Infinity Fibre Distribution Frame

We connect™

P2
P3
P4
P5
Q1
Q2
Q3
Q4
Q5

Infinity Fibre Distribution Frame

The Infinity Fibre Distribution Frame (IFDF) is a high density optical interconnect solution suited to a range of communications environments. Modular in design, the IFDF offers a unique solution for high density fibre management in Data Centres, Co-location and Telecommunication environments.

The IFDF is a left and right sectioned mounting frame that is populated with modular swing out sub frames as required. The left and right sections allow inbound or outbound cables to be separated. Each section on the full height frame will accommodate 13 sub frames, totaling 26 when both are fully populated.

The swing out sub frames are fitted as required and accommodate 5 modules each. A range of modules are available to suit fusion splicing, patching, passive device module patching and MTP® patching. Based on a maximum module capacity of 24 fibres, the full height IFDF can present 3120 spliced terminations making it one of the highest density frames on the market.

Applications

- Termination and management of large fibre count cables
- Termination and management of multiple incoming and outgoing cables
- Management of incoming and outgoing pre-terminated cables (including MTP)
- Patching between terminated cables, passive devices and patching interfaces/cross-connects
- Termination and management of A/B diverse route networks
- Cross-connect between DC switches, servers and SAN devices

Splicing

- Single fibre LC/SC fusion spliced pigtail
- FuseConnect
- Through Splicing

Patching

- MTP
- SC
- LC

Passive Device Modules

- Optical splitters
- WDMs
- CWDMs

MTP is a registered trademark of US Conec Ltd.

