

# FIBER OPTIC NETWORKS



Founded in 2003, SAMM Technology offers cutting-edge products and services in the fields of telecommunication infrastructure and data center by producing in line with the expectations and needs of its customers.

With more than 20 years of experience, SAMM Technology has become one of the important suppliers of Europe in terms of capacity, technology and innovation by continuously investing in production, technology, R&D and people.

SAMM Teknoloji produces high performance fiber optic cables, fiber optic cable assemblies, data center infrastructure products and structured cabling solutions in its two factories located in the Gosb/Gebze industrial zone.

SAMM also has a ministry-approved research and development center since 2017.



#### 20+ Years Experience

With more than 200 employees and 2 factories, we have achieved several significant projects in telecommunication fiber optic infrastructure.



#### **World Class Production**

With systematic and scientific methods, we always focus on reaching the highest quality in our fiber optic cable production and assembly lines.



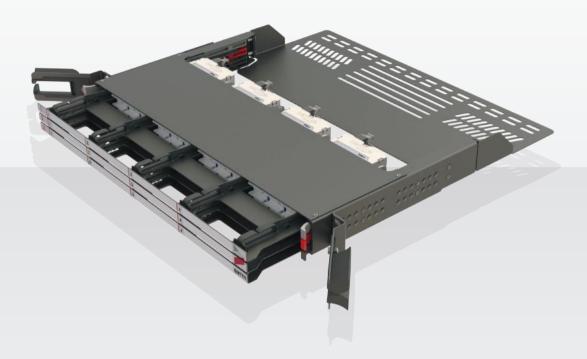
#### **Connecting Continents**

An advantageous shipping location, at the intersection of Asia, Europe and the Middle-East.



#### Innovative Solutions

We are passionate about responding to customer demand and keeping pace with the ever evolving telecommunication and fiber optic technologies.



Data Center Fiber Optic Networks



#### Modular Ultra High Density Panels | G-Connect Series

These panels are designed to accommodate Base-8 and Base-12 variety solutions in a high density and new generation structure. The modular construction combines highest port density with installation ease. A maximum of 144 LC connections can be stacked in 1U section, within 12 UHD modules.



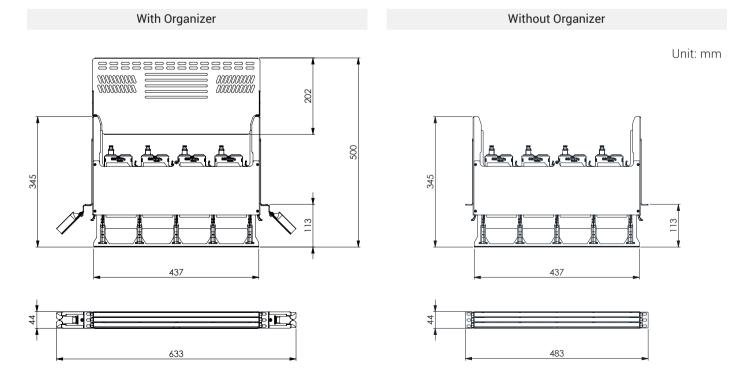


#### **Features**

- Modular structure with many different variations
- Configurable tray structure for Base-8 and Base-12 topologies
- Patented Rail Design
- In 1U 144 LC connector capacity
- 3 individually sliding trays per 1U for maximum flexibility during operation and installation
- Patch cord management for each individual tray
- Labelling front for module identification
- Sliding and extracting the modules of the trays for better access to cables during installation
- Modules can be removed and installed from the front and rear side of the trays



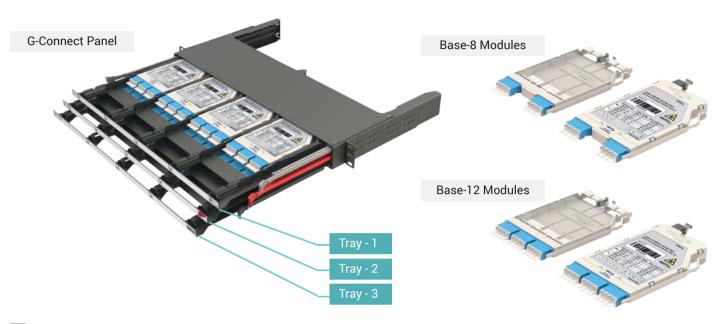
#### **Dimensions**







#### **Different Backbone Design Options**



#### **Practical Benefits**

Sliding Rail Tray Lock with Release Arm

Front Cable Guides



Rear Cable Organizer



**Order Coding** 



PAN-UHD-1U-B12-BLK-NN
PAN-UHD-1U-REAR-ORG
PAN-UHD-1U-FRONT-GUI

19" 1U G-Connect UHDM Panel, Black, 12 Module Capacity, Base-12

19" 1U G-Connect UHDM Panel Rear Organizer, Black

19" 1U G-Connect UHDM Panel Left/Right Front Cable Management Guides



#### **UHD MTP-LC Conversion Modules Base-8 / Base-12**

This ultra high-density MTP-LC conversion module is ideal for plug-and-play systems. The module hosts 8 or 12 LC adapters in the front and 1 MTP adapter in the back, with the optical circuit that interconnects the front and back adapters. This module has a thin design and a 1U panel can fit 12 modules in it.





- Entrance facility
- Data center
- Telecommunications room
- Cellular tower base station
- Consolidation point
- Central office
- Equipment room



#### **Key Features and Benefits**

- Front and rear installation options on panel rail guides
- Sliding mechanism allows modules to snap into position for quick and easy, tool-less mounting
- High-density: up to 144 fibers in a 1U rack space
- Safety lock design against movement when installed
- Port numbering on the label
- Robust and Strong design
- Complete optical testing



#### **Technical Specifications**

Plastic module materials	PC/ABS Blend, Light Grey
Flammability rate	UL94-V0
RoHS	Compliant
Operating temperature	-20°C to +60°C
Storage temperature	-25°C to +70°C



#### **Optical Performance**

С	onnector Type	IL(dB)	RL(dB)	Wavelength (nm)
	SM/APC	≤ 0.35	60	1310, 1550
MTP	OM3 MM / UPC	≤ 0.35	30	850, 1300
	OM4 MM / UPC	≤ 0.35	30	850, 1300
	SM/UPC	≤ 0.25	50	1310, 1550
LC	OM3 MM / UPC	≤ 0.25	40	850, 1300
	OM4 MM / UPC	≤ 0.25	40	850, 1300

#### **Certification And Compliance**

#### ANSI/TIA-942-A

Telecommunications Infrastructure Standard for Data Centers

#### ANSI/TIA-568-C.3

Optical Fiber Cabling Components Standard

#### TIA-604 series

Fiber Optic Connector Intermateability Standard

#### TIA-455 series

Standard Test Procedure for Fiber Optic Components

#### GR-326-CORE

Generic Requirements for Single Mode Optical Connectors and Jumper Assemblies

#### IEC 60874-1

Connectors for Optical Fibers and Cables; Generic Standard IEC 61300

Fiber Optic Interconnecting Devices and Passive

Components; Basic Test and Measurement Procedures

#### IEC 60874-1

Connectors for Optical Fibers and Cables; Generic Standard

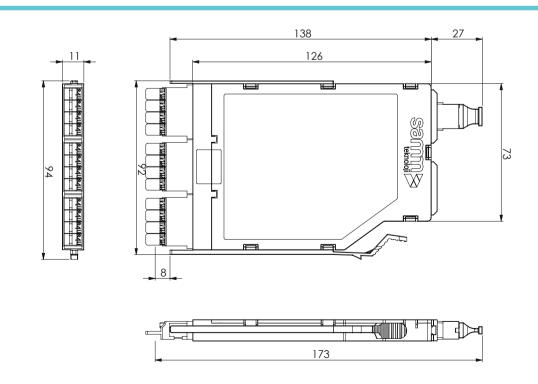
#### UL 94

Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

#### RoHS

Directive on Restriction of Hazardous Substances

#### **Dimensions**



Unit: mm





#### MTP-LC Conversion Modules Base-12

\* Please refer to the
Connectivity Hand Book for
cabling polarity quidelines.

