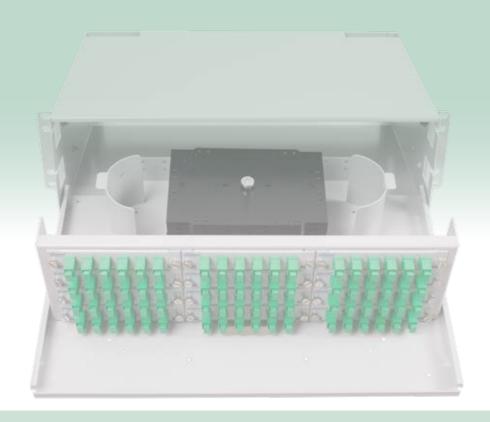
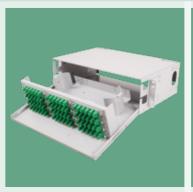


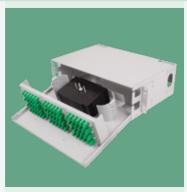
... managing optical cables with OPTOKON is EASY!



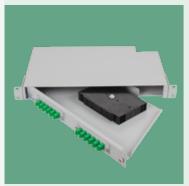
# OPTICAL DISTRIBUTION FRAMES

High quality cable management system









**OPTOKON CABLE MANAGEMENT - 10 YEAR WARRANTY** 

#### **ABOUT OPTOKON**

OPTOKON manufactures comprehensive fiber optic cable management systems delivering high performance solutions for passive network installations. OPTOKON systems meet today's requirements for tomorrow's applications. These advanced modular fiber optic systems include the full range of passive components for singlemode and multimode applications that when combined, provide complete solutions for today's applications, and maximize physical infrastructure performance, reliability, modularity and scalability.

#### Content

#### **RACK MOUNT**

OFDU-S Splice cabinet

OFDU-T Termination cabinet

ODFU-TS Splice and termination cabinet MFDC Splice and termination cabinet MCNP Connector network panel

ZMPJ Fixed cabinet

TMVJ Cabinet with slide-out shelf ECNP ETSI Connector Network Panel

#### **WALL MOUNT**

MPIC Interconnect cabinet

MSIC Splice cabinet

FO 22 Splice and termination box MCPE End user termination box

#### **OUTDOOR**

MOPF Fiber optic termination box

MOMB Outdoor metal fiber optic box, IP66

#### 19" RACKS

MROM The complete FTTH solution iSEVEN 600 and 800 mm wide 19" racks

REN Wall mount rack

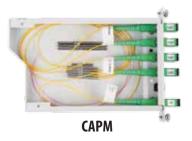
#### **ACCESSORIES**

CNPM Coupling panels
CAPM Cassettes
FP Front panel

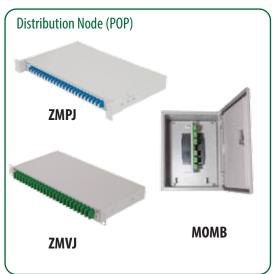
**Splice Trays** 

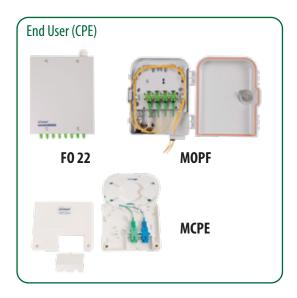
#### **CABLE CLOSURES**

Fiber optic splice closures









#### **OPTOKON CABLE MANAGEMENT 10 YEAR WARRANTY**

The OPTOKON standard 10 year warranty is valid for all cable management components from the OPTOKON range manufactured from ALUMINIUM. This includes all racks, cabinets, shelves, connector panels. The warranty does not extend to any cables, connectors, adaptors, pigtails or any other component fitted into the cable management system as an accessory. This warranty is valid and effective from 1/5/2006 and is not applicable to any aforementioned product purchased from OPTOKON prior to this date. Any OPTOKON cable management product purchased prior to 1/5/2006 is governed by the standard OPTOKON one year warranty valid at the date of purchase.

Terms and conditions for the standard ten year warranty are available at WWW.OPTOKON.COM or by request from SALES@OPTOKON.COM

#### **GENERAL INFORMATION**

#### **IEC 60297**

Apart from the ETSI range, all cabinets in this catalogue generally conform to IEC 60297 and AS 1939 standards for 19" racking. This standard forms the basis of all other related 19" standards. Strict conformance to the details of the mounting of 19" equipment is essential for the racks, subracks and internal housings. However strict conformance relating to external cabinet dimensions imposes severe design styling constraints for relatively minor benefits. Where close conformance is demanded we suggest our 2005 range.

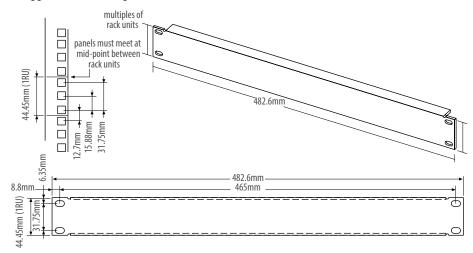
$$1 \text{ RU} = 44.45 (13/4'')$$

For tolerance requirements reduce calculated height by 0.8 mm.

Therefore, 132.55 is the actual height.

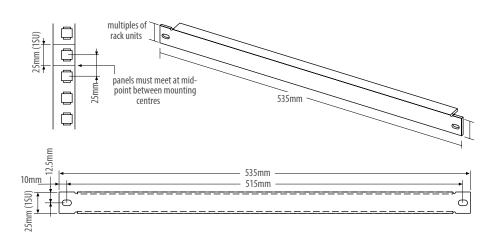






#### ETSI

This European Telecommunication Standard (ETS) has been produced by the Equipment Engineering (EE) Technical Committee of the European Telecommunications Standards Institute (ETSI). The European Telecommunication Standard is aimed at setting out, on a common basis, the engineering requirements for telecommunication practice, for housing equipment forming part of a public telecommunications network. This ETS applies to all telecommunications equipment forming part of the public telecommunications network.



# **RACK MOUNT - Rack Mount Splice Cabinet**

#### **OFDU-S**

The OFDU-S cabinet is based on universal optical distribution frames. The unified modular system enables easy reconfiguration and can be extended according to operator requirements. The OFDU-S provides splicing, storage and protection of up to 288 fiber splices in individually accessible trays. The slide-out and swing down shelf enables unrestricted front, rear and top access to the splicing area. Various types of splice trays can be used.

#### **FEATURES**

- Splicing of up 288 fibers in one cabinet
- Fixed or hinged cassette installation
- Slide-out and drop down shelf
- Aluminum material low weight and shipment costs
- Bend radius protection protection enables management and rearrangement of cable slack
- Removable top provides unrestricted access to splice tray and fiber connections
- Cable strain-relief hardware provided
- Durable powder coat finish RAL 9006



TECHNICAL SPECIFICATIONS	<b>TECHNIC</b>	AL SP	ECIFIC	<b>ATIONS</b>
--------------------------	----------------	-------	--------	---------------

PART NUMBER	FIBER CAPAC	ITY	RACK	DIMENSIONS	SHIP WGT	
PARI NUMBER	EQUIPMENT	CAPACITY	UNITS	(HxWxD) mm	(kg)	
OFDU-S2-V1	6 splice cassettes	72	2U	88 x 432 x 305	1.4	
OFDU-S2-V2	2 x 6 splice cassettes	144	20	00 X 432 X 303		
OFDU-S3-V1	12 splice cassettes	144	3U	133 x 432 x 305	1.9	
OFDU-S3-V2	2x 12 splice cassettes	288	30	133 X 432 X 303	1.9	

Note:

V1 – variant: contains one cassette holder and one pair of BRP reels

 $V2-variant: contains \ two \ cassette \ holders \ and \ two \ pairs \ of \ BRP \ reels$ 

#### Parts available separately:

1	OFDU-BU-X
5	OFDU-SS
6	OFDU-RC-X
7-10	OFDU-CH-X
11	OFDU-TC
12	OFDU-DM-X
13	Key lock / latch
14	UH-X
15	BRP reel

base unit sliding shelf rear cover cassette holder top cover front door metal (plexi)

unit holder





Key lock

# 

ONDEHING CODE				
OFDU-SX -	. <b>VX</b>		XX -	XX
Version, rack units		11		Front door option
OFDU-S2	2U			LM Metal door-lock
OFDU-S3	3U			ZM Metal door-latch
				LP Plexi door - lock
				ZP Plexi door - latch
Variant, number of h	olders		Numl	ber of splice cassettes
V1 – 1x cassette holder,	1x BRP		01-24	Number of cassettes
V2 – 2x cassette holder,	2x BRP			

- Note: 1) Splice Tray: CMS\_01-09\_EN-KNS Splice\_trays
  - OFDU-S2: max. 12 splice cassettes: one holder for 6 or two holders for 12 splice cassettes
     OFDU-S3: max. 24 splice cassettes: one holder for 12 or two holders for 24 splice cassettes



#### **OFDU-T**

The OFDU-T cabinet is based on universal optical distribution frames. The unified modular system enables easy reconfiguration and can be extended according to operator needs. The OFDU-T provides termination in convenient housing unit. The OFDU-T terminates up to 144 fibers in a 3U distribution frame. This unit can take up to 12 snap-in coupling panels or prewired cassettes. The slide-out and swing down shelf enables unrestricted front, rear and top access to termination panels and cable reserve.

