

## FACT Optical Distribution Frame (ODF) Platform

High-density fiber connectivity and management for today's central office

## As your fiber network grows, so do your challenges

The transition to centralized radio access networks (C-RAN), the increasing use of virtual fiber in support of small cells, the need to migrate to higher lane speeds: trends and technologies like these are reshaping today's central office and driving demand for fiber to levels unimagined just a few years ago.

Network managers are under pressure to increase optical density while keeping their fiber manageable and their networks future-ready. The demands are quickly eclipsing the capabilities of standard rack panels. So network managers layer new fiber atop the old to avoid disrupting existing services. Meanwhile, the growing infrastructure—with its termination, splicing, patching and storage demands—grows increasingly difficult to maintain and manage.

**You need a long-term solution.**

## FACT ODF, the fiber management platform designed for service providers



FACT™ is a flexible Optical Distribution Frame (ODF) that enables you to better manage your high-density fiber network as it grows and evolves. It incorporates flexible termination, splicing, patching and storage capabilities in a modular and customizable design. It supports your most challenging fiber applications while keeping your network connections accessible and manageable.



Splice, connect and manage various types of cables and fiber from components and service areas across your central office: Loose tube fiber, patch cords, connectorized breakout assemblies, intra-facility cables. The FACT ODF enables you to connect modules within the same frame or different frames across your network. The FACT ODF holds all fibers and cables in place during patching, splicing or routing. So your network investment is protected.



The FACT ODF enables you to maintain your growing fiber network and respond to trends like network convergence. It provides an easy migration path towards higher links speeds, new connectivity platforms and expanded capacity in existing central office locations.

# Modular design

The FACT ODF system is a completely modular system, designed from the inside out. It consists of the following components:

## Elements

The building blocks of the FACT ODF are its splicing and/or patching elements. Each element offers 48 LC connections and measures 30,95 mm tall, 30-percent less than the standard HU (44,45mm). FACT elements can be deployed individually or similar elements can be combined into high-density modules. Four elements snap together to create one 3HU module that can support 192 LC connections. Six elements combine into 288 ports that can fit in a 5HU slot. Each FACT element features two hinged trays providing full front access to both sides of all connections and clear visibility of all ports. The element trays secure the fibers in place during manipulation to ensure optical performance and eliminate transient signal loss.

## Adapter packs

All FACT elements—with the exception of Splice-Only solutions— can be custom configured with a variety of adapters, splicing and passive optical components. Add Standard Connectors (SC) and Small Form Connectors (LC), with ultra-polished contacts (UPC) and angled physical contacts (APC), to support a wide range of datacom and telecom applications, including G-PON, E-PON and dense wavelength division multiplexing (DWDM).

## Frame

The FACT ODF system is designed for use with CommScope's legacy FIST-GR3 frame, enabling you to increase the return on your CapEx investment. Lightweight and compact, the FIST-GR3 modular frame can be customized to optimize your available floor space. Exiting patchcords are routed over spools in the back of the frame to minimize bending. A fully loaded FIST-GR3 frame holds up to 56 FACT elements for 2,688 fiber connections.

## Accessories (sold separately)

Backplates are available in kits that include the backplate, U-shaped mounting brackets and all necessary hardware. The backplates are sized based on port/fiber count and designed to fit 1-, 2- and 4-element FACT components. For new installations of a fully loaded FIST-GR3 frame, CommScope also offers an extra large, one-piece backplate kit that accommodates 28 FACT elements and occupies one half of a 2.2m frame.

Cable attachment bracket kits allow you to securely mount different cable and patch cords to the side of the FACT panel. Bracket kits for standard loose tube fiber cable and inter-facility cable are designed to fit all FACT splicing and patching solutions, while the pigtail termination kit is specific to the FACT splice-only solution.



## MODULAR DESIGN

# FACT Elements	Height (mm)	HU	LC Connectors
1	30,95	0,7	48
2	61,9	1,4	96
3	92,85	2,1	144
4	123,8	2,8	192
5	154,75	3,5	240
6	185,7	4,2	288



# Powerful Benefits

The unique design and engineering of the FACT ODF system translates in to flawless performance, seamless transition to future applications and a higher overall return on investment. In short, it addresses your most pressing concerns regarding the management and growth of your central office fiber network.

## Scalable, manageable density

With its compact and lightweight frame and high density, plug 'n play elements, the FACT ODF scales quickly and easily. Its innovative snap-on design requires no tools and can reduce installation time in half. Maintenance is easier, too. All fibers remain identifiable and accessible, so you can:

- Locate and trace individual fibers along easy-to-follow cable routing paths
- Complete moves, adds and changes quicker and more accurately with ample room to work
- Consolidate and save with a single fixed patch cord length for all in-rack and panel connections
- Manage inter-connects as well as cross-connects
- Perform advanced splicing, management and storage from a single location

## Long-Term Agility

Be prepared for future changes while getting more value from your current fiber network. Modular design means long-term agility.