\*(Please choose the right polarity wiring and fiber type - QR Code)

# OS2 Base-12 Module

#### Code and Description

#### UHDM-1x12MTPEm/3xLCQD-0S2-A

OS2 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Blue, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type A

#### UHDM-1x12MTPEm/3xLCQD-0S2-AF

OS2 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Blue, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type AF

#### UHDM-1x12MTPEm/3xLCQD-0S2-B

OS2 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Blue, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type B

#### OM3 Base-12 Module





#### UHDM-1x12MTPEm/3xLCQD-0M3-A

OM3 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Aqua, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type A

#### UHDM-1x12MTPEm/3xLCQD-OM3-AF

OM3 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Aqua, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type AF

#### UHDM-1x12MTPEm/3xLCQD-0M3-B

OM3 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Aqua, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type AB

#### OM4 Base-12 Module

#### Code and Description



#### UHDM-1x12MTPEm/3xLCQD-OM4-A

OM4 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Violet, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type A

#### UHDM-1x12MTPEm/3xLCQD-0M4-AF

OM4 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Violet, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type AF

#### UHDM-1x12MTPEm/3xLCQD-0M4-B

OM4 MTP to LC Conversion Module, Base-12, Front 3x LC Quad Adapter Violet, Rear 1x MTP12, Pinned, Adapter Body Black, Allocation Type B





#### MTP-LC Conversion Modules Base-8

\*(Please choose the right polarity wiring and fiber type - Page 06, QR Code)

#### OS2 Base-8 Module

#### Code and Description



#### UHDM-1x8MTPEm/2xLCQD-0S2-A

OS2 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Blue, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type A

#### UHDM-1x8MTPEm/3xLCQD-OS2-AF

OS2 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Blue, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type AF

#### UHDM-1x8MTPEm/3xLCQD-OS2-B

OS2 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Blue, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type B

#### OM3 Base-8 Module

#### **Code and Description**



#### UHDM-1x8MTPEm/2xLCQD-0M3-A

OM3 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Aqua, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type A

#### UHDM-1x8MTPEm/2xLCQD-0M3-AF

OM3 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Aqua, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type AF

#### UHDM-1x8MTPEm/2xLCQD-0M3-B

OM3 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Aqua, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type AB

#### **OM4 Base-8 Module**

#### **Code and Description**



#### UHDM-1x8MTPEm/3xLCQD-0M4-A

OM4 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Violet, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type A

#### UHDM-1x8MTPEm/3xLCQD-OM4-AF

OM4 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Violet, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type AF

#### UHDM-1x8MTPEm/3xLCQD-OM4-B

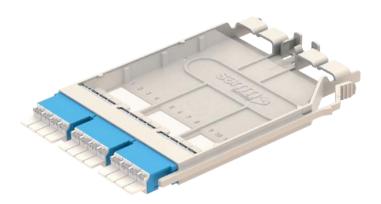
OM4 MTP to LC Conversion Module, Base-8, Front 2x LC Quad Adapter Violet, Rear 1x MTP8, Pinned, Adapter Body Black, Allocation Type B

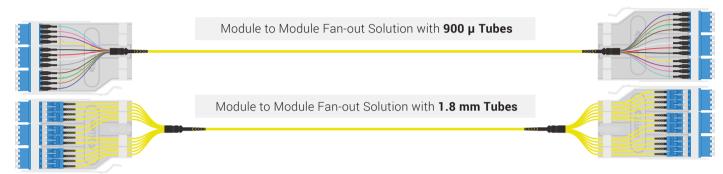


#### Patch Modules - Base-8 / Base-12

This patch module houses the interconnections between fiber optic assemblies and active equipment, it is designed to facilitate "end-to-end" parallel optics connectivity. It can accommodate standard MTP, LC and SC connectors and has a fiber capacity of 6/12/144 fiber interconnections per module.

Patch Modules snap easily into position with a fluid and robust sliding mechanism, and are compatible with all G-Connect Series high density panels. These modules provide a straight through LC, SC or MTP patching field, which allows trunk cables to be connected directly to patch cords or harnesses.







#### **Applications**

- Entrance facility
- Data center
- Telecommunications room
- Cellular tower base station
- Consolidation point
- Central office
- Equipment room



#### **Key Features and Benefits**

- Front and rear installation options on panel rail guides
- Safety lock design against movement when installed
- Two sides rear cable entry
- Fan-out divider holder
- Engraved port numbering
- Robust and Strong design



#### Patch Capacity for 1U G-Connect High Density Panel

Connector Type	LC	SC	MTP-8	MTP-12	MTP-24
Fiber Count	144	72	576	864	1728



#### **Technical Specifications**

Module Fiber Count Variations	8/12/24/48/72/144 Fibers		
Adapters Insertion Loss	≤ 0.1 dB (Typical)		
	≤ 0.2 dB ( Maximum )		
Plastic Module Materials	PC/ABS Blend, Light Grey		
Flammability Rate	UL94-V0		
RoHS	Compliant		
Operating Temperature	-20°C to +60°C		
Storage Temperature	-25°C to +70°C		



#### **Certification and Compliance**

#### ANSI/TIA-942-A

Telecommunications Infrastructure Standard for Data Centers

#### ANSI/TIA-568-C.3

Optical Fiber Cabling Components Standard

#### **TIA-604 series**

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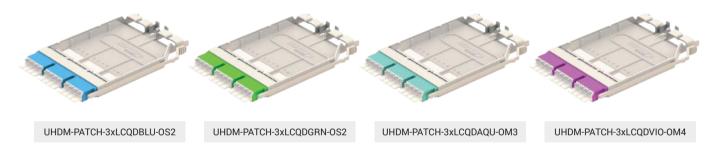
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Tests for Flammability of Plastic Material for Parts in **Devices and Appliances** 

