



# 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
- Single fibre mechanical

## Patching

- MTP
- SC
- LC

## Passive Device Modules

- Optical splitters
- WDMs
- CWDMs



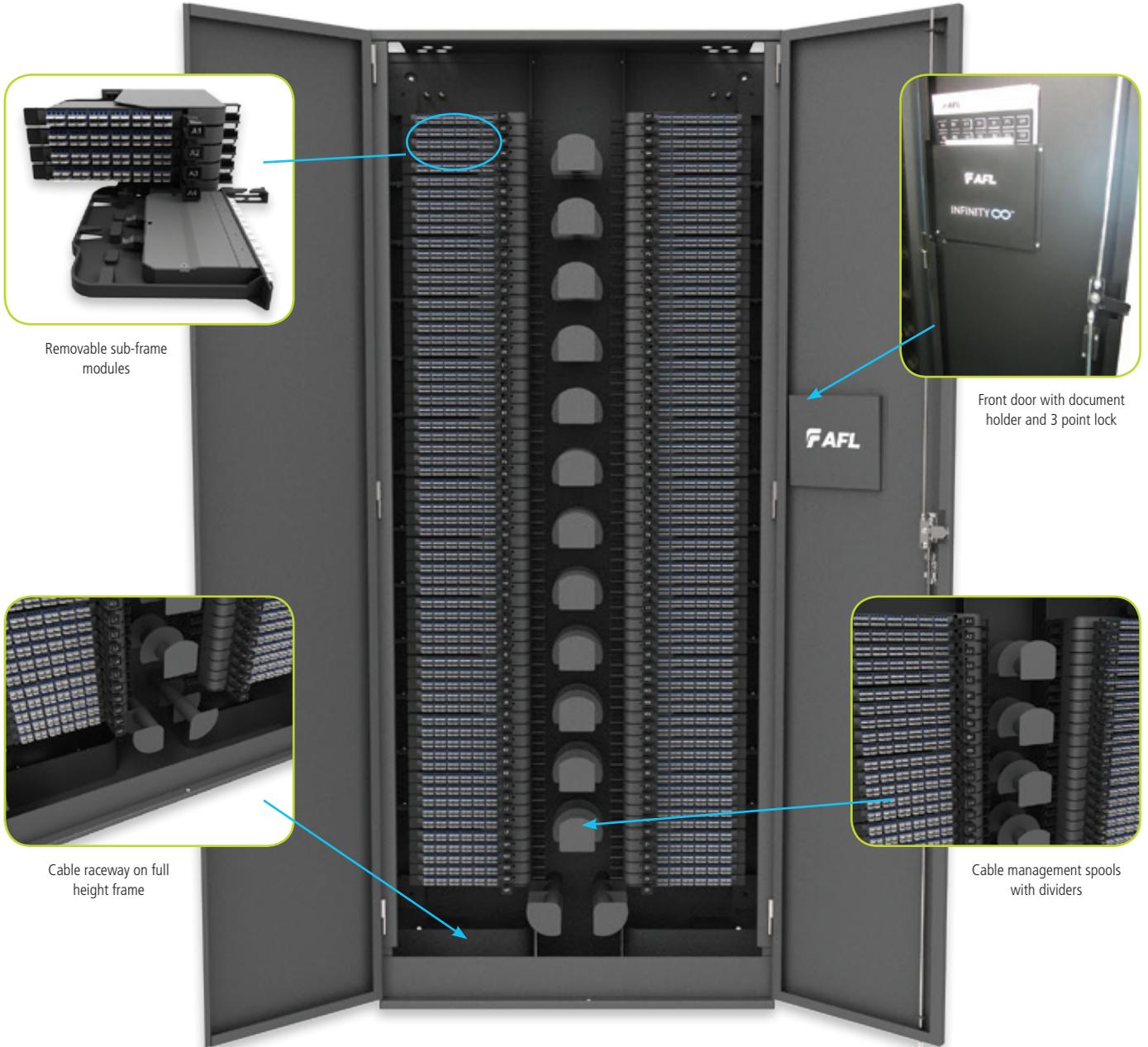
## Features and Benefits

- 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 patchcord 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 patchcords 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								
DESCRIPTION	Infinity Fibre Distribution Frame	Infinity Fibre Distribution Frame – Mini								
DIMENSIONS	900 mm (W) x 2200 mm (H) x 300 mm (D)	900 mm (W) x 1295 mm (H) x 300 mm (D)								
WEIGHT	120 kg without internal sub-frames	75 kg unloaded. 140 kg with 12 internal sub-frames and 60 cassettes								
INSTALLATION	Bayed, back to back, wall or free-standing	Wall mountable or free-standing								
CAPACITY	<p>The rack allows for 13 sub-frames per side to allow a total of 130 cassettes / patch panels.                      The mini rack allows for 6 sub-frames per side to allow a total of 60 cassettes / patch panels.                      Three types of cassettes are available for both racks and can be used in any combination. Cassette types include: Splice, Optical passives and MTP.                      Patch panels for pre-terminated cables are also available.</p> <p><b>Cassette capacity:</b>                      Splicing cassette – up to 24 splices using SC terminations                      Passives cassette – up to 12 circulator circuits                      MTP cassette – up to 48 circuits using LC connectors (Using 2 x 24F MTP's at rear of cassette)                      Patching cassette – up to 24 connections using LC connectors</p> <table