#### **FEATURES**

- Termination cabinet
- Slide-out and drop down shelf
- Aluminum material low weight and shipment costs
- Up to 144 fiber termination
- Removable top and back cover enables unrestricted front, rear and top access
- For FTTH use microtube holder included
- Prewired CAPM cassettes include connectorized fiber pigtails and adapters
- Lockable or latch door options are available
- Durable powder coat finish RAL 9006



#### **TECHNICAL SPECIFICATIONS**

PART NUMBER	RACK UNITS	DIMENSIONS (H x W x D) mm	SHIP WGT (kg)	
OFDU-T2	2U	88 x 432 x 305	1.5	
OFDU-T3	3U	133 x 432 x 305	1.9	

OFDU-T2 - typical patch panel capacity							
CNPM or CAPM <sup>1</sup>	Max	Fibers					
CNPM-XX-06		36					
CNPM-XX-08	6	48					
CNPM-XX-12		72					
OFDU-T3 - typical patch panel capacity							
CNPM-XX-06		72					
CNPM-XX-08	12	96					
CNPM-XX-12		144					

Note: 1) CNPM coupling panel: CMS\_24-01\_EN-CNPM

CAPM prewired cassette with pigtails and adapters: CMS\_22-01\_EN-CAPM

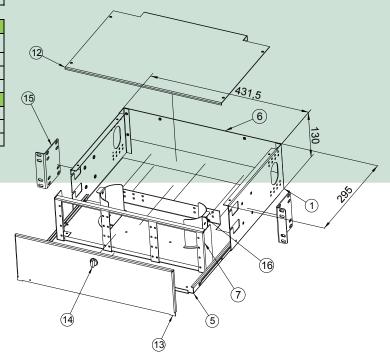
#### Parts which are available separately:

1	OFDU-BU-X	base unit
5	OFDU-SS	sliding shelf
6	OFDU-RC-X	rear cover
7	OFDU-CP-X	connector panel
12	OFDU-TC	top cover
13	OFDU-DM-X	front door metal (plexi)
	14 1 1 11 1	'' '

14 Key lock / latch

15 UH-X unit holder16 BRP reel radius protection

X=2,3-rack unit



OFDU-TX	(	-	XXX -	XX	<u> </u>	XX	_		
<b>Version</b> OFDU-T2 OFDU-T3	2U 3U				_	Front LM ZM LP ZP	Metal do Metal do Plexi doo Plexi doo	or - lo or - la or - lo	itch ck
Panel Capacity 006 – 144 Fibers	Metal la	tch		Coup ST SC FC E2 DSC DLC DMU MJ	SC ad FC ad E200 SC du LC du MU d	lapter lapter lapter 0 adapt iplex ad iplex ad	dapter dapter idapter	App M S A x	Multimode Singlemode APC No adapters



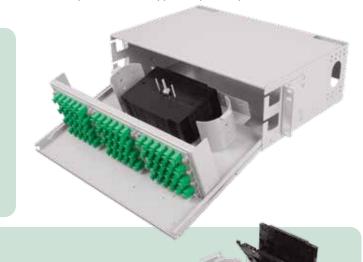
# **RACK MOUNT - Rack Mount Splice and Termination Cabinet**

#### **OFDU-TS**

The OFDU-TS cabinet is based on universal optical distribution frames. The unified modular system enables easy reconfiguration and can be extended according to operator needs. The OFDU-TS provides splicing and termination within one convenient housing unit. The OFDU-TS terminates up to 144 fibers in a 3U distribution frame. This unit can take up to 12 snap-in coupling panels or prewired cassettes. The slide-out and swing down shelf enables unrestricted front, rear and top access to the splicing area and termination panels. Various types of splice trays can be used.

#### **FEATURES**

- Splicing and termination in one cabinet
- Slide-out and drop down shelf
- Aluminum material low weight and shipment costs
- Up to 144 fiber termination
- Splicing in single splice trays, individual splice tray access
- Fixed or hinged cassette installation
- Removable top and back cover enables unrestricted front, rear and top access
- For FTTH use microtube holder included
- Lockable or latch door options are available
- Durable powder coat finish RAL 9006



#### **TECHNICAL SPECIFICATIONS**

PART NUMBER	RACK UNITS	DIMENSIONS (H x W x D) mm	SHIP WGT (kg)
OFDU-TS2	2U	88 x 432 x 305	1.5
OFDU-TS3	3U	133 x 432 x 305	1.9

OFDU-TS2 - typical fiber capacity								
Splice Tray1	Max	Fibers	CNPM or CAPM2	Max	Fibers			
KNS-12	6	72	CNPM-XX-06		36			
			CNPM-XX-08	6	48			
			CNPM-XX-12		72			
OFDU-TS3 - typical fiber capacity								
KNS-12	12	144	CNPM-XX-06		72			
			CNPM-XX-08 12		96			
			CNPM-XX-12		144			

Note: 1) Splice Tray:

ce Tray: CMS\_01-09\_EN-KNS Splice\_trays

unit holder

2)CNPM coupling panel: CMS\_24-01\_EN-CNPM CAPM prewired cassette with pigtails and adapters: CMS\_22-01\_EN-CAPM

# Hinged cassette installation (6) (7) (8) (9) (14) (13)

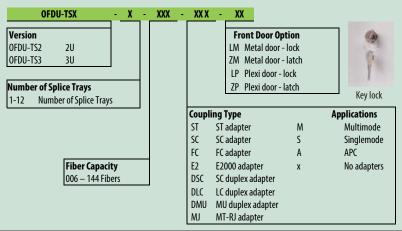
#### Parts available separately:

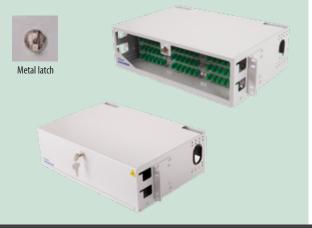
1	OFDU-BU-X	base unit
5	OFDU-SS	sliding shelf
6	OFDU-RC-X	rear cover
7	OFDU-CP-X	connector panel
8-11	OFDU-CH-X	cassette holder
12	OFDU-TC	top cover
13	OFDU-DM-X	front door metal (plexi)
14	Key lock / latch	

X=2,3 – rack unit

#### ORDERING CODE

15





# **RACK MOUNT - Splice and Termination Cabinet**

#### **MFDC**

The MFDC Cabinets offer termination and splicing within one convenient housing. The MFDC terminates up to 144 fibers in a 6U frame. This unit accepts 12 snap-in coupling panels or prewired cassettes. Fibers are routed to the lower section of the unit where splice trays, fiber bundles, and buffer tubes are stored. Various types of splice trays, blocks of 12 splice cassettes can be located on a pullout shelf, allowing easy access to the buffer tube, fiber storage and splicing area. MFDC-T is special variant which contains only 24 snap-in coupling panels for high density termination. It accommodates of up to 288 optical adapters.