RoHS

Directive on Restriction of Hazardous Substances

#### LC Patch Modules



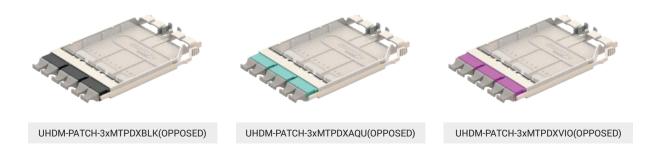


#### SC Patch Modules





#### MTP Patch Modules

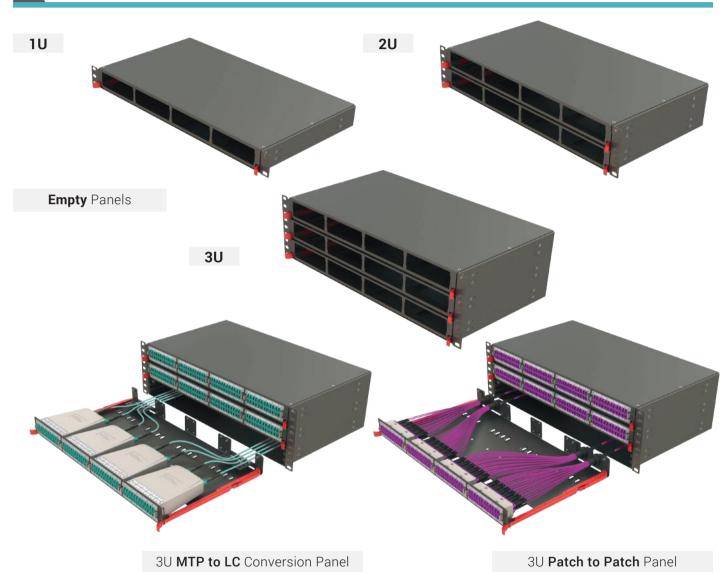




#### **High Density Modular Fiber Panels**

High density modular fiber panels can terminate, organize and distribute up to 144/288 fibers. These panels are designed to be mounted on 19" rack systems and they have 4 solts, in each 1U unit, that can hold MTP/LC conversion modules and MTP/LC/SC patch adapter modules. These HD modular fiber optic panels are compatible with optional accessories such as pre-installed inner splicing trays, cable tie-up plates, fan-out fixing plates, blind plates, optical adapters and fiber pigtails. High Density Modular Fiber Panels are generally used in data centers.

#### **Optional Modularity for Different Applications**



#### **Panel Capacity**

Type of Panel		Conversion Modules	Patch	Modules	
		MTP to LC	MTP to MTP	LC	SC
111 Danal (4 Clata)	Module Capacity	12/24	96/144/288	24	12
1U Panel (4 Slots)	Panel Capacity	48/96	384/576/1152	96	48
2U Panel (8 Slots)	Module Capacity	12/24	96/144/288	24	12
	Panel Capacity	96/192	768/1152/2304	192	96
3U Panel (12 Slots)	Module Capacity	12/24	96/144/288	24	12
	Panel Capacity	144/288	1152/1728/3456	288	144

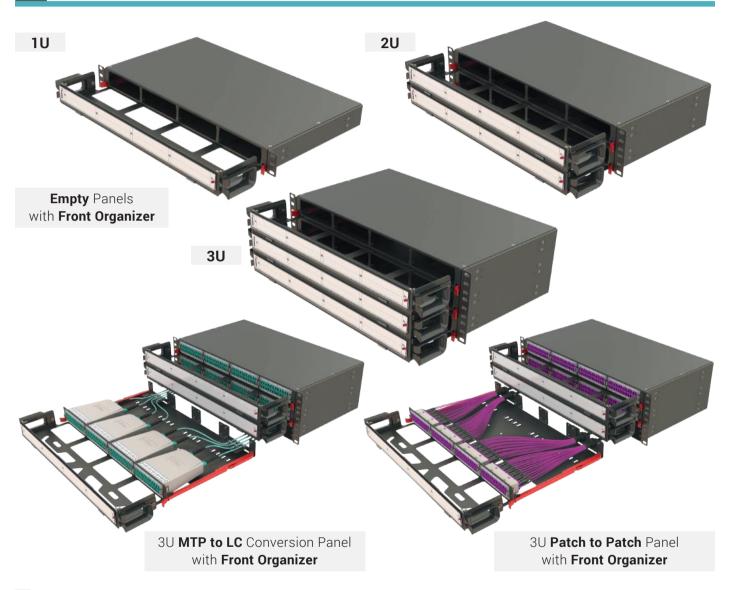


#### **High Density Modular Fiber Panels with Front Organizer**

These panels are similar to the HD modular fiber panels, but they come with a front cable organizer. The front cable organizer is fit for 1U, 2U or 3U sections according to the height of the panel. It helps in saving cabinet space and arranging the cabling system. The smart design of the front organizer offers easier cable management and extends the life of cables, connectors and fiber network components.



#### **Optional Modularity for Different Applications**



#### **Panel Capacity**

Type of Panel		Conversion Modules	Patch I	Modules	
		MTP to LC	MTP to MTP	LC	SC
111 Damel (4 Clate)	Module Capacity	12/24	96/144/288	24	12
1U Panel (4 Slots)	Panel Capacity	48/96	384/576/1152	96	48
2U Panel (8 Slots)	Module Capacity	12/24	96/144/288	24	12
	Panel Capacity	96/192	768/1152/2304	192	96
3U Panel (12 Slots)	Module Capacity	12/24	96/144/288	24	12
	Panel Capacity	144/288	1152/1728/3456	288	144





# 1U High Density Modular Fiber Panels - Easy Series

1U high density modular fiber optic panels can terminate, organize and distribute up to 48/96 fibers. These panels are designed to be mounted on 19" rack systems and they have 4 slots in a 1U unit that can hold conversion modules and MTP/LC/SC patch adapter modules. High Density Modular Fiber Panels are generally used in data centers.

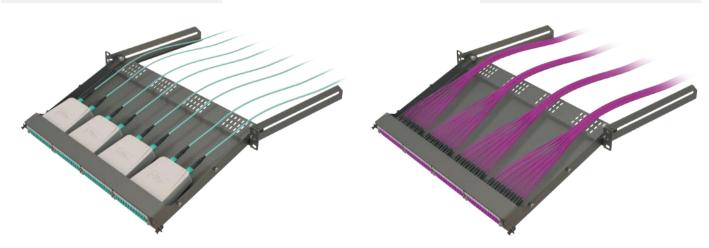


#### **Optional Modularity for Different Applications**



1U Conversion Panel







#### **Panel Capacity**

Type of Modules		Conversion Modules	Patch Modules		
		MTP to LC	MTP to MTP	LC	sc
111 Danal (4 Slata)	Module Capacity	12/24	96/144/288	24	12
1U Panel (4 Slots)	Panel Capacity	48/96	384/576/1152	96	48



#### **Ordering Code**

MT13213 EHDM -PANEL-1U-4SL-V0- BLK-NN Mechanical Sliding Modular Panel





#### High Density MTP to LC Conversion Module | 12 LC-DX

This high-density MTP-LC conversion module is ideal for plug-and-play systems. The module hosts 12 or 24 LC adapters in the front and 1 or 2 MTP adapters in the back, with the optical circuit that interconnects the front and rear adapters. This module has an HD design and a 1U panel can fit 4 modules in it.