- Support the any-to-any demands of today's leaf and spine architecture
- Enable service providers to add splitters and wave division multiplexing (WDM)
- Pay as you grow, not before, without overprovisioning

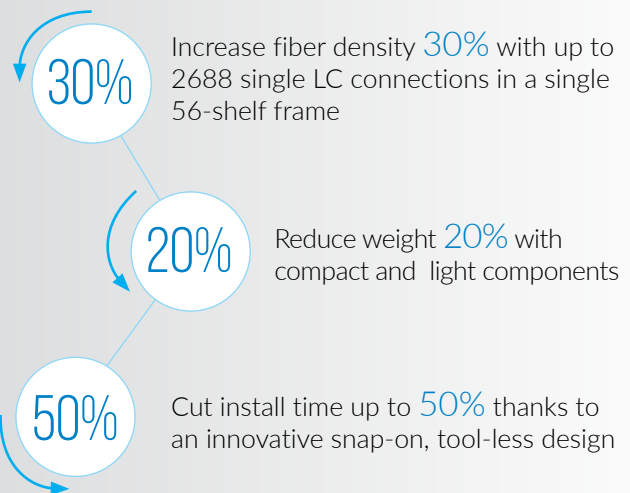
## Lower Total Cost of Ownership

The net effect of modular agility and better cable management—lower total cost of ownership. Defer CapEx by maximising fiber density and port utilisation

- Use standard cable lengths to help reduce ordering and inventory costs
- Decrease the cost to troubleshoot issues, install or reroute fibers
- Reduce mean-time-to-repair and costs associated with downtime
- Increase the lifespan of your ODF from 24-36 months to 10-15 years
- Accelerate time to market—and ROI—for new services or customers



## FACT BY THE NUMBERS



# Options and Ordering

FACT – GPS Patching System (Patch-only, Splice/Patch or Pre-cabled patch-only)

FACT - GPS - 1 2 3 - 4 5

## Port count

1	024	24-position
	048	48-position
	072	72-position
	096	96-position
	144	144-position
	192	192-position
	288	288-position (LC only)

cable fiber count needs to match port count

## Length (m)

4	00 <sup>1</sup>	1 for use with fiber option NN
	03	
	05	
	10	
	15	
	20	
	25	
30		

## Adapter type

	Standard	Superior	
2	S1	-	SC/UPC
	S2	SG	SC/APC 8°
	S3	-	SC/APC 9°
	L1	LF	LC/UPC
	L2	LG	LC/APC
	E9	-	E2000 8°

L5 = OM4

## Fiber options

5	IA	12-fiber intrafacility <sup>1</sup>
	IF	48-fiber loose-tube indoor (yellow jacket)
	OD	24-fiber loose-tube indoor/outdoor (orange jacket)
	OF	48-fiber loose-tube indoor/outdoor (orange jacket)
	NN	No pre-cabling is required

cable fiber count needs to match port count

<sup>1</sup> No strength member

## Tray options

	Right of shelf <sup>1</sup>	Left of shelf <sup>2</sup>	
3	AF	FA	Adapters and ANT splice holder (fiber and splice protector sold separately)
	AE	EA	Adapters and SMOUV splice protector (fiber sold separately)
	AJ	JA	Connector/adapters, pigtails, ANT splice holder, fiber from adapters to splice holder, ready for incoming cable
	AI	IA	Connector/adapters, pigtails, SMOUV splice protector, fiber from adapters to splice holder, ready for incoming cable
	AA	AA	Full patch, adapter only, no splice field

<sup>1</sup> Patches leave the FACT element on the Right side

<sup>2</sup> Patches leave the FACT element on the Left side

## Color Coding

Fiber 1	BLUE
Fiber 2	ORANGE
Fiber 3	GREEN
Fiber 4	BROWN
Fiber 5	GREY
Fiber 6	WHITE
Fiber 7	RED
Fiber 8	BLACK
Fiber 9	YELLOW
Fiber 10	PURPLE
Fiber 11	PINK
Fiber 12	TURQUOISE

Note: All fibered FACT products use EIA/TIA 598 color coding

## Example

FACT - GPS - 048 L2 FA - 25 OF

48 ports, 25 meters of pre-installed 48 loose-tube indoor/outdoor fibers, trays with standard LC angled adapters and ANT splice holder with cables that exit the trays on the left side.

# Options and Ordering

FACT – GSS (Splice-Only)