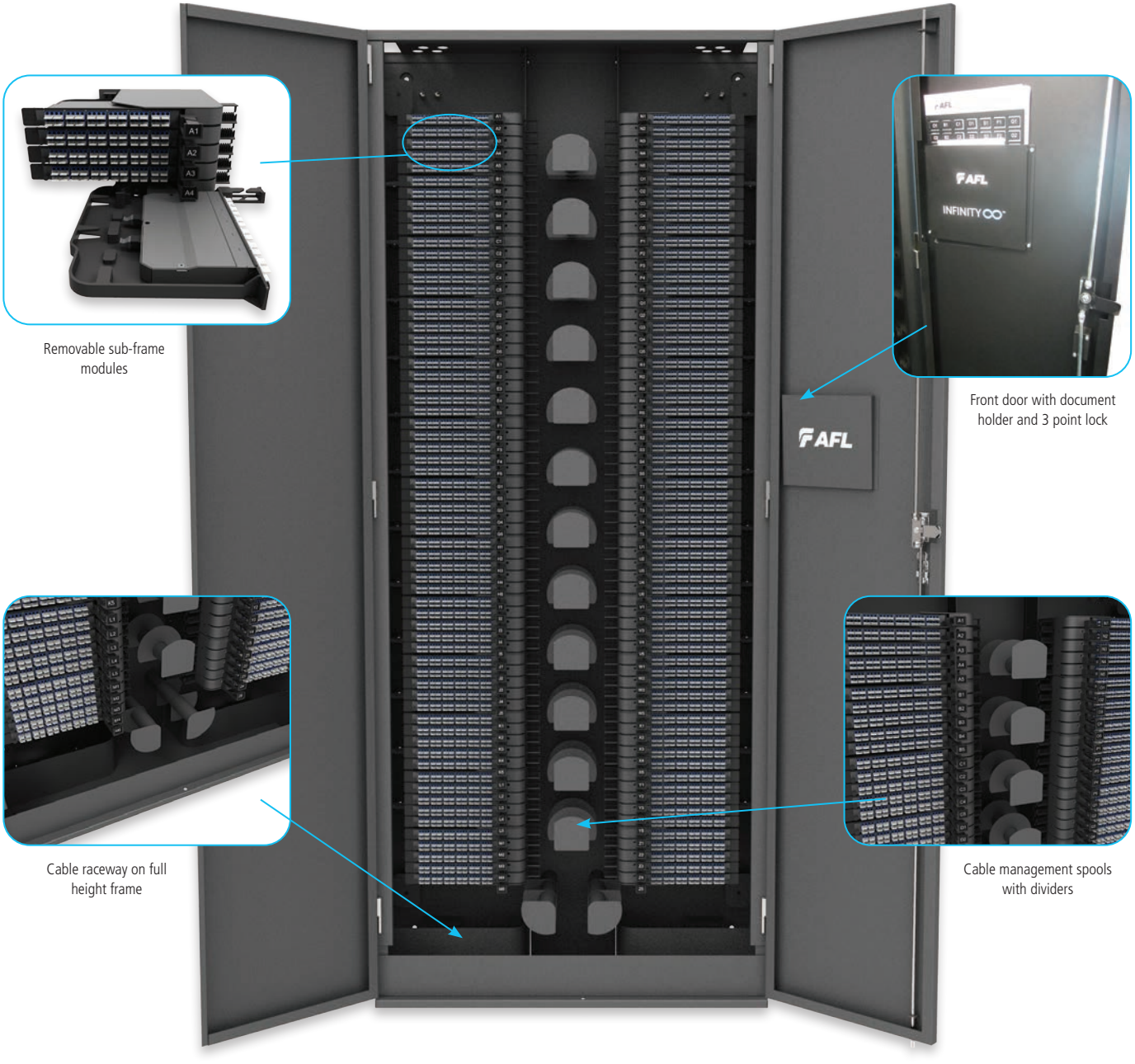
Features and Benefits

- Individual modules allow access without adjacent circuit disruption
- Top and bottom cable entry suitable for both overhead and under floor cabling
- Left and right side fibre guide system supports and manages incoming and outgoing cables
- Central storage bay accommodates patch cord routing and storage
- Modular design allows expansion of the network when required
- All front access design to suit wall mounting
- Large capacity lower cable raceway for inter-rack patching on full height frame only
- Fixed length patch cords suits all patching requirements, minimising inventory
- Shipped assembled ready for installation
- Label tags are supplied for the swing out modules for identifying individual trays
- Supplied with full installation instructions for splicing and connecting pre-terminated assemblies
- Doors fitted with documentation storage

Specifications

PART NUMBER	**AFL-IFDF-FRAME-UL-V2**	**AFL-IFDF-FRAME-UL-V2-M**	**AFL-IFDF-FRAME-UL-V2-MC**
DESCRIPTION	Infinity Fibre Distribution Frame	Infinity Fibre Distribution Frame – Mini	Infinity Fibre Distribution Frame – Micro
DIMENSIONS	900 mm (W) x 2200 mm (H) x 300 mm (D)	900 mm (W) x 1295 mm (H) x 300 mm (D)	900 mm (W) x 790 mm (H) x 300 mm (D)
UNLOADED WEIGHT WITHOUT SUB-FRAMES	120 kg	75 kg	25 kg
INSTALLATION OPTIONS	Bayed, back to back, wall or free-standing	Wall mountable or free-standing	Wall mountable
SUB-FRAME CAPACITY	13 Sub-frames per side (26 total)	6 Sub-frames per side (12 total)	3 Sub-frames per side (6 total)
CASSETTE/PATCH PANEL CAPACITY	130	60	30
SPLICE CAPACITY	3,120	1,440	720
X-PATCHING CAPACITY: **2.0mm** **3.0mm**	 1,560 Fibre cords 780 Fibre cords	 720 Fibre cords 720 Fibre cords	 360 Fibre cords 360 Fibre cords
PRE-TERMINATED CABLE CAPACITY: (BUNDLED MTP AND/OR PRE-TERMINATED 24F LC)	130 Cables	60 Cables	30 Cables
FEATURES	**Top:** Cable entry points with brush strips, 8x M25 cable knockouts, central fibre cord exit with cover **Underfloor:** Cable entries with covers	**Top:** Cable entry points with brush strips, 8x M25 cable knockouts, central fibre cord exit with cover **Bottom:** Cable entry points with brush strips, 4 x M25 cable knockouts	
	Integrated lower duct for cross patching side-to-side with removable covers	N/A	
MATERIAL	Zinc coated mild steel		Aluminium
COLOUR	Matte black textured powdercoat		
FEATURES	Central patch cord management spools Integrated cable tray and tie-off points L&R for cable retention Fibre tube management guides for all modules ID tag sheet for labelling trays & integrated document pocket		