#### **Applications**

- Entrance facility
- Data center
- Telecommunications room
- Cellular tower base station
- Consolidation point
- Central office
- Equipment room



#### **Key Features and Benefits**

- Front installation on panel rail guides
- Sliding mechanism allows modules to snap into position for quick and easy, tool-less mounting
- High-density: up to 96 fibers in a 1U rack space
- Safety lock design against movement when installed
- Port numbering on the label
- Robust and Strong design
- Complete optical testing



#### **Technical Specifications**

Plastic module materials	PC/ABS Blend, Light Grey
Flammability rate	UL94-V0
RoHS	Compliant
Operating temperature	-20°C to +60°C
Storage temperature	-25°C to +70°C





#### MTP to LC Conversion Modules | 1xBase-24 / 12xLC-Duplex



\*(Please choose the right polarity wiring and fiber type - QR Code)





#### OS2 Base-24 to 12 LC Duplex Module



#### **Code and Description**

HDM-PC24 -24F-1xMTP24-OS2-12LCDX-A Single Mode, A2, 9/125, MTP to LC Module, 1xMTP24-LC, Type A HDM-PC24 -24F-1xMTP24-OS2-12LCDX-AF

Single Mode, A2, 9/125, MTP to LC Module, 1xMTP24-LC, Type AF

HDM-PC24 -24F-1xMTP24-OS2-12LCDX-B Single Mode, A2, 9/125, MTP to LC Module, 1xMTP24-LC, Type B

OM3 Base-24 to 12 LC Duplex Module



#### **Code and Description**

HDM-PC24 -24F-1xMTP24-OM3-12LCDX-A
Multimode Mode, OM3, 50/125, MTP to LC Module,
1xMTP24-LC, Type A

HDM-PC24 -24F-1xMTP24-OM3-12LCDX-AF
Multimode Mode, OM3, 50/125, MTP to LC Module,
1xMTP24-LC, Type AF

HDM-PC24 -24F-1xMTP24-OM3-12LCDX-B

Multimode Mode, OM3, 50/125, MTP to LC Module,
1xMTP24-LC, Type B

OM4 Base-24 to 12 LC Duplex Module



#### Code and Description

HDM-PC24 -24F-1xMTP24-0M4-12LCDX-A
Multimode Mode, OM4, 50/125, MTP to LC Module,
1xMTP24-LC, Type A
HDM-PC24 -24F-1xMTP24-0M4-12LCDX-AF
Multimode Mode, OM4, 50/125, MTP to LC Module,
1xMTP24-LC, Type AF
HDM-PC24 -24F-1xMTP24-0M4-12LCDX-B

Multimode Mode, OM4, 50/125, MTP to LC Module, 1xMTP24-LC, Type B





#### MTP to LC Conversion Modules | 2xBase-12 / 12xLC-Duplex

\*(Please choose the right polarity wiring and fiber type - Page 14, QR Code)





#### OS2 2xBase-12 to 12 LC Duplex Module

# A 1 2 3 6 6 7 6 9 10 11 12 20 21 22 23 24

#### Code and Description

HDM-PC24 -24F-2xMTP12-OS2-12LCDX-A
Single Mode, A2, 9/125, MTP to LC Module,
2xMTP12-LC, Type A
HDM-PC24 -24F-2xMTP12-OS2-12LCDX-AF
Single Mode, A2, 9/125, MTP to LC Module,
2xMTP12-LC, Type AF
HDM-PC24 -24F-2xMTP12-OS2-12LCDX-B
Single Mode, A2, 9/125, MTP to LC Module,

2xMTP12-LC, Type B

2xMTP12-LC, Type B

#### OM3 2xBase-12 to 12 LC Duplex Module



#### Code and Description

HDM-PC24 -24F-2xMTP12-OM3-12LCDX-A

Multimode Mode, OM3, 50/125, MTP to LC Module,

2xMTP12-LC, Type A

HDM-PC24 -24F-2xMTP12-OM3-12LCDX-AF

Multimode Mode, OM3, 50/125, MTP to LC Module,

2xMTP12-LC, Type AF

HDM-PC24 -24F-2xMTP12-OM3-12LCDX-B

Multimode Mode, OM3, 50/125, MTP to LC Module,

2xMTP12-LC, Type B

#### OM4 2xBase-12 to 12 LC Duplex Module



#### Code and Description

HDM-PC24 -24F-2xMTP12-0M4-12LCDX-A

Multimode Mode, OM4, 50/125, MTP to LC Module,

2xMTP12-LC, Type A

HDM-PC24 -24F-2xMTP12-0M4-12LCDX-AF

Multimode Mode, OM4, 50/125, MTP to LC Module,

2xMTP12-LC, Type AF

HDM-PC24 -24F-2xMTP12-0M4-12LCDX-B

Multimode Mode, OM4, 50/125, MTP to LC Module,





#### MTP to LC Conversion Modules | 1xBase-12 / 6xLC-Duplex



\*(Please choose the right polarity wiring and fiber type - QR Code)





#### OS2 Base-12 to 6 LC Duplex Module



#### Code and Description

HDM-PC12 -12F-1xMTP12-OS2-06LCDX-A Single Mode, A2, 9/125, MTP to LC Module, 1xMTP12-LC, Type A HDM-PC12 -12F-1xMTP12-OS2-06LCDX-AF

Single Mode, A2, 9/125, MTP to LC Module, 1xMTP12-LC, Type AF HDM-PC12 -12F-1xMTP12-OS2-06LCDX-B

Single Mode, A2, 9/125, MTP to LC Module, 1xMTP12-LC, Type B

#### OM3 Base-12 to 6 LC Duplex Module



#### **Code and Description**

HDM-PC12 -12F-1xMTP12-OM3-06LCDX-A
Multimode Mode, OM3, 50/125, MTP to LC Module,
1xMTP12-LC, Type A

HDM-PC12 -12F-1xMTP12-OM3-06LCDX-AF
Multimode Mode, OM3, 50/125, MTP to LC Module,
1xMTP12-LC, Type AF

HDM-PC12 -12F-1xMTP12-OM3-06LCDX-B

Multimode Mode, OM3, 50/125, MTP to LC Module,
1xMTP12-LC, Type B

#### OM4 Base-12 to 6 LC Duplex Module



#### Code and Description

HDM-PC12 -12F-1xMTP12-OM4-06LCDX-A
Multimode Mode, OM4, 50/125, MTP to LC Module,
1xMTP12-LC, Type A
HDM-PC12 -12F-1xMTP12-OM4-06LCDX-AF
Multimode Mode, OM4, 50/125, MTP to LC Module,
1xMTP12-LC, Type AF

HDM-PC12 -12F-1xMTP12-OM4-06LCDX-B Multimode Mode, OM4, 50/125, MTP to LC Module, 1xMTP12-LC, Type B



#### **Optical Values**

C	onnector Type	IL(dB)	RL(dB)	Wave Length (nm)
	SM/APC	≤ 0.35	60	1310, 1550
MTP	OM3 MM / UPC	≤ 0.35	30	850, 1300
	OM4 MM / UPC	≤ 0.35	30	850, 1300
	SM/UPC	≤ 0.25	50	1310, 1550
LC	OM3 MM / UPC	≤ 0.25	40	850, 1300
	OM4 MM / UPC	≤ 0.25	40	850, 1300

#### **Certification And Compliance**

#### ANSI/TIA-942-A

Telecommunications Infrastructure Standard for Data Centers ANSI/TIA-568-C.3

Optical Fiber Cabling Components Standard

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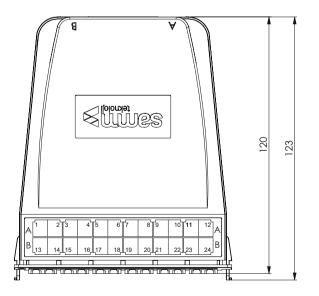
Connectors for Optical Fibers and Cables; Generic Standard UL 94

Tests for Flammability of Plastic Material for Parts in Devices and Appliances

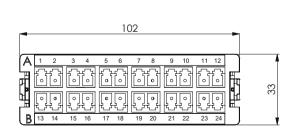
#### RoHS

Directive on Restriction of Hazardous Substances

#### **Module Dimensions**







Unit: mm





#### **Plastic Adapter Modules LC Duplex**





#### 12x LC Duplex Adapters - 24 Fibers

#### HDM-PAM-12LCDX-OS2-BU

High Density Modular Panel, 12 LC Duplex Adapter Module, Single Mode, OS2, Blue Adapter