#### **FEATURES**

- Aluminium material providing low weight and shipping costs
- Accommodates up to 144 fiber splices or 288 optical adapters
- Splicing in single splice trays or in block of 12 cassettes
- Individual splice tray access
- Removable top and back cover allows unrestricted front, rear and top access
- Prewired CAPM cassettes include connectorized fiber pigtails and adapters
- Key lock and metal latch door options are available
- Durable powder coat finish
- Labels provided to document splice and termination locations



#### **TECHNICAL SPECIFICATIONS**

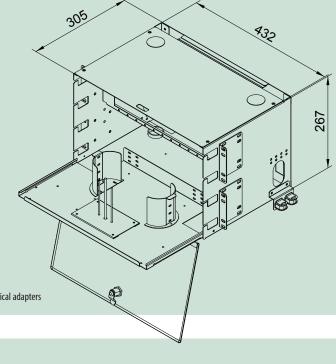
PART NUMBER	RACK UNIT	DIMENSIONS (H x W x D) mm	SHIP WGT (kg)	Purpose
MFDC	<b>411</b>	267 422 205	2.0	Splice &
	6U	267 x 432 x 305	2.9	termination
MFDC-T				Termination only

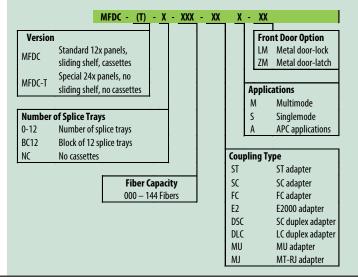
EQUIPMENT PARAMETERS					
Cassette type Number of cassettes Splicing capacity					
Cassettes KNS-12S <sup>1</sup>	12	144			
Block of cassettes TC-248S1	1	144			
No splicing cassettes <sup>2</sup>	0	0			

Patch panel type	Number of patch panels	Termination capacity
CNPM-XX-06		72
CNPM-XX-08	12	96
CNPM-XX-12		144
CNPM-XX-06		144
CNPM-XX-08	24 <sup>2</sup>	192
CNPM-XX-12		288

Note: 1) see datasheet CMS\_21-01\_EN-Splice trays

2) MFDC-T without splicing cassettes and sliding shelf serves only for termination using up to 288 optical adapters







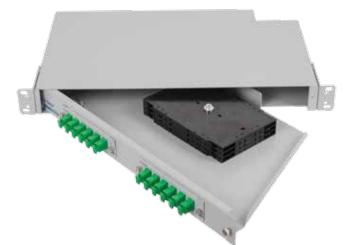
#### **RACK MOUNT - Rack Mount Connector Network Panel**

#### **MCNP**

The MCNP Connector Network Panel is an economical rack mountable patch panel for use with splicing of manufactured pigtails, preterminated cables and field-installable connectors. The cables are strain-relieved at the rear of the unit. The pivoting shelf can be equipped with either a splice tray holder or bend radius protection which guides, stores and organizes excess slack. This prevents damage to fibers prior to routing into couplings. The MCNP is used in installations where space is limited.

#### **FEATURES**

- Splicing and termination optical cable in one box
- Aluminum material low weight and shipment costs
- Extended (3 coupling panels per 1U) version available
- Splice cassette holder enables cable termination with the help of piqtail splicing
- Accommodates up to 24 fibers in 1 rack unit
- Removable top cover provides unrestricted access
- Pivoting shelf eases connector routing and cable routing
- Cable strain-relief and grounding provisions
- Accepts industry standard connector types
- FTTH use microtubes holder included
- Passed seismic tests according to ASME standards
- Approved for construction of nuclear power plant components



#### **TECHNICAL SPECIFICATIONS**

PART		FIBER CAPACITY	1	RACK	DIMENSIONS	SHIP WGT
NUMBER	CNPM-XX-06	CNPM-XX-08	CNPM-XX-12	UNITS	(HxWxD) mm	(kg)
MCNP – 1S	12	16	24	1	44 x 432 x 280	2.4
MCNP – 2S	24	32	48	2	88 x 432 x 280	3.8
MCNP – 3S	36	48	72	3	133 x 432 x 280	5.2
MCNP – 1E	18	24	36	1	44 x 432 x 280	2.4
MCNP – 2E	36	48	72	2	88 x 432 x 280	3.8
MCNP – 3V	72	96	144	3	133 x 432 x 280	5.5

Note: 1) Splice Tray: CMS\_01-09\_EN-KNS Splice\_trays

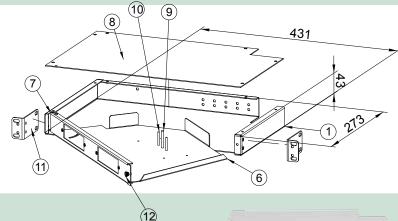
CNPM coupling panel: CMS\_24-01\_EN-CNPM
CNPM-XX-06 6 pcs ST, FC, SC, E2000, ... adapters
CNPM-XX-08 8 pcs ST, FC, SC, E2000, ... adapters
CNPM-XX-12 12 pcs SC, E2000 adapters

CAPM prewired cassette with pigtails and adapters: CMS\_22-01\_EN-CAPM

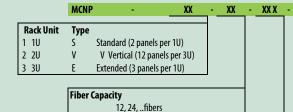
#### Parts available separately:

1	MCNP-BU-X	base unit
6	MCNP-TS-1	twisting shelf
7	MCNP-CP-1	front panel
8	MCNP-TC	top cover
9	Pin FH-M5-38	•
10	Pin FH-M3-30	
11	UH-1 var1	
12	Screw CNMP	

X=2,3-rack unit



#### **ORDERING CODE**



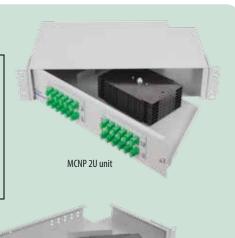
	Coupling 1	Гуре	
)	CX		(
ST	ST	М	Multimode
SC	SC	S	Singlemode
FC	FC	Α	APC
E2	LSH (E2000)		
MJ	MT-RJ		
DSC	duplex SC		
DLC	duplex LC		
DMII	dunley MH		

X - Option for Fiber Termination

- B Bend radius protectors
- C Splice cassette for 12 splicing

#### XX - Number of Splice Cassettes

- No cassette (Bend radius protectors)
- 1 1 Splice cassette
- 2 2 Splice cassettes
- 3 Splice cassettes
- ... up to 12 splice cassettes





# **RACK MOUNT - Enclosed Cabinet**

#### **ZMPJ**

The ZMPJ enclosed cabinet introduces a compact, low cost solution for fiber optic cable termination. The ZMPJ series is ideal for rack-mounting in confined areas such as equipment enclosures where rack space is limited. The modular system allows splicing and termination of 48 fibers in rack height 1U.

#### **FEATURES**

- FTTH use holder for microtubes included
- Designed for microtubes termination
- Compact robust design
- Fixed shelf
- Changeable front panel, various coupling adaptors
- Coupling adapters mounted on the face panel
- Accommodates up to 48 fibers in 1 rack unit
- Removable top cover provides unrestricted access
- Durable powder coat finish
- Cable strain-relief and grounding provisions
- Accepts the industry's most common connector types

# 

#### **TECHNICAL SPECIFICATIONS**

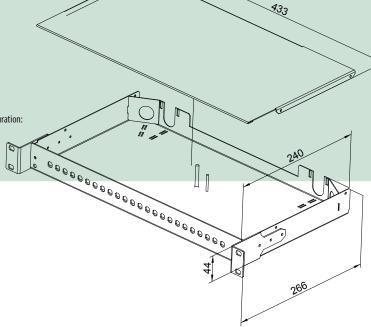
PART NUMBER	FIBER CAPACITY		RACK		
PARI NUMBER	FM-12-XX	FM-24-XX	UNITS	(HxWxD) mm	(kg)
ZMPJ – 1	12	48 <sup>1</sup>	1	44 x 432 x 265	3.6

Note 1) fiber capacity is valid for SFF connector types

Coupling panels FM series available for standard connector adapter types in the following configuration:

FM-12-XX 12 pcs ST, FC, SC, duplex LC, E2000, ... adapters FM-24-XX 24 pcs ST, SC, duplex SC, E2000, ... adapters

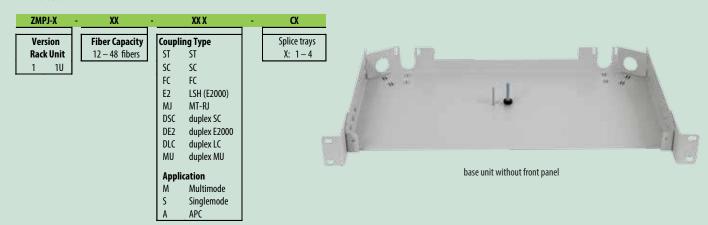
Standard front p	oanels
FM-12-DSC	12x duplex SC adaptors
FM-24-DSC	24x duplex SC adaptors
FM-12-ST(FC)	12x single ST (FC) adaptors
FM-24-ST(FC)	24x single ST (FC) adaptors
FM-12-SC	12x single SC adaptors <sup>1</sup>
FM-24-SC	24x single SC adaptors <sup>1</sup>
FM-24-DLC	24x duplex LC adaptors







FM-24-SC



#### **RACK MOUNT - Cabinet With Slide-Out Shelf**

#### **TMVJ**

The TMVJ sliding shelf cabinet introduces a compact, low cost solution for fiber optic cable termination. The TMVJ series is ideal for rack-mounting in confined areas such as equipment enclosures where rack space is limited. The cabinet is equipped with a slide-out shelf with splice tray holder. This allows easy access to the splicing area for optical network reconfiguration during operation and prevents damage to fibers prior to routing into adapters. The modular system allows splicing and termination of up to 48 fibers in rack height 1U.