Fully Loaded Frame with 26 Sub-Frame Modules



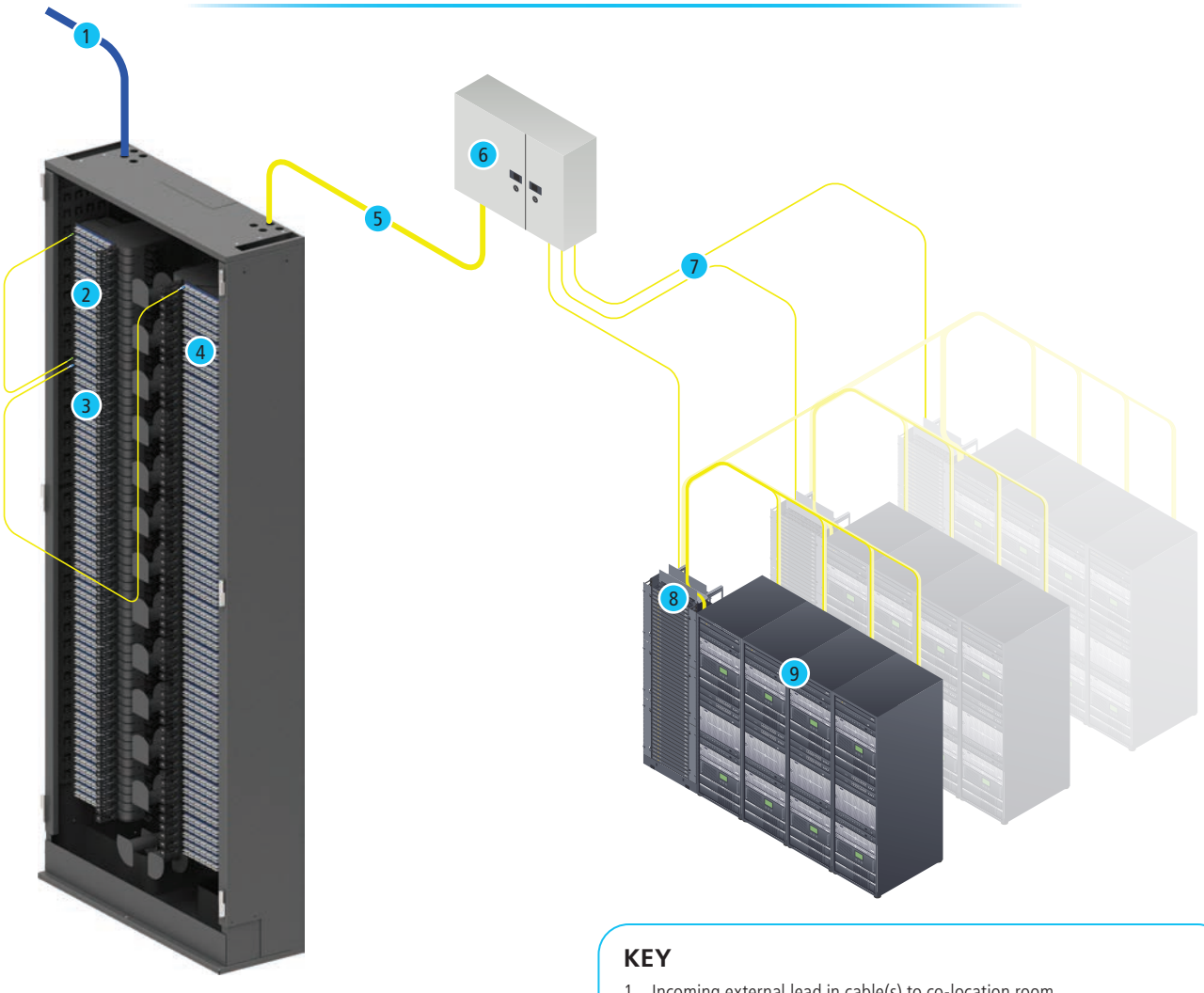
Removable sub-frame modules

Front door with document holder and 3 point lock

Cable raceway on full height frame

Cable management spools with dividers

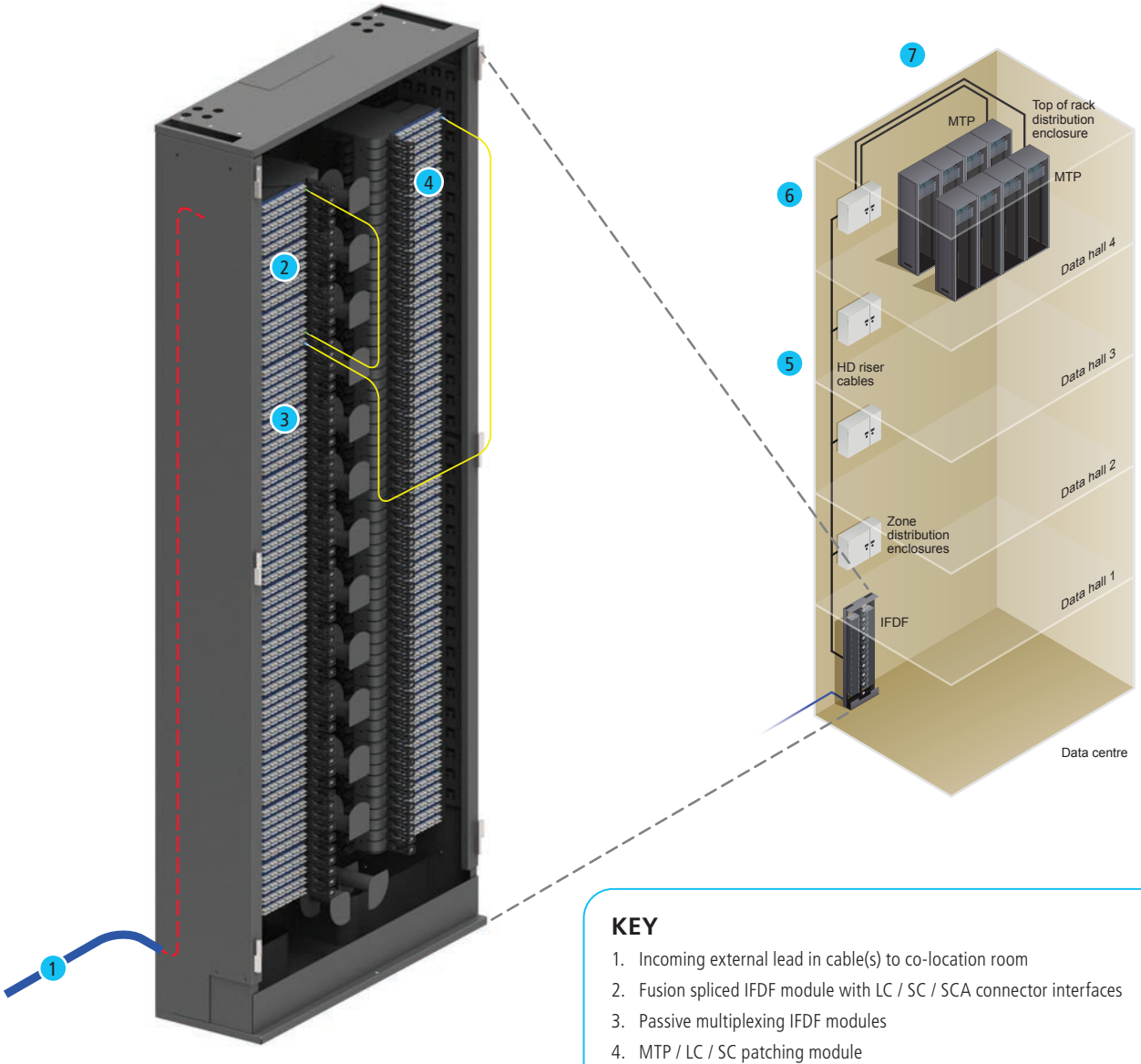
Telecommunications Co-location with Horizontal Distribution Network



KEY

1. Incoming external lead in cable(s) to co-location room
2. Fusion spliced IFDF module with LC / SC / SCA connector interfaces
3. Passive multiplexing IFDF modules
4. MTP / LC / SC patching module
5. Structured high fibre count cabling to data hall or other location
6. Zone distribution enclosure MTP / LC / SC
7. Structured lower fibre count distribution cables
8. EoR (End of Row) cross-connect racks
9. Equipment racks with ToR (Top of Rack) patching fields