#### HDM-PAM-12LCDX-OS2-GN

High Density Modular Panel, 12 LC Duplex Adapter Module, Single Mode, OS2, Green Adapter

#### HDM-PAM-12LCDX-OM2-BG

High Density Modular Panel, 12 LC Duplex Adapter Module, Multimode Mode, OM2, Beige Adapter

#### HDM-PAM-12LCDX-OM3-AQ

High Density Modular Panel, 12 LC Duplex Adapter Module, Multimode Mode, OM3, Aqua Adapter

#### HDM-PAM-12LCDX-OM4-VT

High Density Modular Panel, 12 LC Duplex Adapter Module, Multimode Mode, OM4, Violet Adapter

#### 6x LC Duplex Adapters - 12 Fibers

#### HDM-PAM-06LCDX-OS2-BU

High Density Modular Panel, 6 LC Duplex Adapter Module, Single Mode, OS2, Blue Adapter

#### HDM-PAM-06LCDX-OS2-GN

High Density Modular Panel, 6 LC Duplex Adapter Module, Single Mode, OS2, Green Adapter

#### HDM-PAM-06LCDX-OM2-BG

High Density Modular Panel, 6 LC Duplex Adapter Module, Multimode Mode, OM2, Beige Adapter

#### HDM-PAM-06LCDX-OM3-AQ

High Density Modular Panel, 6 LC Duplex Adapter Module, Multimode Mode, OM3, Aqua Adapter

#### HDM-PAM-06LCDX-OM4-VT

High Density Modular Panel, 6 LC Duplex Adapter Module, Multimode Mode, OM4, Violet Adapter



#### Plastic Adapter Modules SC Simplex











#### 12x SC Simplex Adapters - 12 Fibers

#### HDM-PAM-12SCSX-OS2-BU

High Density Modular Panel, 12 SC Simplex Adapter Module, Single Mode, OS2, Blue Adapter

#### HDM-PAM-12SCSX-OS2-GN

High Density Modular Panel, 12 SC Simplex Adapter Module, Single Mode, OS2, Green Adapter

#### HDM-PAM-12SCSX-OM2-BG

High Density Modular Panel, 12 SC Simplex Adapter Module, Multimode Mode, OM2, Beige Adapter

#### HDM-PAM-12SCSX-OM3-AQ

High Density Modular Panel, 12 SC Simplex Adapter Module, Multimode Mode, OM3, Aqua Adapter

#### HDM-PAM-12SCSX-OM4-VT

High Density Modular Panel, 12 SC Simplex Adapter Module, Multimode Mode, OM4, Violet Adapter

#### Plastic Adapter Modules MTP (Opposed)







#### 12x MTP Adapters - 96/144/288 Fibers

HDM-PAM-12MTP-GEN-BK\_Opposed High Density Modular Panel, 12 MTP Simplex Adapter Module, Generic, Black Adapter

HDM-PAM-12MTP-OM3-AQ\_Opposed High Density Modular Panel, 12 MTP Simplex Adapter Module, Multimode Mode, OM3, Aqua Adapter

HDM-PAM-12MTP-OM4-VT\_Opposed High Density Modular Panel, 12 MTP Simplex Adapter Module, Multimode Mode, OM4, Violet Adapter

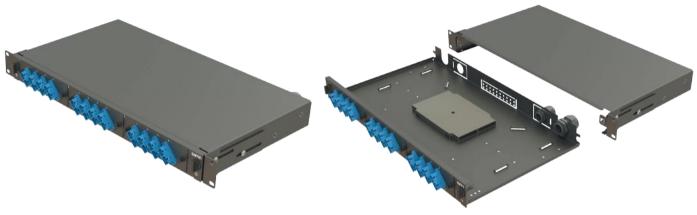


#### Modular-Type Bright Series Fiber Optic Patch Panels | Mechanical-Sliding, 1U

Modular-Type Bright Series Mechanical Sliding Panel Systems are designed for modularity that allows 3 different adapter module options. These panels can be opened and closed by sliding on the bottom surface of the side walls.

The panels are also available blank or pre-assembled with a wide variety of connector types up to 48 Fiber capacities. Adapter modules can be mounted/dismounted with plastic clip structures.

These panels are used in telecom rooms, main distribution rooms and system rooms to terminate, distribute and manage fiber/copper optic infrastructure in many different applications and needs with a wide variety of fiber optic adapter / connector options such as LC / SC / FC / ST / MTP / E2000 / LSH and RJ-45.





#### Features and Benefits

- Interchangeable and modular design for both fiber and copper connectors
- Safe tray lock mechanisim with two simple plastic quarter turn lock
- One basic unit fits all types of connectors providing high flexibility, low cost and easy to handle stock
- Robust and installer-friendly design providing reduced installation and operating costs
- Different rear cable entry options with PG16 and PG13,5 gland holes
- Screwable desing on FO adapter plates
- Fast installation modules with snap in fixation latches
- Adjustable depth in rack
- Powder-coated RAL 9000 (Black)
- Operating temperature: -20°C / +80°C

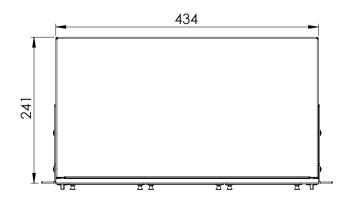


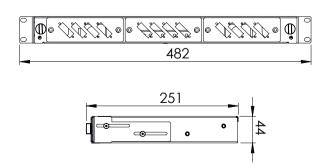
#### **Compliance/Certifications**

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system Flammability rating UL94 V-0 ROHS Compliant



#### **Dimensions**









#### **Order Codes for Panel**

Picture	Description	Order Code
	Bright Series Modular Panel, Mechanical Sliding 1U, 3 Slot Capacity	BSMOD-1U-MSV0-FP3S-EMPTY
	Single Splice Kits	Order Code
45 mm	Splice Tray Kit 1: 1x12F Tray + 12 Pcs of Splice Protectors Splice Tray Kit 2: 1x24F Tray + 24 Pcs of Splice Protectors	BS-SPLKIT1-12F-1T-BLK BS-SPLKIT2-24F-1T-BLK
	Group Splice Kits	Order Code
45 mm	Splice Tray Kit 3: 2x12F Tray + 24 Pcs of Splice Protectors Splice Tray Kit 4: 2x24F Tray + 48 Pcs of Splice Protectors	BS-SPLKIT3-24F-2T-BLK BS-SPLKIT4-48F-2T-BLK
	Group Splice Kits	Order Code
45 mm	Splice Tray Kit 5: 4x12F Tray + 48 Pcs of Splice Protectors	BS-SPLKIT5-48F-4T-BLK



# **Order Codes for Front Modules**

Picture	Description	Order Code
•	Blank Module for Bright Series Modular Panel	BS-BM01_1Pc BS-BM01_1Pc
	4xSC Simplex Horizontal Module for Bright Series Modular Panel	BS-BM02_1Pc BS-BM02_3Pcs
• • • • • • • • •	8xSC Simplex Horizontal Module for Bright Series Modular Panel	BS-BM03_1Pc BS-BM03_3Pcs
. 1111.	4xSC Duplex Angled Module for Bright Series Modular Panel	BS-BM04_1Pc BS-BM04_3Pcs
•	4xKeystone Module for Bright Series Modular Panel	BS-BM05_1Pc BS-BM05_3Pcs
	8xST or 8xFC(D-hole) Module for Bright Series Modular Panel	BS-BM06_1Pc BS-BM06_3Pcs
• • • • • • • • • • • • • • • • • • • •	8xSC Simplex Module for Bright Series Modular Panel	BS-BM07_1Pc BS-BM07_3Pcs
• • • • • • • • • • • • • • • • • • • •	8xSC Duplex Module for Bright Series Modular Panel	BS-BM08_1Pc BS-BM08_3Pcs