#### **FEATURES**

- FTTH use holder for minicables or microtubes
- Designed for cable or microtubes termination
- Compact robust design
- Slide-out shelf provides unrestricted access
- Changeable front panel, various adapters
- Coupling adapters mounted on the face panel
- Accommodates up to 48 fibers in 1 rack unit
- Durable powder coat finish
- Cable strain-relief and grounding provisions
- Accepts industry standard connector types



#### **TECHNICAL SPECIFICATIONS**

PART NUMBER	FIBER CAPACITY		RACK	DIMENSIONS	SHIP WGT	
PARI NUMBER	FT-12-XX	FT-24-XX	UNITS	(HxWxD) mm	(kg)	
TMVJ – 1	24	48 <sup>1</sup>	1	44 x 432 x 221	3.5	

Note: 1) fiber capacity is valid for SFF connector types

Coupling panels FT series available for industry standard connector adapter types in following configuration:

FT-12-XX 12 pcs ST, FC, SC, duplex LC, E2000, ... adapters FT-24-XX 24 pcs ST, SC, duplex SC, E2000, ... adapters

Standard front p	anels
FT-12-DSC	12x duplex SC adaptors
FT-24-DSC	24x duplex SC adaptors
FT-24-SC line	24x single SC adaptors in-line
FT-12-ST(FC)	12x single ST (FC) adaptors
FT-24-ST(FC)	24x single ST (FC) adaptors
FT-12-SC	12x single SC adaptors
FT-24-SC	24x single SC adaptors
FT-24-DLC	24x duplex LC adaptors



FT-24-SC

437 29



FT-24-SC equipped with adaptors

ORDERING CODE

TMVJ-X	_	XX	_		XX X	_	X
Version	7	Fiber Capacity	1	Coup	ling Type		Splice trays
Rack Unit		12 – 48 fibers		ST	ST		1 – 4
1 1U			_	SC	SC		
				E2	LSH (E2000)		
				MJ	MT-RJ		
				DSC	duplex SC		
				DE2	duplex E2000		
				DLC	duplex LC		
				MU	duplex MU		
				Appli	cation		
				М	Multimode		
				S	Singlemode		
				Α	APC		



# **RACK MOUNT - ETSI Connector Network Panel**

#### **ECNP**

The ECNP cabinet is based on universal optical distribution frames. It provides splicing and termination within one convenient housing unit. The ECNP terminates up to 144 fibers in a 7SU (ETSI height) distribution frame. The swing-out shelf enables unrestricted front, rear and top access to the splicing area and termination panels.

#### **FEATURES**

- ETSI rack standards compatible
- Aluminum material low weight and shipment costs
- Up to 144 termination in 7SU (175 mm) ETSI height
- Splicing and termination optical cable in one box
- Splice cassette holder enables cable termination with the help of piqtail splicing
- Fixed or hinged cassette installation
- Removable top cover provides unrestricted access
- Pivoting shelf eases connector routing and cable routing
- Cable strain-relief and grounding provisions
- Accepts the industry's most common connector types

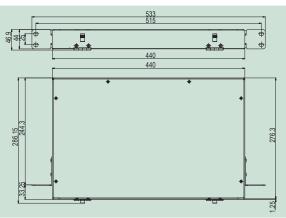


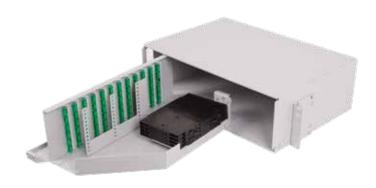
#### **TECHNICAL SPECIFICATIONS**

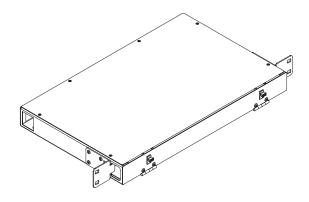
PART NUMBER	FIBER CAPACITY <sup>1</sup>	ETSI Height <sup>2</sup>	DIMENSIONS <sup>3</sup> (HxWxD) mm
ECNP-2	12/24	2 SU (50 mm)	45x533x280
ECNP-3	24/48	3 SU (75 mm)	70x533x280
ECNP-5	36/72	5 SU (125 mm)	120x533x280
ECNP-5B	48/96	5 SU (125 mm)	120x533x280
ECNP-7	72/144	7 SU (175 mm)	170x533x280

Note: 1) Standard splice tray capacity is 12 pieces, extended capacity — 24 pieces, when slim protection tubes are used.

- 2) SU system unit, 1 SU=25 mm
- 3) Width without mounting brackets is 440 mm, see technical drawing below







	ECNP-X		X	-
X	- Version			
2	ECNP-2			
3	ECNP-3			
5	ENCP-5			
5B	ENCP-5B			
7	ENCP-7			
Nui	mber of Splice	e Cass	ettes1	
1-12	Number of	splice	cassettes	;
	Fiber	Capac	ity	
	006 – 1	44 Fib	ers	

XXX	<u>-</u>	XX	X
Couplin	g Type	App	olications
ST	ST adapter	M	Multimode
SC	SC adapter	S	Singlemode
FC	FC adapter	Α	APC
E2	E2000 adapter		
DSC	SC duplex adapter		
DLC	LC duplex adapter		
DMU	MU duplex adapter		
MJ	MT-RJ adapter		

	•			
Front Door Option				
LM	Metal door - lock			
ZM	Metal door - latch			
LP	Plexi door - lock			
ZP	Plexi door - latch			



#### **WALL MOUNT - Interconnect Cabinet**

#### **MPIC**

The double-door Premise Interconnect Cabinet (MPIC) is available from 6 to 96 fiber capacities. The cabinet is ideal in building entrance terminals, telecommunications closets, computer rooms and other controlled environments where space is limited. This double door cabinet provides segregated access for the end-user and the installer. Both doors are fully removable from the base, which allows easy access during installation work and optical network reconfiguration. End-users can reconfigure the connections without exposing the installation workspace. The cable strain-relief is facilitated with dual cable tie "brackets".

#### **FEATURES**

- Protection for facility and user connections
- Aluminum material low weight and shipment costs
- For FTTH use holder for micro tubes included
- Removable door easy access for optical network installation and reconfiguration
- Bend radius protection allows management and rearrangement of cable slack
- Strain-relief for multiple inbound cables
- Labels provided for system documentation
- Optional kit adapts cabinet splice tray
- Durable powder coat finish
- Bonding and grounding stud provided
- Jumper strain relief brackets for outbound cable
- Passed the seismic tests according to ASME standards
- Approved for construction of Nuclear Power Plant Components



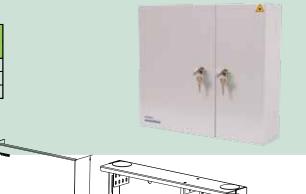
#### **TECHNICAL SPECIFICATIONS**

PART NUMBER		FIBER CAPACITY	DIMENSIONS	SHIP WGT	
PARI NUMBER	CNPM-XX-06	CNPM-XX-08	CNPM-XX-12	(HxWxD) mm	(kg)
MPIC-4	24	32	48	340 x 355 x 75	2.0
MPIC-6	36	48	72	490 x 355 x 75	2.9
MPIC-8	48	64	96	645 x 355 x 75	3.5

Note 1) fiber capacity is valid for standard connector type, when SFF (small form factor) connectors are used, fiber capacity is higher

Coupling panels CNPM series (see Data Sheet CMS\_24-01\_EN-CNPM) available for standard connector adapter types in the following configuration:

CNPM-XX-06 6 pcs ST, FC, SC, E2000, ... adapters CNPM-XX-08 8 pcs ST, FC, SC, ... adapters



**(D)** 

### ORDERING CODE

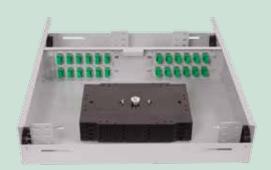
MPIC-X	- XX - XX
Version	Fiber Capacity
MPIC-4	6, 12, fibers
MPIC-6	
MPIC-8	
	•

	Coupling	J Type		
ST	ST	М	Multimode	
SC	SC	S	Singlemode	
FC	FC	Α	APC	
E2	LSH (E2000)	ı		
DSC	Duplex SC			
DLC	Duplex LC			
MU	MÜ			
MJ	MT-RJ			

_	Х	
	Fron	Door Option
	LM	Key Lock
	ZM	Latch

# X - Fibre Termination Option B Bend Radius Protectors C Splice Cassette for 12 Splices X - Number of Splice Cassettes

0 No cassette (only BRP)
1-8 Number of Splice Cassettes



# **WALL MOUNT - Splice Cabinet**

#### **MSIC**

The MSIC single-door splice cabinet provides storage and protection for up to 288 fiber splices in individually accessible trays. The design of the cable entries and cable holders allows the installation of a large volume of microcables — used in FTTH projects. The cabinet can be equipped with a stackable splice tray with hinges for easy fiber splicing. This feature allows splice tray opening and easy fiber re-installation during operation.