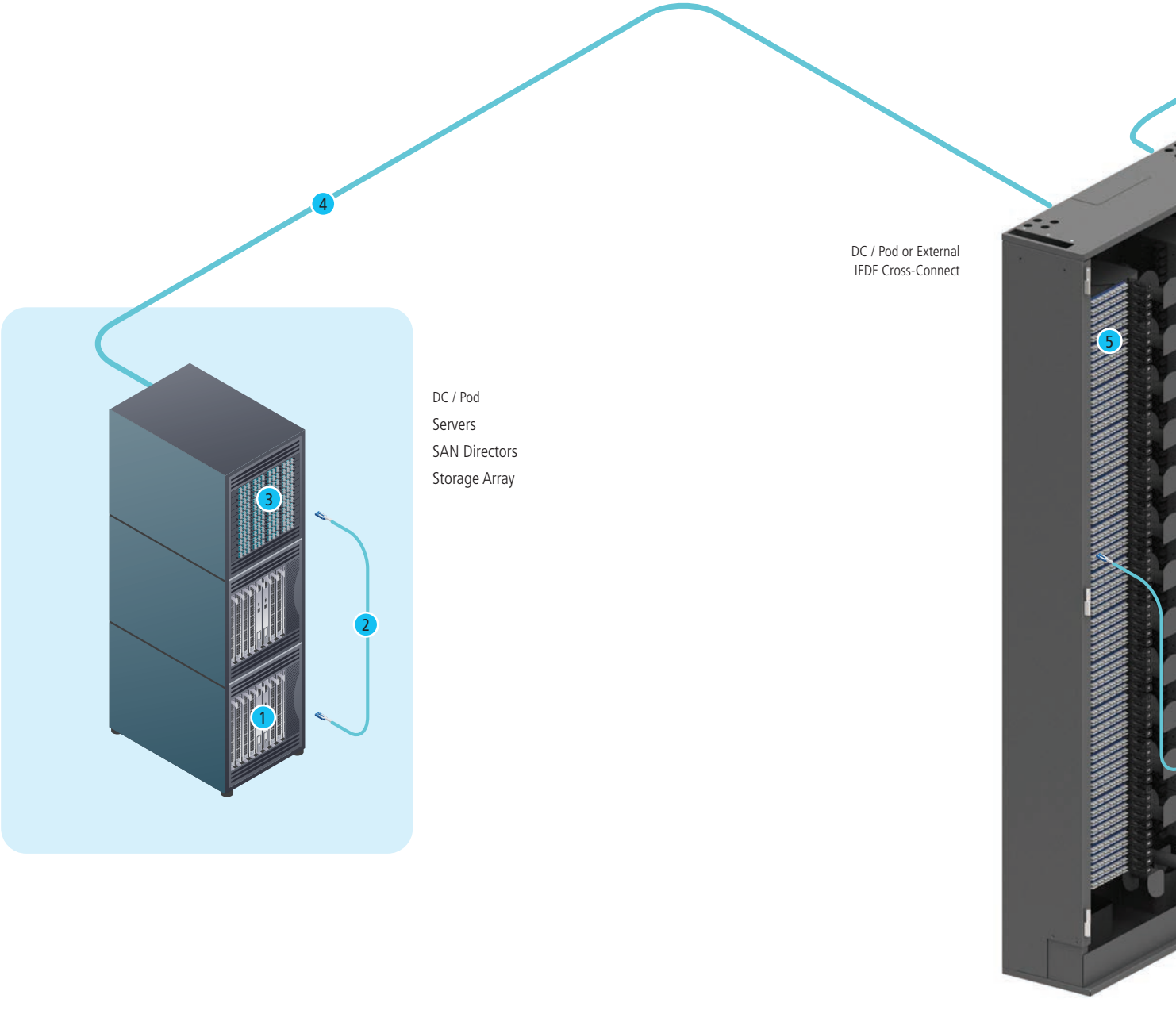
Telecommunications Co-location with Vertical Distribution Network