<sup>\*\*\*</sup> Note: Adapters and pigtails will be ordered separately, please visit (LINK) telecom.samm.com

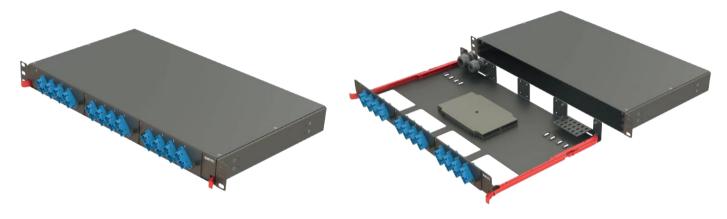


#### Modular-Type Bright Series Fiber Optic Patch Panels | Rail-Sliding, 1U

Modular-Type Bright Series Rail Sliding Panel Systems are designed for modularity that allows 3 different adapter module options. These panels can be opened and closed on a plastic rail mechanism.

The panels are also available blank or pre-assembled with a wide variety of connector types up to 48 Fiber capacities. Adapter modules can be mounted/dismounted with plastic clip structures.

These panels are used in telecom rooms, main distribution rooms and system rooms to terminate, distribute and manage fiber/copper optic infrastructure in many different applications and needs with a wide variety of fiber optic adapter / connector options such as LC / SC / FC / ST / MTP / E2000 / LSH and RJ-45.





#### Features and Benefits

- Interchangeable and modular design for both fiber and copper connectors
- Special plastic rail and locking mechanism
- One basic unit fits all types of connectors providing high flexibility, low cost and easy to handle stock
- Robust and installer-friendly design providing reduced installation and operating costs
- Different rear cable entry options with PG16 and PG13,5 gland holes
- Screwable desing on FO adapter plates
- Fast installation modules with snap in fixation latches
- Removable shelf design for installation easiness
- Powder-coated RAL 9000 (Black)
- Operating temperature: -20°C / +80°C

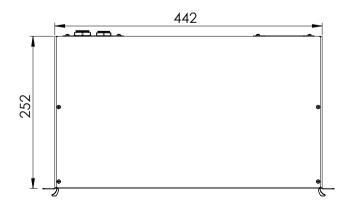


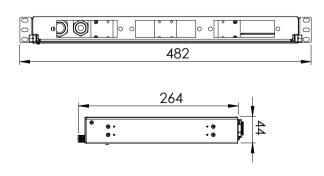
#### Compliance/Certifications

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system Flammability rating UL94 V-0 ROHS Compliant



#### **Dimensions**









#### **Order Codes for Panel**

Picture	Desc	cription	Order Code
		ht Series Modular Panel, Rail Sliding 3 Slot Capacity	BSMOD-1U-RSV0-FP3S-EMPTY
	Sing	le Splice Kits	Order Code
45 mm		ce Tray Kit 1: 1x12F Tray + 12 Pcs of Splice Protectors ce Tray Kit 2: 1x24F Tray + 24 Pcs of Splice Protectors	BS-SPLKIT1-12F-1T-BLK BS-SPLKIT2-24F-1T-BLK
	Grou	up Splice Kits	Order Code
45 mm		ce Tray Kit 3: 2x12F Tray + 24 Pcs of Splice Protectors ce Tray Kit 4: 2x24F Tray + 48 Pcs of Splice Protectors	BS-SPLKIT3-24F-2T-BLK BS-SPLKIT4-48F-2T-BLK
	Grou	up Splice Kits	Order Code
45 mm	Splid	ce Tray Kit 5: 4x12F Tray + 48 Pcs of Splice Protectors	BS-SPLKIT5-48F-4T-BLK

# **Order Codes for Front Modules**

Picture	Description	Order Code
•	Blank Module for Bright Series Modular Panel	BS-BM15_1Pc
	4xSC Simplex Horizontal Module for Bright Series Modular Panel	BS-BM09_1Pc BS-BM09_3Pcs
• = = = •	8xSC Simplex Horizontal Module for Bright Series Modular Panel	BS-BM10_1Pc BS-BM10_3Pcs
• • • • • • • • • • • • • • • • • • • •	4xSC Duplex Angled Module for Bright Series Modular Panel	BS-BM11_1Pc BS-BM11_3Pcs
•	4xKeystone Module for Bright Series Modular Panel	BS-BM12_1Pc BS-BM12_3Pcs
	8xST or 8xFC(D-hole) Module for Bright Series Modular Panel	BS-BM13_1Pc BS-BM13_3Pcs
•••••••••	8xSC Simplex Module for Bright Series Modular Panel	BS-BM14_1Pc BS-BM14_3Pcs

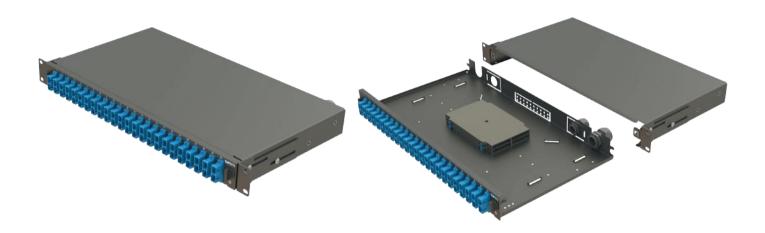
<sup>\*\*\*</sup> Note: Adapters and pigtails will be ordered separately, please visit (LINK) telecom.samm.com



# Fixed-Type Bright Series Fiber Optic Patch Panels | Mechanical-Sliding, 1U

Fixed-Type Bright Series Mechanical-Sliding Patch Panel Systems are designed for termination of up to 96 optical fibers according to the selected front panel structure. These panels can be opened and closed by sliding on the bottom surface of the side walls.

The panels are also available blank or pre-assembled with a wide variety of connector types up to 96 Fiber capacities. 1U fiber distribution panels are flexible to achieve diversified applications in the telecom room and main distribution area, to work with various adaptor fiber optic adapter/connector types such as LC/SC/FC/ST/MTP/E2000/LSH.