border="1"> <thead> <tr> <th>Splicing capacity:</th> <th>Splicing capacity:</th> </tr> </thead> <tbody> <tr> <td>3120 splices using SC/SCA connectors on loose tube cable</td> <td>1440 splices using SC/SCA connectors on loose tube cable</td> </tr> <tr> <th>Preterminated cables capacity:</th> <th>Preterminated cables capacity:</th> </tr> <tr> <td>Bundled MTP cables (8 MTP's per cable) – 130 cables Pre-terminated 24F LC cables – 130 cables</td> <td>Bundled MTP cables (8 MTP's per cable) – 60 cables Pre-terminated 24F LC cables – 60 cables</td> </tr> </tbody> </table>		Splicing capacity:	Splicing capacity:	3120 splices using SC/SCA connectors on loose tube cable	1440 splices using SC/SCA connectors on loose tube cable	Preterminated cables capacity:	Preterminated cables capacity:	Bundled MTP cables (8 MTP's per cable) – 130 cables Pre-terminated 24F LC cables – 130 cables	Bundled MTP cables (8 MTP's per cable) – 60 cables Pre-terminated 24F LC cables – 60 cables
Splicing capacity:	Splicing capacity:									
3120 splices using SC/SCA connectors on loose tube cable	1440 splices using SC/SCA connectors on loose tube cable									
Preterminated cables capacity:	Preterminated cables capacity:									
Bundled MTP cables (8 MTP's per cable) – 130 cables Pre-terminated 24F LC cables – 130 cables	Bundled MTP cables (8 MTP's per cable) – 60 cables Pre-terminated 24F LC cables – 60 cables									
FEATURES	Top and bottom cable entry points with cable fixing gland brackets and brush strips  Mild steel with textured powder coat finish in matte black  Central patchcord management spools  Fibre tube management guides for all modules	Top cable entry points with cable fixing glands and brush strips								