KEY

1. Incoming external lead in cable(s) to co-location room
2. Fusion spliced IFDF module with LC / SC / SCA connector interfaces
3. Passive multiplexing IFDF modules
4. MTP / LC / SC patching module
5. Structured riser backbone cabling to data hall on multiple floors
6. Zone distribution enclosure MTP / LC / SC
7. Structured lower fibre count distribution cables to ToR patching fields in equipment racks

Data Centre (DC) and SAN (Storage Area Network) Cross-Connect Architecture

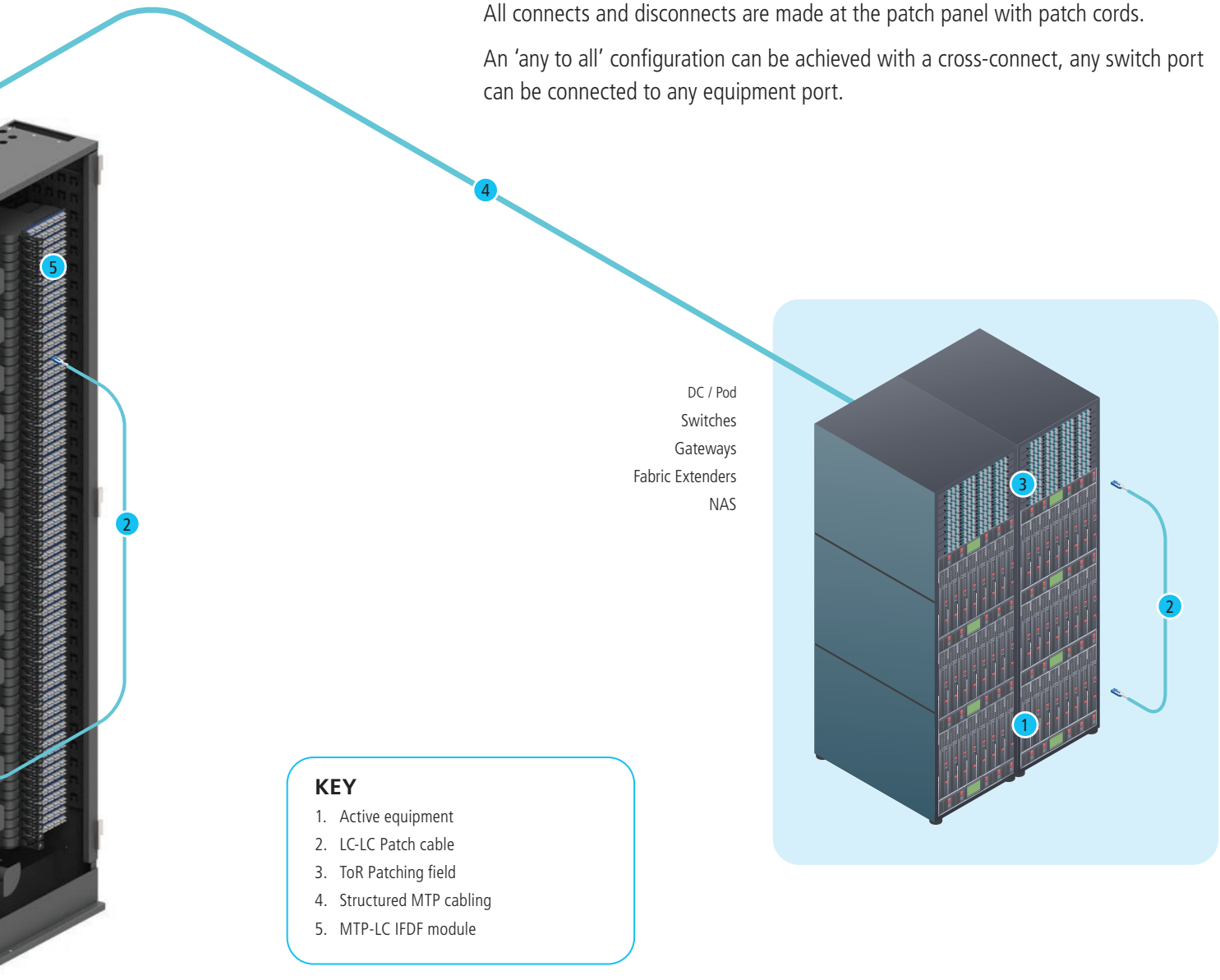


Shown is an MTP cross-connect housed in an IFDF. The IFDF cross-connect can sit with, or adjacent to the network equipment, or in another location.