#### Features and Benefits

- Safe tray lock mechanisim with two simple plastic quarter turn lock
- Robust and installer-friendly design providing reduced installation and operating costs
- Wide range of front plate options for different types of adapters
- Different rear cable entry options with PG16 and PG13,5 gland holes
- Screwable desing on FO adapter plates
- Adjustable depth in rack
- Powder-coated RAL 9000 (Black)
- Operating temperature: -20°C / +80°C

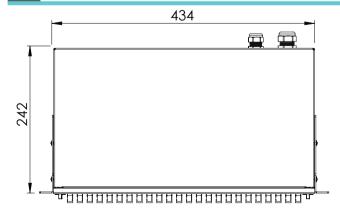


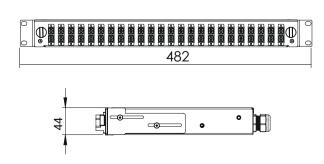
#### Compliance/Certifications

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system Flammability rating UL94 V-0 ROHS Compliant



#### **Dimensions**









#### **Front Panels Options**

	Choose Front Pa	nnel	
Front Panels	Panel Code	Available Adapters	Order Code
	FP01	SC Simplex 12 LC Duplex LSH Simplex	BSFXD-1U-MSV0-FP01-EMPTY
	FP02	SC Duplex LC Quad	BSFXD-1U-MSV0-FP02-EMPTY
	FP03	SC Simplex 24 LC Duplex LSH Simplex	BSFXD-1U-MSV0-FP03-EMPTY
	FP04	SC Duplex LC Quad	BSFXD-1U-MSV0-FP04-EMPTY
	FP05	24 SC Simplex LC Duplex	BSFXD-1U-MSV0-FP05-EMPTY
	FP06	24 FC Simplex ST Simplex	BSFXD-1U-MSV0-FP06-EMPTY



#### **Order Codes for Splice Kits**

Picture	Description	Order Code
	Single Splice Kits	Order Code
45 mm	Splice Tray Kit 1: 1x12F Tray + 12 Pcs of Splice Protectors	BS-SPLKIT1-12F-1T-BLK
	Splice Tray Kit 2: 1x24F Tray + 24 Pcs of Splice Protectors	BS-SPLKIT2-24F-1T-BLK
	Group Splice Kits	Order Code
45 mm	Splice Tray Kit 3: 2x12F Tray + 24 Pcs of Splice Protectors	BS-SPLKIT3-24F-2T-BLK
	Splice Tray Kit 4: 2x24F Tray + 48 Pcs of Splice Protectors	BS-SPLKIT4-48F-2T-BLK
	Group Splice Kits	Order Code
45 mm	Splice Tray Kit 5: 4x12F Tray + 48 Pcs of Splice Protectors	BS-SPLKIT5-48F-4T-BLK



# Ordering Coding 19" Front Patch Shelves

(sample coding)

# BSFXD - 1U - MSV0 - FP02 - SPLKIT2 - A2 - SC - DX - 24

Rail System	Front Panel	Splice Kit	Fiber Type	Connector	Port Options	Fiber Count
Mechanical Sliding: MSV0	Panel-01: FP01 Panel-02: FP02 Panel-03: FP03 Panel-04: FP04 Panel-05: FP05 Panel-06: FP06	Splice Tray Kit 1: SPLKIT1 Splice Tray Kit 2: SPLKIT2 Splice Tray Kit 3: SPLKIT3 Splice Tray Kit 4: SPLKIT4 Splice Tray Kit 5: SPLKIT5	Empty: NN G657.A1: A1 G657.A2: A2 G652.OM2: M2 G652.OM3: M3 G652.OM4: M4	Empty: NN SC/UPC: SC SC/APC: SA LC/UPC: LC LC/APC: LA FC/UPC: FC FC/APC: FA ST/UPC ST E2000/UPC: E2 E2000/APC: EA	Empty: NN Simplex: SX Duplex: DX Quad: QD	Empty: NN 12 Fibers: 12 24 Fibers: 24 48 Fibers: 48



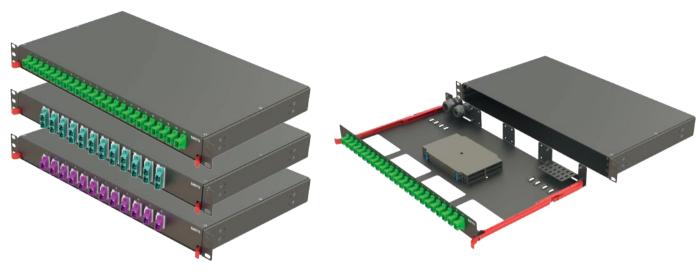
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#### Fixed-Type Bright Series Fiber Optic Patch Panels | Rail Sliding, 1U

Fixed-Type Bright Series Rail-Sliding Patch Panel Systems are designed for termination of up to 96 optical fibers according to the selected front panel structure. These panels can be opened and closed on a plastic rail mechanism.

The panels are also available blank or pre-assembled with a wide variety of connector types up to 96 Fiber capacities.

These panels are used in telecom rooms, main distribution rooms and system rooms to terminate, distribute and manage fiber optic infrastructure in many different applications and needs with a wide variety of fiber optic adapter / connector options such as LC/SC/MTP/E2000/LSH.





#### Features and Benefits

- Different cable entry options
- Special plastic rail and locking mechanism
- Robust and installer-friendly design providing reduced installation and operating costs
- Different rear cable entry options with PG16 and PG13,5 gland holes
- Screwable desing for adapters on front plates
- Patented adapter clips for angled applications
- Removable shelf design for installation easiness
- Powder-coated RAL 9000 (Black)
- Operating temperature: -20°C / +80°C

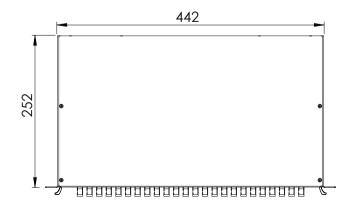


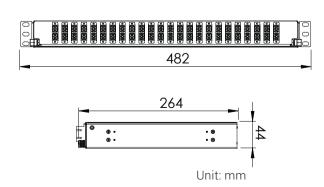
#### Compliance/Certifications

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system Flammability rating UL94 V-0 ROHS Compliant



#### **Dimensions**









#### **Front Panels Options**

Choose Front Panel						
Front Panels	Panel Code	Ava	ailable Adapters	Order Code		
	FP07	24	SC Simplex LC Duplex LSH Simplex	BSFXD-1U-RSV0-FP07-EMPTY		
	FP08	24	SC Duplex LC Quad	BSFXD-1U-RSV0-FP08-EMPTY		
	FP09	12	SC Simplex Angled LC Duplex Angled LSH Simplex Angled	BSFXD-1U-RSV0-FP09-EMPTY		
	FP10	12	SC Duplex Angled LC Quad Angled	BSFXD-1U-RSV0-FP10-EMPTY		
	FP11	12	SC Duplex Staright LC Quad Straight	BSFXD-1U-RSV0-FP11-EMPTY		



#### **Order Codes for Splice Kits**

Picture	Description	Order Code
	Single Splice Kits	Order Code
45 mm	Splice Tray Kit 1: 1x12F Tray + 12 Pcs of Splice Protectors Splice Tray Kit 2: 1x24F Tray + 24 Pcs of Splice Protectors	BS-SPLKIT1-12F-1T-BLK BS-SPLKIT2-24F-1T-BLK
	Group Splice Kits	Order Code
45 nm	Splice Tray Kit 3: 2x12F Tray + 24 Pcs of Splice Protectors Splice Tray Kit 4: 2x24F Tray + 48 Pcs of Splice Protectors	BS-SPLKIT3-24F-2T-BLK BS-SPLKIT4-48F-2T-BLK
	Group Splice Kits	Order Code
45 mm	Splice Tray Kit 5: 4x12F Tray + 48 Pcs of Splice Protectors	BS-SPLKIT5-48F-4T-BLK



#### Ordering Coding of Bright Series Patch Panel

(sample coding)