#### **FEATURES**

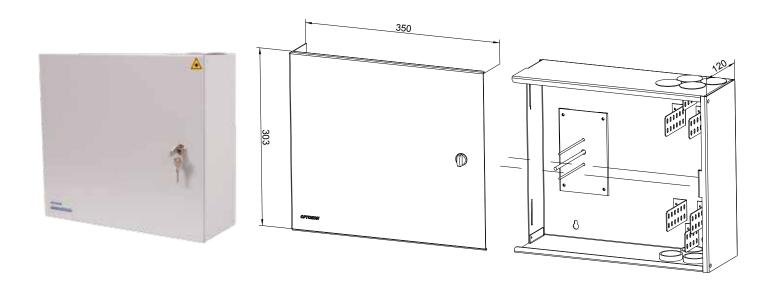
- Aluminium material providing low weight and shipment costs
- Single cabinet with 192 fiber capacity
- Sliding shelf easy fiber splicing
- Accepts standard splice trays or block of cassettes
- Removeable doors
- Durable powder coat finish
- Strain-relief for multiple inbound cables
- Labels provided for system documentation



#### **TECHNICAL SPECIFICATIONS**

PART NUMBER	FIBER CAPACITY <sup>1</sup>	DIMENSIONS (HxWxD) mm	SHIP WGT (kg)	
I ARI NOMBER	12 fiber splice tray	DIMENSIONS (HXWXD) IIIIII		
MSIC-8	144	305 x 356 x 120	2.4	
MSIC-16	288	457 x 356 x 120	3.9	

Note: 1) fiber capacity is valid for standard (12 fiber) splice trays, when 16 fiber splice trays are used, the capacity is higher.



#### **ORDERING CODE**



Note: 1) Max number of splice trays — defined for KNS-12 type
For other type — depends on the dimensions of the splice tray



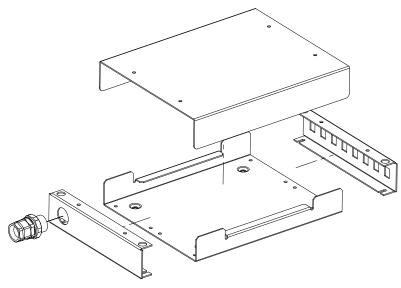
# **WALL MOUNT - Splice and Termination Box**

#### **FO-22**

The FO-\*22 is a cost effective wall mount interconnect indoor cabinet designed for splice, storage and protection of 4 to 12 fiber optic connections. These compact, modular units are ideal for use in locations such as building entrance terminals, telecommunications closets and other controlled environments where wall space is at premium. The FO 22 ML has a 4-fiber capacity, the FO 22 MB allows capacity up to 12 fibers.

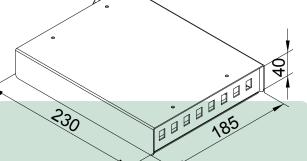
#### **FEATURES**

- Easy wall mounting
- Aluminum material low weight and shipment costs
- Craft friendly protection for facility and user connections
- Modular system
- Easy access to individual connectors
- Durable powder coat finish









#### TECHNICAL SPECIFICATIONS

PART NUMBER	FIBER CAPACITY	DIMENSIONS (HxWxD) mm	SHIP WGT (kg)
F0-22-ML	4	220 x 90 x 40	0.6
FO-22-MB	up to 12	220 x 180 x 40	1.0

	F0 22 -	XX	- XX -	XX X -	X/X/X (Panels O	ption)
		-			F0.22.D. I	
	2 type				FO 22 Panels	
	ML				FP0	universal blank panel
	MB				FPB	blank panel (MB type only)
					FP1R	universal entry panel including PG13.5 bushing
Fiber ca	pacity					(right-side, cable $\varnothing$ up to 13.5 mm)
2, 4,	12 fibers				FP1L	universal entry panel including PG13.5 bushing
						(left-side, cable $\varnothing$ up to 13.5 mm )
Couplin	g Type					
ST	ST	М	Multimode		FP2	universal entry panel including PG9 bushings
SC	SC	S	Singlemode		FP2V	universal entry panel including PG13.5 bushings
FC	FC	Α	APC		FP2B	entry panel including PG9 bushings
E2	LSH (E2000)				FP2BV	entry panel including PG13.5 bushings
DLC	Duplex LC				FP1B	entry panel including PG13.5 bushing
						(MB type only, cable $\varnothing$ up to 13.5 mm)
					FP4FC	universal coupling panel (ST,FC, )
					FP4SC	universal coupling panel (SC, E2, DLC,)
					FP-CNPM	CNPM panel (MB type only)



# WALL MOUNT - End user terminating box

#### MCPE-01T

The MCPE-01T is a mounted wall outlet designed for FTTH applications and is used to terminate optical pigtails at customer premises. The MCPE-01T provides mechanical protection and managed fiber control in an attractive format. The cable is fed to the wall outlet from the top, bottom or the back. A patchcord leads from the wall outlet to the active equipment (CPE —Custumer Premises Equipment). The MCPE-01T enables installation of one or two adapters, based on the standard SC footprint.

#### **FEATURES**

- Hinged/detachable splice cassette
- Detachable cap
- One or two SC adapters
- Compact design
- Separate fiber guiding
- Suitable for heat-shrinkable splice-protection as well as for mechanical splice protection



#### **TECHNICAL SPECIFICATIONS**

Material	ABS
Color	Grey ( RAL 7035) or White (RAL 9010)
Operating temperature	-40°C to +75°C (acc. EN 60068-2-1 and EN 60068-2-1)
Flammability	UL94 HB
IP Protection class	IP42 (according IEC 60529)
Dimensions	100 x 80 x 22 mm (LxWxH)
Weight	60 g (without adapters and pigtails)

Standards / Technical Compatibility:

Wall outlet MCPE-01T was designed to be installed in the Telefonica FTTH network.



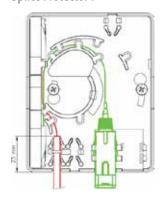


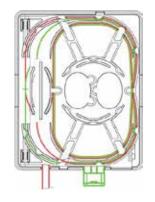


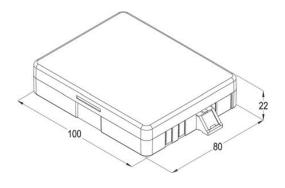


#### **APPLICATION DIAGRAM:**

The pictures below show the entrance of the installation cable to the wall outlet and routing of excess cable inside the splice cassette and "Cold Splice Protector".







# **WALL MOUNT - End user terminating box**

#### MCPE-02

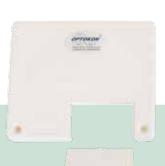
The OPTOKON MCPE-02 box introduces the wall mounted, two fiber box, which is designed for optical cable termination in the customer premises — end user site in FTTH projects. The MCPE-02 box includes the holder for two splice protection sleeves. The internal fiber guides ensure the arrangement of the fiber reserve and its protection against smaller bending radius than allowed. The MCPE-02 enables installation of two SC single coupling adapters. The MCPE-02D is designed for installation of duplex SC adapter, LC quadruple (4 LC connections), etc. The additional internal panel enables installation of a single LC adapter.

#### **FEATURES**

- Small dimensions
- Easy access to fibers
- Protection of connectors against damage
- Standard SC single or duplex adapters, LC and E2000 available

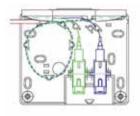
#### **TECHNICAL SPECIFICATIONS**

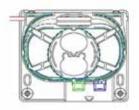
Material	ABS
Colour	Grey ( RAL 7035) or White (RAL 9010)
Operating temperature	-40°C to +75°C (acc. EN 60068-2-1 and EN 60068-2-1)
Flammability	UL94 HB
IP Protection class	IP42 (according IEC 60529)
Dimensions	120 x 100 x 26.5 mm (LxWxH)
Weight	95 g (without adapters and pigtails)



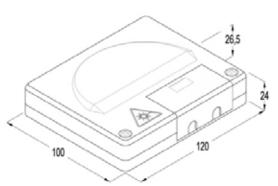








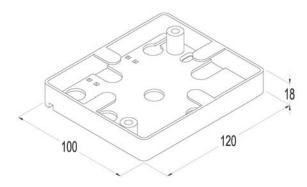




# MCPE-02U - Optional storage box

The storage box is fitted between the wall outlet and the wall. It is designed for overlength storage of the incoming cable feed into the wall outlet. The storage box can accommodate an overlength of 4 meters (duplex cable) or 8 meters (simplex cable) and assures through its shape, a minimal bending radius of 30 mm.