Data Centre cross-connects allow device interfaces to be pre-cabled from day one using structured cabling. Structured cabling offers scalability, reduced connection errors and a higher level of equipment protection and security.

The cross-connect patching interface mirror switch ports and server ports. All connects and disconnects are made at the patch panel with patch cords.

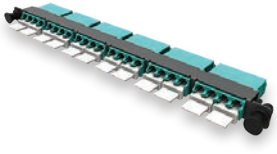
An 'any to all' configuration can be achieved with a cross-connect, any switch port can be connected to any equipment port.



KEY

1. Active equipment
2. LC-LC Patch cable
3. ToR Patching field
4. Structured MTP cabling
5. MTP-LC IFDF module

Options Available

FRAME		DESCRIPTION	PART NUMBERS
	Supplied unloaded as standard.	IFDF Frame Unloaded, Standard	**AFL-IFDF-FRAME-UL-V2**
		IFDF Frame Unloaded, Mini	**AFL-IFDF-FRAME-UL-V2-M**
		IFDF Frame Unloaded, Micro	**AFL-IFDF-FRAME-UL-V2-MC**
SPLICE MODULES & SPLICE ACCESSORIES			
	Fusion splice cassettes available with a maximum of 24 splices.	24F SCA SM Loaded Fibre Splice Cassette	**AFL-IFDF-24SCGN-1A-V2**
		24F LC SM Loaded Fibre Splice Cassette	**AFL-IFDF-24LCBU-1-V2**
		24F LC OM4 Loaded Fibre Splice Cassette	**AFL-IFDF-24LCAQ-4-V2**
		24F Splice / Thru-Splice Cassette Suits IFDF	**AFL-IFDF-24FSPLICE**
		Thru-Splice Gland Kit Suit Cable 2.5mm Max. (6 Pack)	**CABGN-DDH-2.5-6KIT**
		Thru-Splice Gland Kit Suit Cable 3.5mm Max. (6 Pack)	**CABGN-DDH-3.5-6KIT**
MTP MODULES			
	MTP-LC cassettes available with a maximum of 48 LC connections. These cassettes form part of a plug and play system within the IFDF.	MTPM LCQ Extra High Density 24F SM Cassette (2 x 12)	**IFC-24MTPMALCQ-1XHD**
		MTPM LCAQ Extra High Density 24F SM Cassette (2 x 12)	**IFC-24MTPMALCAQ-1XHD**
		MTPM-LCQ Extra High Density 24F OM4 Cassette (2 x 12)	**IFC-24MTPMLCQ-4XHD**
		MTP2M-LCQ Extra High Density 24F SM Cassette (1 x 24)	**IFC-24MTP2MALCQ-1XHD**
		MTP2M-LCQ Extra High Density 24F 0M4 Cassette (1 x 24)	**IFC-24MTP2MLCQ-4XHD**
		MTP2M-LCQ Extra High Density 48F SM Cassette (2 x 24)	**IFC-48MTP2MALCQ-1XHD**
		MTP2M-LCQ Extra High Density 48F OM4 Cassette (2 x 24)	**IFC-48MTP2MLCQ-4XHD**
PATCH MODULES			
	Adapter panels are used in conjunction with incoming pre-terminated cable assemblies. They can accommodate a maximum of 12SC, 24LC or 96MTP connections.	24F LC Loaded Patch Panel for IFDF Sub-Frame, Blue	**AFL-IFDF-24LCBU-P**
		24F LCA Loaded Patch Panel for IFDF Sub-Frame, Green	**AFL-IFDF-24LCAGN-P**
		24F LC Loaded Patch Panel for IFDF Sub-Frame, Aqua	**AFL-IFDF-24LCAQ-P**
		12F SC Loaded Patch Panel for IFDF Sub-frame, Blue	**AFL-IFDF-12SCBU-P**
		12F SCA Loaded Patch Panel for IFDF Sub-frame, Green	**AFL-IFDF-12SCGN-P**
		12F SCA Loaded Patch Panel for IFDF Sub-frame, Aqua	**AFL-IFDF-12SCAQ-P**
		MTP 8 Port XHD Panel Flat Loaded W/ 8 x Black	**IFC-MTP08XHD-FL-BK**
		MTP 8 Port XHD Panel Flat Loaded W/ 8 x Aqua	**IFC-MTP08XHD-FL-AQ**
PASSIVE DEVICES			
	AFL fibre passive devices can be used to multiplex optical signals in single mode networks. This allows better utilisation of installed infrastructure by combining multiple transmissions over less fibres.	12 x 1310 nm Circulator SCA/LC, IFDF	**FPD-OC113SCALC12-F1**
		12 x 1550 nm Circulator SCA/LC, IFDF	**FPD-OC115SCALC12-F1**