# BSFXD - 1U - RSV0 - FP08 - SPLKIT04 - A2 - SC - DX - 48

Rail System	Front Panel	Splice Kit	Fiber Type	Connector	Port Options	Fiber Count
Rail Sliding: RSV0	Panel-07: FP07 Panel-08: FP08 Panel-09: FP09 Panel-10: FP10 Panel-11: FP11	Splice Tray Kit 1: SPLKIT01 Splice Tray Kit 2: SPLKIT02 Splice Tray Kit 3: SPLKIT03 Splice Tray Kit 4: SPLKIT04 Splice Tray Kit 5: SPLKIT05	Empty: NN G657.A1: A1 G657.A2: A2 G652.0M2: M2 G652.0M3: M3 G652.0M4: M4	Empty: NN SC/UPC: SC SC/APC: SA LC/UPC: LC LC/APC: LA FC/UPC: FC FC/APC: FA ST/UPC ST E2000/UPC: E2 E2000/APC: EA	Empty: NN Simplex: SX Duplex: DX Quad: QD	Empty: NN 12 Fibers: 12 24 Fibers: 24 48 Fibers: 48



#### **1U ATP Series Aluminium Front Patch Panels**

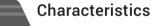
ATP series panels are used to terminate and distribute optical fiber cables with high capacity, from 24 to 48 fibers. ATP panels are convenient equipment to organize and connect the fiber optic links, and are designed to be used in telecommunication networks. central offices, fiber optic infrastructure and on-premises fiber networks. Our fiber optic panels follow the typical rack mount standards, and they come with different kinds of optional fiber optic adapters, ports, pre-installed inner trays, accessories, and different types of pigtails





#### **Technical Data**

Material	Anodized aluminium
Color	Aluminium silver
Capacity	48 fibers with LC-DX
	24 fibers with SC-SX / LSH(E2000)-SX
2011/65/EC	(RoHS) fully compliant
Module	24F/Module with fusion splice holders
Dimensions	W:482/439 × D:230/200 × H:44 mm



- Easy and time-saving installation
- Standard 1U 19" size
- Lightweight aluminium construction
- Drawer tilt function for easy access
- Up to 48 fibers per 1U
- 2 perforated plates integrated in the rear of the housing
- Loose tube storage area in bottom of drawer





#### **Adapter Types**





















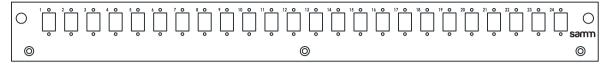






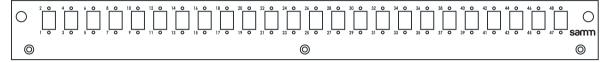
#### **Front Panel Numbering**

#### Panel Type P01 For SC and LSH(E2000)

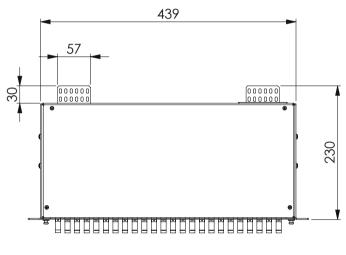


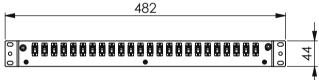
#### Panel Type P02 For LC-DX

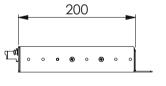
Unit: mm



#### **Dimensions and Drawings**







Unit: mm

#### **Panel Contents**

Content Details	Empty Panel Partially Loaded	SC/LSH(E2000) Fully Loaded	LC-DX Fully Loaded
Panel Body Capacity	1 PC	1 PC	1 PC
Sticky Storage and Management Clips	4 PC	4 PC	4 PC
24F Splice Modules	2 PC	2 PC	2 PC
Rack Mounting Set	1 SET	1 SET	1 SET
Cable Tie Set	1 SET	1SET	1 SET
Rear Blind Plate for one side closing	1 SET	1 PC	1 PC
Adapters Pre-assembled with screws	NONE	24 PC	24 PC
Fusion Splice Protection Sleeve   45mm	NONE	24 PC	48 PC
Pigtails ( Un-assembled )	NONE	24 PC	48 PC



#### **4U Overhead Mounting Rack Frame**

4U overhead rack frame is designed to mount directly to overhead ladder racks or cable trays. Ideal for use as a Zone Distribution Area (ZDA) or Equipment Distribution Area (EDA) in data centers.

The overhead rack frame shall provide additional four rack units above a standing rack or cabinet, in order to maximize real estate utilization in data centers or telecommunication rooms. The frame works as a consolidation point, enabling flexible cabling layout as well as convenient addition of new enclosures and servers.

Used with copper patch panels or fiber enclosures, the cable tray rack can increase cabling density, improve cable routing, simplify moves, and provide custom pre-cabled connectivity for rapid deployment of new cabinets, racks, and equipment.



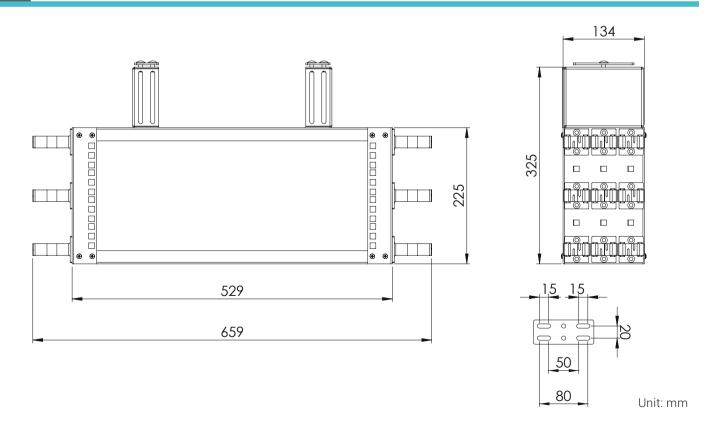


#### **Key Features**

- Applicable toladder rack mounting
- Applicable to wire mesh trays mounting
- Bottom or side mounting options to cabling structures
- Quick and easy installation
- Rapid data center deployment
- Mounting hardware and cable management included
- Epoxy Powder Paint, RAL 9005, Black



#### **Dimensions**





#### 1U 19" Pass-Through Panel With Brush Strip (Metal)

1U Pass-through Panels with Brush Strip is an ideal solution for routing cables from the front of the rack to the rear. The panels can be mounted on unused rack openings to reduce bypass airflow through open spaces in racks and cabinets. Brush strips provide a barrier to airflow, while allowing cables to be passed from the front to the rear of the rack.





1U 19" Pass-Through Panel With Brush Strip (Metal) Order Code MT09618

#### 19" Tool-less Snap-in Blanking Panels

Blanking panels are part of the energy-saving airflow management solutions for smart data centers. They are designed to minimize bypass airflow in racks and cabinets while providing a desirable appearance.



This panel has a knob on each side to be installed and removed easily with fingers grip, and it just needs to be pushed in to snap in its fixed position.



This panel has a latch on each side to provide a more secure lock in position, and it cannot be removed without unhooking the latches sideways.



#### 1U 19" Finger Grip Snap-in Blanking Panel (Plastic) Order Code MT09617

1U 19" Latch Snap-in Blanking Panel (Metal) MT09615 Order Code

#### 6U 19" Breakable Blanking Panel (Plastic)

Order Code MT09616

This panel is good for closing multiple U sections together. It is made of 6 panels that can be broken apart to fit from 6 to 1 U sections, and each part can be snapped in position easily.

#### 1U 19" Modular Cable Organizer | With 5 Snap In Rings

The new concept Cable Management Panel with fully modular rings configuration provides flexibility in Cable Management. Configurations can be vertical or horizontal or can be mixed by rotating the position of the rings on housing. No tools required for plugging the rings onto the cable management panel.





1U 19" Modular Cable Organizer | With 5 Snap In Rings

Order Code MT14351









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SAMM Teknoloji iletişim San. ve Tic. A.Ş. November 2021





#### Company

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