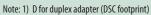
Material	ABS
Colour	Grey ( RAL 7035) or White (RAL 9010)
Storage capacity	4 meters (duplex cable), 8 meters (simplex cable)
Dimensions	120 x 100 x 18 mm (LxWxH)
Weight	40 a



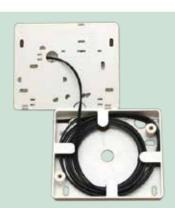
#### **ORDERING CODE**

MCPE-02 (D)1 -XXX X<sup>2</sup> **Coupling type** Multimode SC SC DSC duplex SC Singlemode DIC dunlex I C APC QLC quadruple LC NC no connectors

A standard (1-2 sleeves)
B mini (up to 4 sleeves)



b for duplies adapter (lost rootprint)
 if different adapters included, please specify to ordering code in form adapter1/adapter2 – e.g. SC A/SC S (only for SC and DLC option)



# **WALL MOUNT - End user terminating box**

#### MCPE-04

The OPTOKON MCPE-04 box introduces the wall mount, four fiber box, which is designed for optical cable termination in the customer premises — end user site in FTTH projects. The MCPE-04 box includes a splice cassette for installation for up to 4 splice protection sleeves. The internal fiber guides ensure the arrangement of the fiber reserve and its protection against smaller bending radius than allowed. The MCPE-04 enables installation of 4 coupling adapters.

#### **FEATURES**

- Small dimensions
- Easy access to fibers
- Wall mount application
- Protection of connectors against damage
- Standard SC single adapters, LC duplex, E2000, etc.

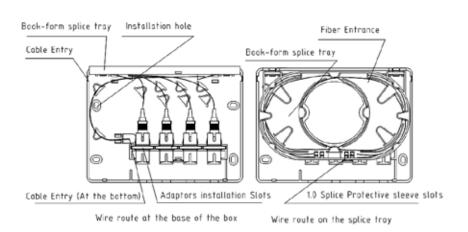


#### **TECHNICAL SPECIFICATIONS**

Colour	White (RAL 9010)
Operating temperature	-40°C to +75°C
Flammability	UL94 HB
IP Protection class	IP42 (according IEC 60529)
Dimesions	150 x 110 x 28 mm (LxWxH)
Weight	120 g (without adapters and pigtails)

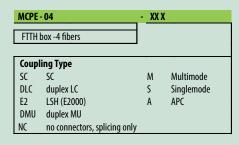


#### **APPLICATION DIAGRAM:**





#### **ORDERING CODE**







#### Standard version:

# **INDOOR/OUTDOOR - Fiber Optic Termination Box**

#### MOPF-08

The MOPF - FO terminal box is designed for optical fiber cable termination. It allows FO cable termination by splicing pigtails, and passive optical splitters 1:8 and installation. The ruggedized box is designed for both indoor and outdoor applications. The MOPF includes a holder for SC type coupling adapters and a splice cassette for heat shrinkable or mechanical splice protection sleeves and two separate holders for passive splitters. A weatherproof lock is provided. Provision for up to 2 optical fiber cables to enter and 8 smaller entries to leave the enclosure through weatherproof cable glands is provided. The outlet ports allow installation of 8 connectorized patchords. Additionally, one universal cable output port is included.

#### **FEATURES**

- Wall mountable
- Easy access to cables, pigtails and patchcords during installation, maintenance and/or upgrade
- Secure, industry standard high impact plastic cover
- Anti-UV, Ultra violet resistant
- Protection class IP 65
- Minimum value of bend radius is 30 mm
- Can house 40-60 mm splice protectors
- Can house 1x8 PLC splitters
- 2 inlet ports, 8 + 1 outlet ports



#### **TECHNICAL SPECIFICATIONS**

ADAPTER TYPES:	SC, E2000, LC duplex		
NUMBER OF ADAPTER HOLDERS:	8 pcs		
FIBER CAPACITY¹:	8 – SC, E2000 type		
	16 — LC duplex type only		
SPLICE PROTECTION HOLDERS:	6 pcs		
PROTECTION CLASS:	IP65		
INPUT PORTS:	2x up to ø 15 mm		
OUTPUT PORTS:	8x ø 6 mm + 1x up to ø 10 mm		
DIMENSIONS(WXHXD):	240 x 200 x 55 mm		
WEIGHT:	0.75 kg		

 $Note: \ 1) \ Always \ use \ mini \ splice \ protection \ sleeves \ P-MP \ C-40, please \ check \ datasheet \ PSL\_01-04\_EN-Prot-Sleeves\_P-series$ 





	MOPF - 08		XX X
FT	TH box - 8 fibers		
Coupl	ing Type	I	
SC	SC	М	Multimode
DLC	duplex LC	S	Singlemode
E2	LSH (E2000)	Α	APC
NC	no connectors, sp	olicing o	nly





# **INDOOR/OUTDOOR - Fiber Optic Termination Box**

#### **MOPF-16**

The MOPF series - F0 terminal boxes are designed for optical fiber cable termination. It allows F0 cable termination by splicing pigtails and installation of splitters. The ruggedized boxes are designed for both indoor and outdoor applications. The MOPF includes holders for SC, E2000, MU duplex and LC duplex coupling adapters. A splice holder for heat shrinkable or mechanical splice protection sleeves is also available. A weatherproof lock is provided. Provision for up to 2 optical fiber cables to enter and 16 smaller entries to leave the enclosure through weatherproof cable glands is provided. The outlet ports have an diameter which allows easy installation of connectorized patchcords.

#### **FEATURES**

- Wall mountable
- Easy access to cables, pigtails and patchcords during installation, maintenance and/or upgrade
- Secure, industry standard high impact plastic cover
- Splice protection holders for shrinkable or mechanical splice sleeves
- Anti-UV, Ultra violet resistant
- Protection class IP65
- Minimum value of bend radius is 30 mm
- Can house 40-60 mm splice protectors
- 2 inlet ports with glands, 16 outlet ports



#### **TECHNICAL SPECIFICATIONS**

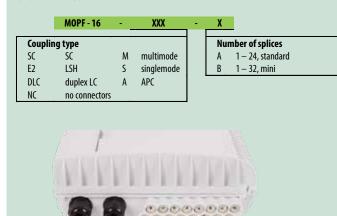
ADAPTER TYPES:	SC, E2000, LC duplex
NUMBER OF ADAPTER HOLDERS:	16 pcs
FIBER CAPACITY:	16 – SC, E2000 type
	32 – LC duplex type only1
SPLICE PROTECTION HOLDERS:	12
PROTECTION CLASS:	IP65
INPUT PORTS:	2x cable gland PG 13.5
OUTPUT PORTS:	16x ø 12 mm
DIMENSIONS(WXHXD):	306x240x106 mm
WEIGHT:	1.7 kg

Note: 1) If more than 24 splices will be placed in MOPF-16, the mini splice protection sleeves P-MP C-40 must be used to accommodate in splice holders, instead of standard P-SC-60 (for max. 24 splices)











# WALL MOUNT - Outdoor metal fiber optic box, IP66

#### **MOMB**

The OPTOKON MOMB metal box is designed for outdoor optical fiber cable termination. The IP66 design is moisture and dust resistant. A weatherproof lock provides for up to 4 optical fiber cables to enter or leave the enclosure through weatherproof cable glands and four cable anchoring points are provided. The MOMB includes a set of individually removable splice trays according to customer request; each tray can accept 12 fusion splices. The splice tray stack is secured by a long length hook and loop tie. The housing contains standard CNPM coupling panels with connector adaptors for all industry standards.