FACT - GSS - <sup>1</sup>XX - <sup>2</sup>XX <sup>3</sup>XXX

## Element count

1	1E	One element
	2E	Two elements
	3E	Three elements
	4E	Four elements

## Tray types

3	A04	4 ANT splices
	S04	4 SMOUV splices
	A12	12 ANT splices
	S12	12 SMOUV splices

## Number of tray types per element

		A04	S04	A12	S12
2	1E	12	12	8	6
	2E	24	24	16	12
	3E	36	38	24	18
	4E	48	48	32	34

## Example

FACT-GSS – 3E – 36 A12

Splice-Only system with three elements and twelve SC/4 ANT splice trays

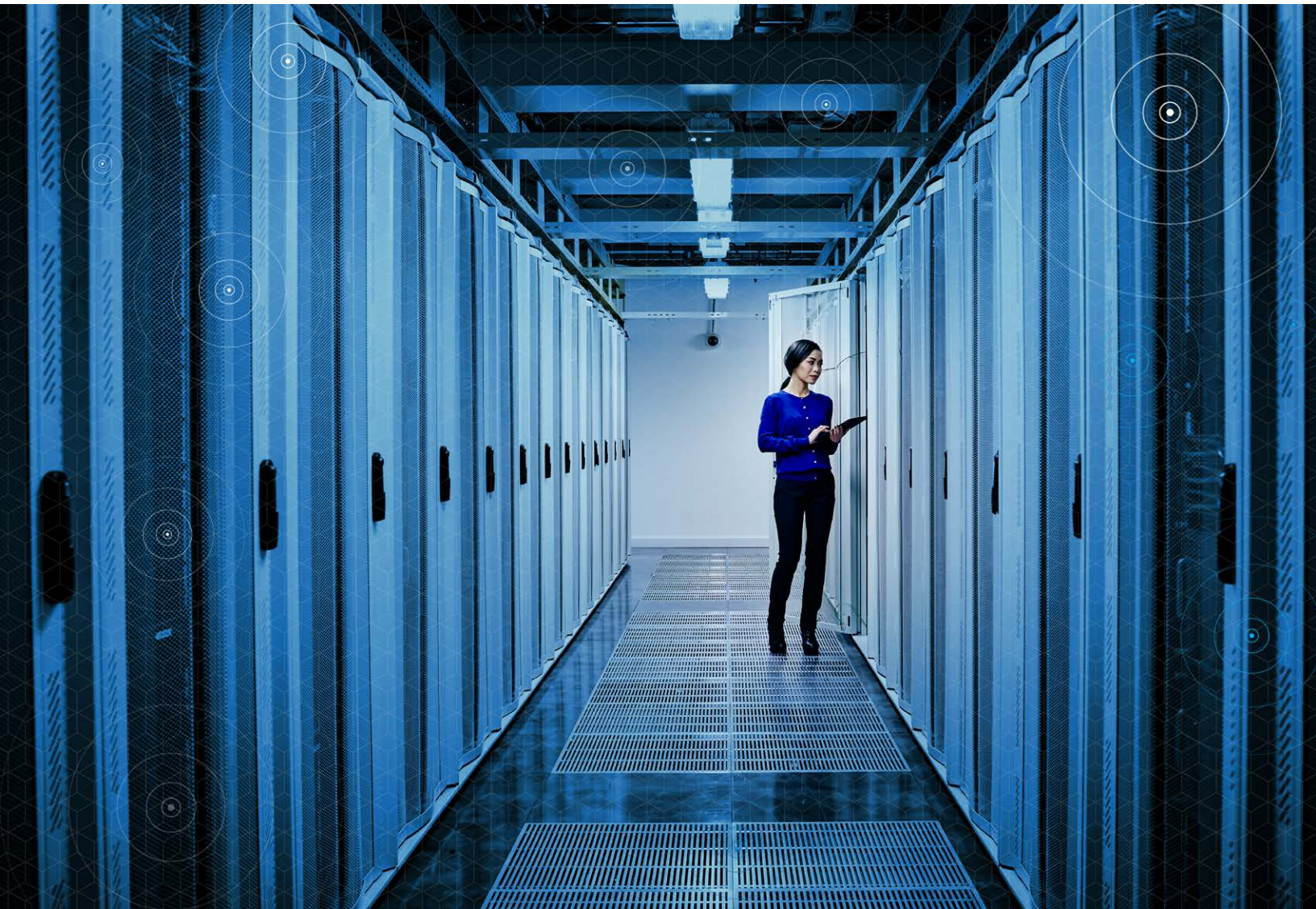
# Options and Ordering

FACT Backplate and Cable Attachment Bracket kits

All backplate and cable attachment bracket kits must be ordered separately from the core FACT system. Ordering information can be found in the CommScope e-Catalogue under the references FACT-BPLATE-XX-X (backplate kit) and FACT-CTU-X-XXX (cable attachment bracket kit).



# Let CommScope show you how



Your challenge is not just increasing your fiber density, but keeping the density accessible and manageable, while having the agility to meet to your ever-changing network demands. At CommScope, our experience with, and understanding of, optimizing the fiber deployment in your facility run deep. To learn more about our ODF solutions contact your CommScope representative or visit [www.commscope.com](http://www.commscope.com).

Everyone communicates. It's the essence of the human experience. How we communicate is evolving. Technology is reshaping the way we live, learn and thrive. The epicenter of this transformation is the network—our passion. Our experts are rethinking the purpose, role and usage of networks to help our customers increase bandwidth, expand capacity, enhance efficiency, speed deployment and simplify migration. From remote cell sites to massive sports arenas, from busy airports to state-of-the-art data centers— we provide the essential expertise and vital infrastructure your business needs to succeed. The world's most advanced networks rely on CommScope connectivity.



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