# Fully Loaded Frame with 26 Sub-Frame Modules



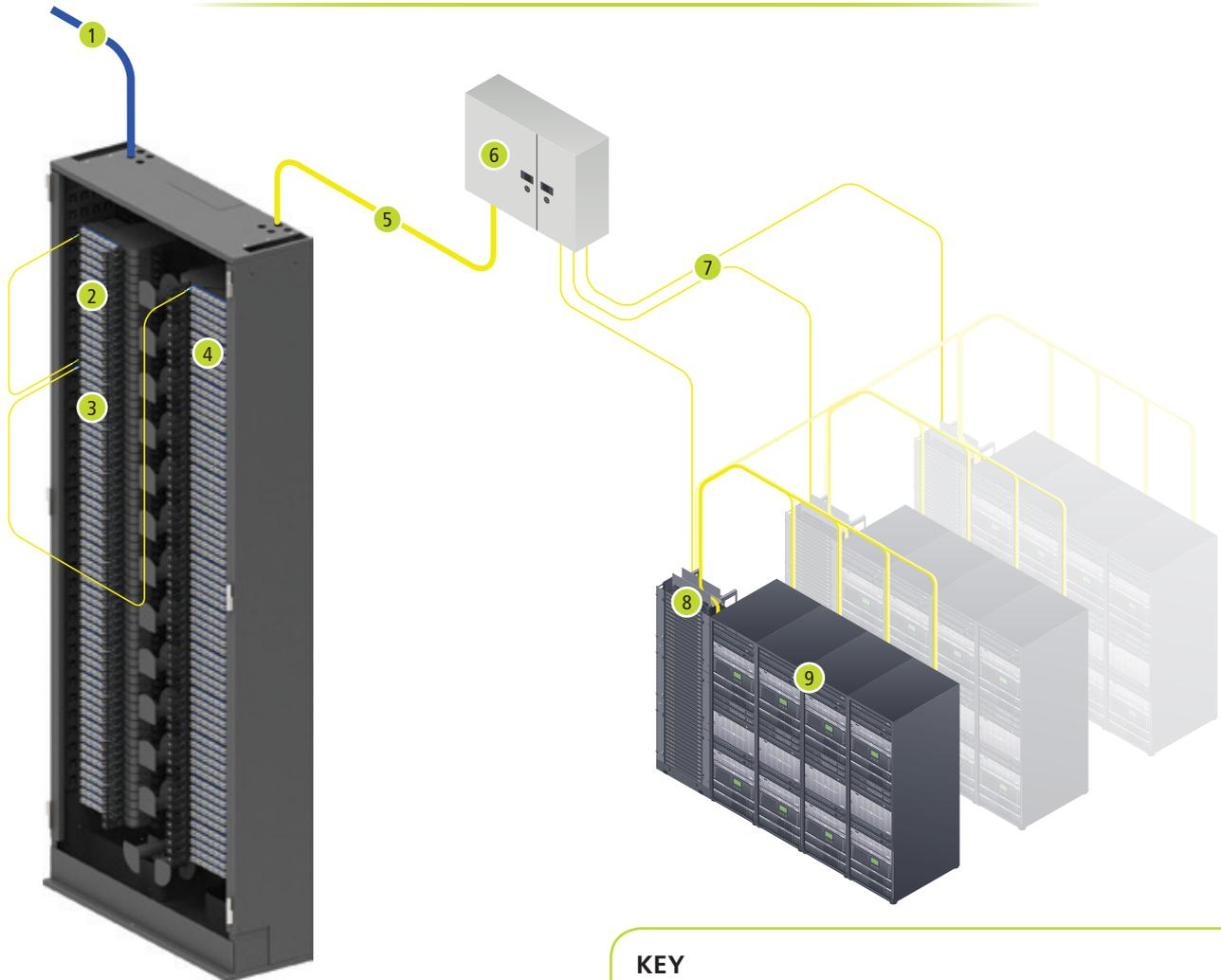
Removable sub-frame modules

Front door with document holder and 3 point lock