#### **FEATURES**

- Easy installation fully removeable base
- Compact FTTH design
- Designed to house SC, SC duplex, ST, FC, E2000, LC, MT-RJ couplings
- Metal wires and F0 hybrid version available
- Pigtail cable entry available
- Wide range of cable size entry
- Allows multiple unit arrangement
- Inside fiber bending with observence of diameters fiber reserve provided

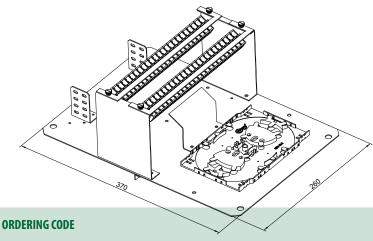


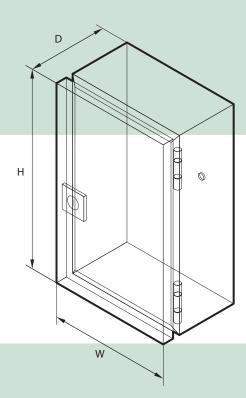
#### **TECHNICAL SPECIFICATIONS**

PART NUMBER	FIBER CAPACITY <sup>1</sup>	DIMENSIONS (HxWxD) mm	SHIP WGT (kg)
MOMB-06	6 fibers	300x200x120	4.2
MOMB-12	12 fibers	300x200x120	4.4
MOMB-24	24 fibers	400x300x210	8.9
MOMB-48	48 fibers	400x300x210	9.1

Environmental protection	IP66
Material	Sheet steel
Lock	Standard: double-bit lock insert

1) Note: Min. capacity – can be higher depending on coupling adaptor type





MOMB-XX	- XX	- XX X
Version	Fiber Capacity	1
MOMB-06	2 – 48 fibers	
MOMB-12		_
MOMB-24		
MOMB-48		
Coupling Type		
CT CT	M Multimode	

	, 10		
Coup	ling Type		
ST	ST	М	Multimode
SC	SC	S	Singlemode
FC	FC	Α	APC
E2	LSH (E2000)		
DSC	Duplex SC		
DLC	Duplex LC		
MU	MU		
MJ	MT-RJ	_	

X - Fib	re Termination Option
В	Bend Radius Protectors
C	Splice Cassette for 12 Splicing
X - Nu	mber of Splice Cassettes
<b>X - Nu</b> 0	mber of Splice Cassettes No cassette (only BRP)

Standard accessories:	Note:
Main body + cover	
Splice cassettes	according to fiber number
Splice protection sleeves	according to fiber number
Coupling adaptors	according to order
Cable holder	
Installation Kit MK-1	
Labels	
Options: cable entry:	
PG9 (max. Ø cable - 9 mm)	The same of the sa
PG13.5 (max. Ø cable - 13 mm)	E (200 E
PG16 (max. Ø cable - 16 mm)	
PG29 pigtail — 12 (24) x Ø 3 mm	MOPB box with 2x PG9 and 1x PG29

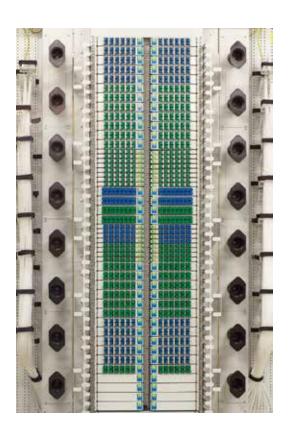
# RACK - The complete cabinet ftth solution

#### **MROM series**

The MROM is an optical fiber distribution/patch system for Passive Optical Networks. The main system application is fiber termination in Central Offices of FTTH networks. MROM combines the advantages of the Central Office systems available on the market.

#### **FEATURES**

- Maximum fiber density due to two-rowed fiber modules 960/1920 fiber terminations for standard/SFF adapter systems per standard rack (1000 mm width, 2200 mm height)
- Comfortable patching with two-sided overlength patchcord storage
- **3** different rack heights: 32HU/1800 mm, 40HU/2200 mm, 48HU/2600 mm
- 2 different rack widths: 600 mm, 1000 mm
- Open and closed rack versions
- The combined splice/patch fiber modules are 90 degrees rotatable and removable and are available in 2 sizes: 0.5 HU or 1 HU for 12/24 standard/SFF adapters per module (see technical data on page 4)
- Only one, uniform metal frontplate for all adapter types
- 45 degrees, snap-in adapter holders for all conventional adapter types: SCsx, LCdx, E2000, LX.5, FC, ST
- Miniflex for fiber protection
- Possibility to blow up fibers directly to the fiber modules
- Integration of gas-blockers on incoming tubes
- Solutions for cross-connect and interconnect configurations
- Modular subunits for highest flexibility
- Rear vertical cable guidance for incoming cables
- Bending radius protection of 30mm for fibers and patchcords
- Intelligent patchcord management:
   Vertical patchcord cable guidance on left and right side
   Mandrels on left and right side of the rack provide sufficient space for patchcord overlength storage
- Integrated patchcord management to adjacent racks avoids the usage of external ducts



#### **TECHNICAL SPECIFICATIONS**

	MROM 600/32HU	MROM 600/40HU MROM 600/48HU MROM 1000/32HU		MROM 1000/40HU	MROM 1000/48HU		
Rack height	1800 mm	2200 mm	2600 mm	1800 mm	2200 mm	2600 mm	
Rack width	600 mm	600 mm	600 mm	1000 mm	1000 mm	1000 mm	
Rack weight (without adapter,	Open rack: 60 kg	Open rack: 72 kg	Open rack: 84 kg	Open rack: 98 kg	Open rack: 118 kg	Open rack: 138 kg	
pigtails, incoming cables)	Closed rack: 88 kg	Closed rack: 105 kg	Closed rack: 122 kg	Closed rack: 142 kg	Closed rack: 170 kg	Closed rack: 197 kg	
Material	Powder coated steel metal						
Color		RAL 7035, light grey					
IP Protection			IP30 (closed	rack)			
Flammability classification			UL 94V-	0			
Max. amount of Fiber modules	32 Full-size OR 64 Half-size	40 Full-size OR 80	48 Full-size OR 96	64 Full-size OR 128	80 Full-size OR 160	96 Full-size OR 192	
Max. alloulit of Fibel Illoudies	amount of Fiber modules 32 Full-size UK 64 Haif-size		Half-size Half-size		Half-size	Half-size	
Max. amount of Fiber	384 SC/E2000 768 LC/LX.5	480 SC/E2000 960	576 SC/E2000 1152	768 SC/E2000 1536	960 SC/E2000 1920	1152 SC/E2000 2304	
terminations/adapter system		LC/LX.5	LC/LX.5	LC/LX.5	LC/LX.5	LC/LX.5	







#### **ORDERING CODE**

For full ordering code details, please see the datasheet for the specific product.

### **RACK - 600 and 800 mm wide 19" racks**

#### **iSEVEN** series

The iSEVEN 19" rack has been designed to provide the user with an unmatched ratio between price, utility value and quality. This rack is the ideal choice for installers and end users who want to spend less time choosing between various options and configuring difficult product part numbers. After extensive research, we have prepared a portfolio of the most frequently used dimensions together with one universal design.

#### **FEATURES**

#### Coding

iSEVEN is a trade name; in all technical documents (data sheets, catalogue) iSEVEN is referred to as RI7

#### Dimensions

iSEVEN is available in most 42U and 45U standard heights, and the most frequently used small size — 21 and 27U; available footprints differ slightly for the above mentioned heights

#### Frame

The frame is made from 1.5 mm high-quality sheet steel; the iSEVEN cabinet has a high level of rigidity and stability (load rating 400 kg; decreased to 300 kg for 27U RI7 racks)

#### Color

iSEVEN is available in two colors: light grey (RAL 7035, Code - B) and black (RAL 9005, Code - H)

#### Options

iSEVEN fully satisfies the requirements for safe housing of equipment, cabling, ventilation & power supplies. The range of options is reduced in comparison with the highly customizable ROF family. In case your requirements are more complex, please refer to the ROF family of racks or to the respective specialist rack series (ROS, ROR, ROP, RSB)



#### **TECHNICAL SPECIFICATIONS**

Choose the iSEVEN rack which will meet your requirements from the table below. For optional configurations please add the appropriate suffix i.e. RI7-27-80/80-GASAA-303-H will specify 27U iSEVEN rack 80x80 with front glass door, rear sheet steel door, 2 sheet steel side panels in black.