Options Available

ACCESSORIES		DESCRIPTION	PART NUMBERS
SUB-FRAME MODULE			
	Left hand side sub frame module to hold up to 5 cassettes or panels. - AFL-IFDF-FRAME-UL-V2 (Max. capacity 13) -AFL-IFDF-FRAME-UL-V2-M (Max. capacity 6) -AFL-IFDF-FRAME-UL-V2-MC (Max. capacity 3)	IFDF LHS Sub-Frame Module - 5 Trays	**AFL-IFDF-SUBLH**
	Right hand side sub frame module to hold up to 5 cassettes or panels. - AFL-IFDF-FRAME-UL-V2 (Max. capacity 13) -AFL-IFDF-FRAME-UL-V2-M (Max. capacity 6) -AFL-IFDF-FRAME-UL-V2-MC (Max. capacity 3)	IFDF RHS Sub-Frame Module - 5 Trays	**AFL-IFDF-SUBRH**
PATCH CORDS			
	Used for cross patching within a frame between any two points. The overlength is stored on central management spools. Recommended length: 5m for 'Standard' 3.5m for 'Mini' 2.5m for 'Micro' (Replace '5M' with '3.5M' or '2.5M' in part number respectively for ordering.) 2.0mm SC simplex and 2.0mm LC uniboot patch cords recommended to achieve maximum cross-patch capacity and minimise congestion within slack storage area.	LCUP Round DX G657.A1 5m 2mm Lead LSZH Yellow	**DR1LCUP5M-YL-EA1-2L-S**
		LCAUP Round DX G657.A1 5m 2mm Lead LSZH Yellow	**DR1LCAUP5M-YL-EA1-2L-S**
		LC-SC Duplex SM 5m 2mm Lead LSZH Yellow	**D1LCSC5M-YL-SA1-2L-S**
		SC-SC Duplex SM 5m 2mm Lead LSZH Yellow	**D1SCSC5M-YL-SA1-2L-S**
		LC-SCA Duplex SM 5m 2mm Lead LSZH Yellow	**D1LCSCA5M-YL-SA1-2L-S**
		SCA-SCA Duplex SM 5m 2mm Lead LSZH Yellow	**D1SCASCA5M-YL-SA1-2L-S**
		SC-SCA Duplex SM 5m 2mm Lead LSZH Yellow	**D1SCSCA5M-YL-SA1-2L-S**
		LCUP Round DX OM4 5m 2mm Lead LSZH Aqua	**DR4LCUP5M-AQ-EBT-2L-S**
		LC-SC Duplex OM4 5m 2mm LEAD LSZH Aqua	**D4LCSC5M-AQ-SBT-2L-S**
		SC-SC Duplex OM4 5m 2mm LEAD LSZH Aqua	**D4SCSC5M-AQ-SBT-2L-S**
ZONE DISTRIBUTION ENCLOSURE			
	An intermediate fibre distribution node that decentralises connectivity from the main distribution frame, transitioning high-density MTP backbone cabling into structured horizontal links closer to the equipment.	29/14 Panel Fibre Wall Enclosure for Zone Distribution - Office White	**FWE-MOD-ZB**
		29/14 Panel Fibre Wall Enclosure for Zone Distribution - Black	**FWE-MOD-ZB-BK**

VELOCITY™
AFL Copper Products

INFINITY™
AFL Fibre Optic Products

www.AFLglobal.com
Australia 1300 232 476 | New Zealand (0) 9 927 7140

© 2026 AFL, all rights reserved. 1225 08.2026