Cable raceway on full height frame

Cable management spools with dividers

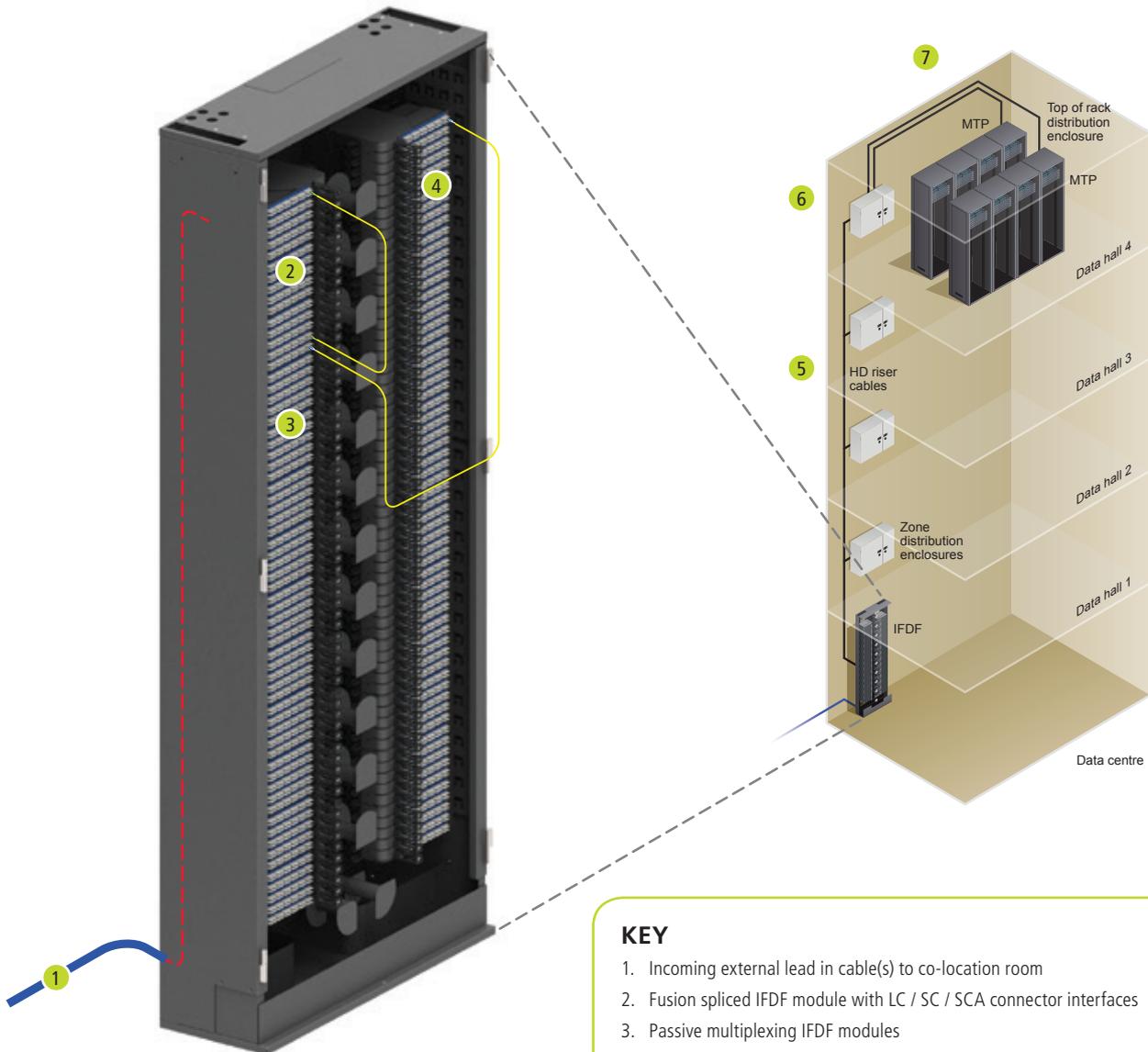
# Telecommunications Co-location with Horizontal Distribution Network



