBER+SUHNER CDRs offer outstanding patch cord management that is visible, adaptable and provides safe routing of patch cables. From critical patch cord routing that is built into the tray ports that ensures flawless, secure and correctly managed cables that enables effortless access to tray cassettes, to the management of over-length cables that run between cabinets. This patch cord management maintains a minimum bend radius of 30mm. The over-length management area features mandrels that have separate plates allowing cables to be separated so that they are easily identifiable. This also helps prevent any crossing of cords for easy install and removal.

The table below shows the advisable cord lengths needed to patch between distribution zones

	A	B	C	D	E	F	G	H
A	3.5 m	5 m	9 m	8 m	10 m	9 m	11 m	10 m
B	5 m	3.5 m	8 m	5 m	9 m	6 m	10 m	7 m
C	9 m	9 m	3.5 m	5 m	9 m	8 m	10 m	9 m
D	8 m	5 m	5 m	3.5 m	8 m	5 m	9 m	9 m
E	10 m	9 m	9 m	8 m	3.5 m	5 m	9 m	8 m
F	9 m	9 m	9 m	5 m	5 m	3.5 m	8 m	5 m
G	11 m	10 m	10 m	9 m	9 m	8 m	3.5 m	5 m
H	10 m	7 m	9 m	9 m	8 m	5 m	5 m	3.5 m