## 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

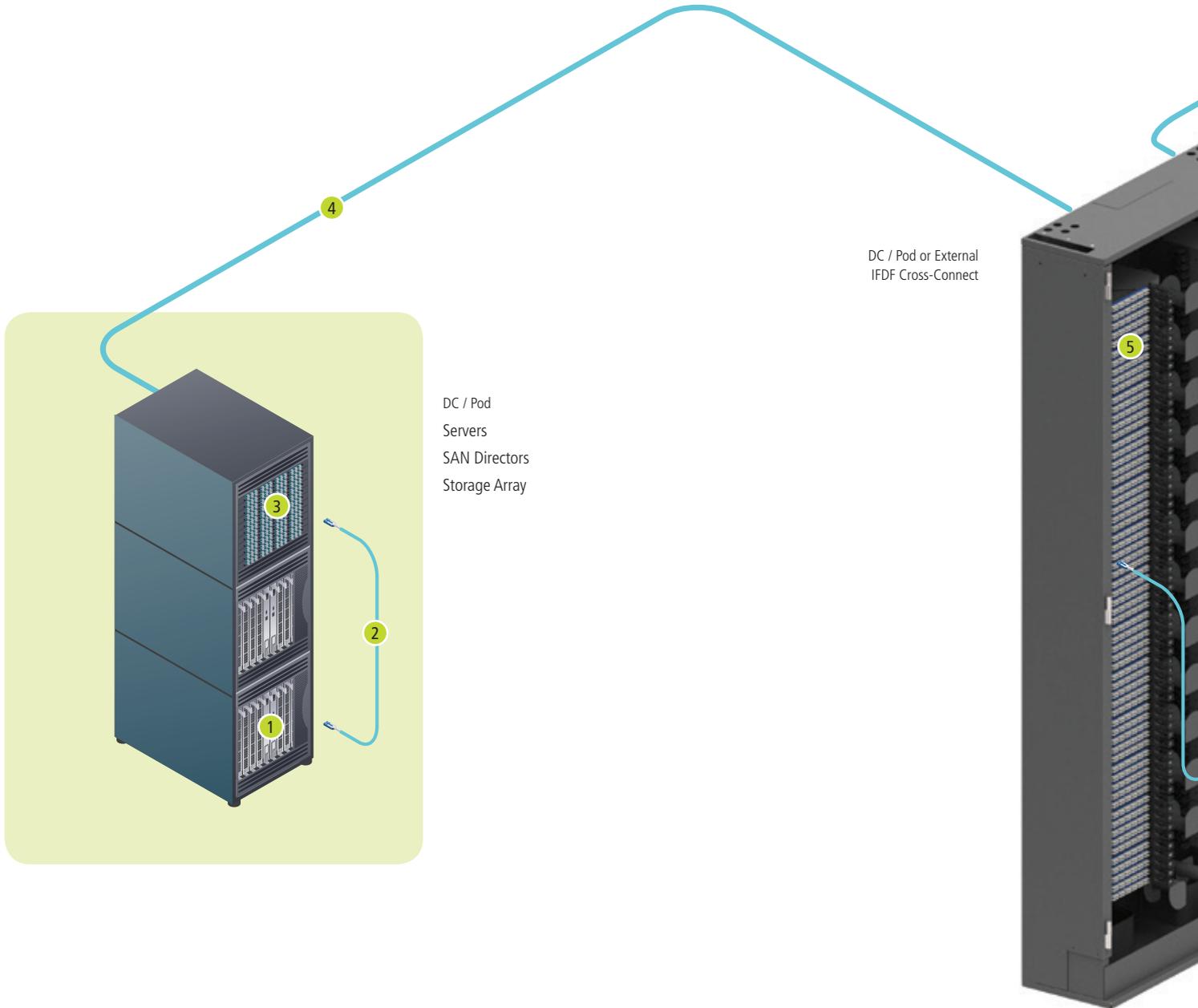
# Telecommunications Co-location with Vertical Distribution Network



## 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

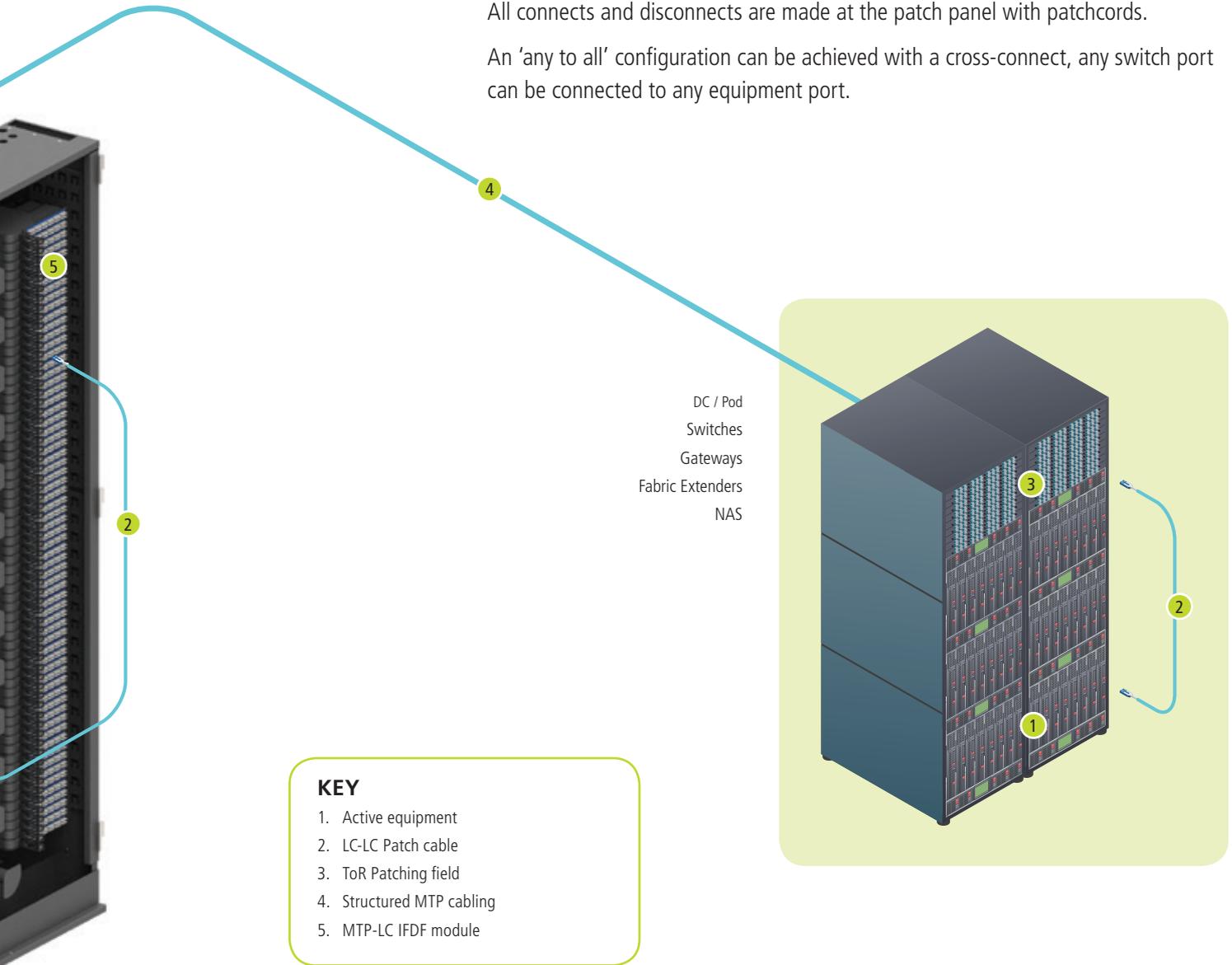


Shown is an MTP cross-connect housed in an IFDF. The IFDF cross-connect can sit with, or adjacent to the network equipment, or in another location.

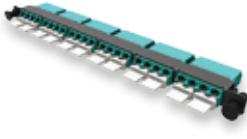
Data Centre cross-connects allow device interfaces to be pre-cabled from day one using structured cabling. Structured cabling offers scalability, reduced connection errors and a higher level of equipment protection and security.

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

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



# Options Available

	DESCRIPTION	PART NUMBERS	
	Fusion splice cassettes available with a maximum of 24 splices	<b>AFL-IFDF-24LCAQ-4-V2</b>	24F LC OM4 Splice Cassette for IFDF Sub-Frame
		<b>AFL-IFDF-24LCBU-1-V2</b>	24F LC SM Splice Cassette for IFDF Sub-Frame
		<b>AFL-IFDF-24SCGN-1A-V2</b>	24F SCA SM Splice Cassette for IFDF Sub-Frame
	MTP-LC cassettes available with a maximum of 48 LC connections. These cassettes form part of a plug and play system within the IFDF	<b>IFC-24MTPMLCQ-4XHD</b>	MTPM-LCQ Extra High Density 24F OM4 Cassette
		<b>IFC-24MTPMALCQ-1XHD</b>	MTPMA-LCQ Extra High Density 24F SM Cassette
		<b>IFC-48MTPMALCQ-1XHD</b>	MTPM-LCQ XHD 48F SM Cassette (suit IFDF only)
		<b>IFC-48MTP2MLCQ-4XHD</b>	MTP2M-LCQ XHD 48F OM4 Cassette (suit IFDF only)
	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.	<b>FPD-OC113SCALC12-F1</b>	12 x 1310 nm Circulator SCA/LC, IFDF
		<b>FPD-OC115SCALC12-F1</b>	12 x 1550 nm Circulator SCA/LC, IFDF
		<b>FPD-OMC181470SCALC-1-F1</b>	8CH CWDM, 1470 nm SCA/LC, IFDF
	Adapter panels are used in conjunction with incoming pre-terminated cable assemblies. They can accommodate a maximum of 12SC, 24LC or 96MTP connections.	<b>AFL-IFDF-24LCBU-P</b>	24F LC Loaded Patch Panel for IFDF Sub-Frame
		<b>AFL-IFDF-24LCAQ-P</b>	24F LC Loaded Patch Panel for IFDF Sub-Frame
		<b>AFL-IFDF-12SCGN-P</b>	12F SC Loaded Patch Panel for IFDF Sub-Frame
		<b>AFL-IFDF-12SCBU-P</b>	12F SC Loaded Patch Panel for IFDF Sub-Frame
		<b>IFC-MTP08XHD-FL-AQ</b>	MTP 8 Port XHD Panel Flat Loaded W/ 8 x Aqua
		<b>IFC-MTP08XHD-FL-BK</b>	MTP 8 Port XHD Panel Flat Loaded W/ 8 x Black
	Left hand side sub frame module to hold up to 5 cassettes or panels	<b>AFL-IFDF-SUBLH</b>	IFDF LHS Sub-Frame Module – 5 Trays
	Right hand side sub frame module to hold up to 5 cassettes or panels	<b>AFL-IFDF-SUBRH</b>	IFDF RHS Sub-Frame Module – 5 Trays
	5 m patchcords	<b>D1LCUP5M-C2</b>	
		<b>D1LCSC5M-C2</b>	
		<b>D1SCSC5M-C2</b>	
		<b>D1LCSCA5M-C2</b>	
		<b>D1SCASCA5M-C2</b>	
		<b>D1SCASC5M-C2</b>	
		<b>D4LCUP5M-C2</b>	
		<b>D4LCSC5M-C2</b>	
		<b>D4SCSC5M-C2</b>	





Australia 1300 232 476 [www.AFLglobal.com/au](http://www.AFLglobal.com/au) | New Zealand +64 (0) 9 927 7140 [www.AFLglobal.com/nz](http://www.AFLglobal.com/nz)

© 2016 AFL, all rights reserved. 1225 v2 07.2016

**Head Office**

93-97 Merrindale Drive  
Croydon South VIC 3136  
AUSTRALIA  
TEL: +61 3 9737 4200

**AFL Cable Plant**

100 Olympia Street  
Tottenham VIC 3012  
AUSTRALIA  
TEL: +61 9316 8300

**Sydney**

13/14 Boden Road  
Seven Hills NSW 2147  
AUSTRALIA  
TEL: +61 2 9421 4200

**Newcastle**

TEL: +61 416 652 749

**Brisbane**

2/50 Borthwick Avenue  
Murarrie QLD 4172  
AUSTRALIA  
TEL: +61 7 3292 1400

**Perth**

1/32 Robinson Avenue  
Belmont WA 6104  
AUSTRALIA  
TEL: +61 8 6253 2200

**Canberra**

3/7 Beaconsfield Street  
Fyshwick ACT 2609  
AUSTRALIA  
TEL: +61 2 6143 2300

**Adelaide**

1/151-153 Gilles Street  
Adelaide SA 5000  
AUSTRALIA  
TEL: +61 8 8223 1919

**Auckland**

8/11 Orbit Drive  
Rosedale, North Shore  
Auckland 0632  
NEW ZEALAND  
TEL: +64 9 927 7140