Chandand sanfannation and	II in IIniaa	Dimensions in mm			Dimensions including packing			Gross weight in kg	
Standard configuration code H in Units	H*	W	D	Useful depth	Н	W	D		
RI7-21-60/60-X	21	1044	600	600	590	1179	640	640	52
RI7-27-60/60-X	27	1311	600	600	590	1446	640	640	61
RI7-21-60/80-X	21	1044	600	800	790	1179	640	840	61
RI7-27-60/80-X	27	1311	600	800	790	1446	640	840	61
RI7-27-60/100-X	27	1311	600	1000	990	1446	640	1040	91
RI7-27-80/80-X	27	1311	800	800	790	1446	840	840	83
RI7-27-80/100-X	27	1311	800	1000	990	1446	840	1040	104

<sup>\*</sup> Height in mm without feet; for height including feet add 16-45 mm Substitute X with desired color: B - 7035 (light grey)

H - 9005 (black)

Ctandard configuration code	His Hate	Dimensions in mm				Dimensions including packing			Gross weight in
Standard configuration code	H in Units	H*	W	D	Useful depth	Н	W	D	kg
RI7-42-60/60-X	42	1978	600	600	590	2113	640	640	83
RI7-45-60/60-X	45	2111	600	600	590	2246	640	640	88
RI7-42-60/80-X	42	1978	600	800	590	2113	640	840	94
RI7-45-60/80-X	45	2111	600	800	790	2246	640	840	100
RI7-42-60/100-X	42	1978	600	1000	990	2113	640	1040	114
RI7-42-80/80 -X	42	1978	800	800	790	2113	840	840	113
RI7-45-80/80-X	45	2111	800	800	790	2246	840	840	120
RI7-42-80/100-X	42	1978	800	1000	990	2113	840	1040	133
RI7-45-80/100-X	45	2111	800	1000	990	2246	840	1040	110

# RACK - 19" wall-mounting racks easy series

#### **REN series**

19" wall-mounting telecommunication and data racks designed for installing patch panels, active components, etc.

#### **FEATURES**

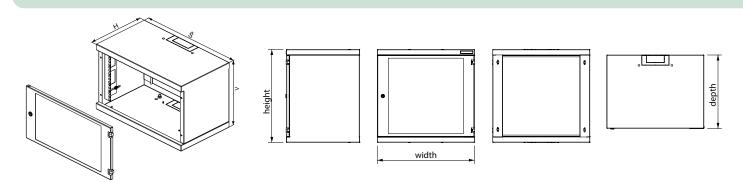
- Three types:
  - a) height 6U; depth 300 mm
  - b) height 6, 10, and 15U; depth 400 mm
  - c) height 6, 10, and 15U; depth 500 mm
- Width 530 mm
- Color powder coated RAL (standard RAL 7035)
- Tinted security glass (EN 12150-1) or sheet steel door
- Reversible door easy re-hanging to open on right or left (at installation site)
- Door opening angle 180°
- Top and bottom knock-out openings for cable entry; size 100x42mm or 150x56 mm
- Cable entries start on rear edge of enclosure for straight cable path along side wall
- Openings can be covered with sliding blank panels DP-BP-200x68 (not included)
- No rear panel
- Two sliding 19" vertical extrusions sliding distance 0 to 60mm
- Mounting holes for wall installation on the back
- GND/earthing kit
- Load rating max. 20kg balanced load
- Protection rating IP30





#### **TECHNICAL SPECIFICATIONS**

Code		Dimensio		Dimensions including packing in mm					
Code	in Units	H	W	D	Useful depth	Н	W	D	Gross weight in kg
REN-06-60/30	6	332	530	300	250	350	555	339	9
REN-06-60/40	6	332	530	400	350	350	555	439	10
REN-10-60/40	10	510	530	400	350	535	555	439	12
REN-15-60/40	15	732	530	400	350	758	555	439	16
REN-06-60/50	6	332	530	500	450	350	555	539	11
REN-10-60/50	10	510	530	500	450	535	555	539	13
REN-15-60/50	15	732	530	500	450	758	555	539	17,5



#### **ORDERING CODE**

For full ordering code details, please see the datasheet for the specific product.

# **CNPM** coupling panels

OPTOKON fiber optic coupling panels are manufactured from aluminium sheet metal and accommodate all standard fiber optic couplings and hybrid adapters.

OPTOKON offers a series of high density coupling panels that fit all OPTOKON fiber management products. These coupling panels are available in a variety of standard coupling styles in 6, 8 and 12 counts. Custom coupling panels can be designed to suit your needs.

#### **FEATURES**

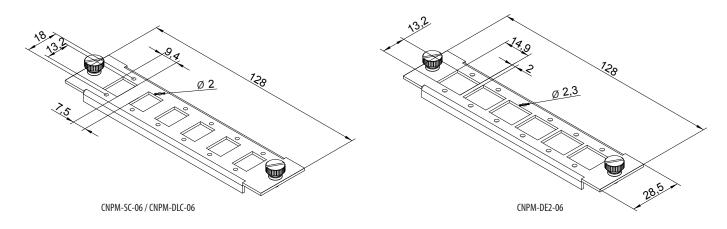
- Compatible with most adapters
- High port density
- Singlemode and Multimode application
- Easy installation secured by screw
- Panels with RJ-45 sockets for copper twisted pairs available
- Allows installation of hybrid (optical and metallic) networks



CNPM-ST-06 / CNPM-FC-06



Dimensions	128 x 28.5 mm
Distance between mounting screws	118.4 mm



#### **ORDERING CODE**

Fiber Optic Panels	Number of Adapters	Fiber Capacity
CNPM – ST – 06 (08)	6(8)x ST type	6(8)
CNPM – FC – 06 (08)	6(8)x FC type	6(8)
CNPM – SC – 06 (08)	6(8)x SC type	6(8)
CNPM – DSC – 03	3x duplex SC type	6
CNPM – DSC – 06	6x duplex SC type	12
CNPM – E2 – 06 (08)	6 (8) x LSH (E2000) type, E2000 size	8
CNPM - DE2 - 06	6x duplex LSH (E2000)	12
CNPM – DLC – 06	6 x duplex LC type, SC footprint	12
CNPM – MJ – 06	6 x MT-RJ type	12
CNPM – DMU – 06	6 x duplex MU type	12
CNPM - 00	blank panel	0
21.00		
RJ-45 Panels	Number of Adapters	Note
CNPM — STP — 06	6 x RJ-45	Supplied including RJ-45 sockets

Note: All coupling panels are imitation stainles steel color.

Standard adapters fixed by mounting clip. Screw fixation - on request. Other adapter types - on request.



#### **CAPM** cassettes

The OPTOKON CAPM cassette offers a convenient and much more reliable alternative to unprotected pigtail splicing or field termination. The CAPM cassettes accept passive fiber optic components such as attenuators, couplers/splitters, WDM and CWDM multiplexers, filters, circulators and many other networking devices. As the fiber optic components have been installed into the CAPM cassettes then they can be integrated into fiber optic networks using the standard system of Optical Distribution Frames without any need for special distribution frames.

#### **FEATURES**

- Factory terminated and 100% tested
- Rugged and secure snap-in modular housing
- Accepts single or ribbon fiber cable
- Cable designed for easy splice preparation
- Wide range of passive fiber optic components
- Reduces installation time



#### **TYPES**

#### Non equipped module CAPM CAPM/P Pigtal module CAPM/F Fan-out module CAPM/S Splice module SFT-CAPM Coupler/Splitter module

SFW-CAPM WDM/CWDM module

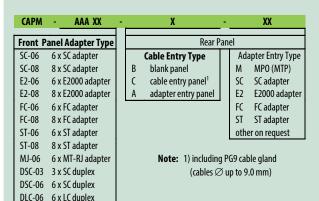
#### **PARTS ASSEMBLY**

- Main body
- Top cover
- Front adapter panel
- Rear panel
- Adapters, cable grommet, pigtails, fan-out, ...



#### **ORDERING CODE**

Non equipped module (empty CAPM cassette)



#### Fan-out module

Internal interconnection between MPO/MTP ribbon connector and up to 12 single connectors SC, LC, ...

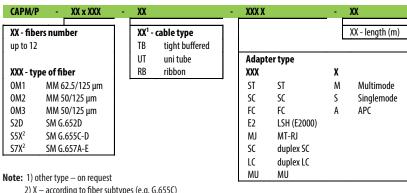
CAPM/F	- XX x XXX	-	XXX X	-	M		
XX - nu	mber of fibers				Rear ada	•	
up to 12	up to 12				MPO/MTP		
	Front panel adapter type <sup>1</sup>						
XXX - ty	XXX - type of fiber		XXX			Χ	
0M1	MM 62.5/125 μm		ST	ST		М	Multimode
OM2	MM 50/125 μm		SC	SC		S	Singlemode
0M3	MM 50/125 μm		FC	FC		Α	APC
S2D	SM G.652D		E2	LS	H (E2000)		
S5X3	SM G.655C-D		MJ	M	T-RJ		
S7X3	SM G.657A-E		DSC	du	plex SC		
			DLC	du	plex LC		
			MU	M	Ú		

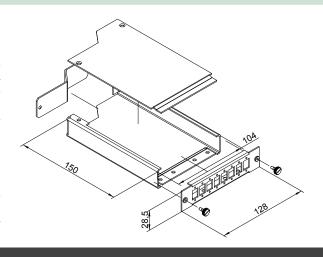
Note: 1) FC, ST, E2 – up to 8 fibers capacity

#### Pigtail module

other type on request

Includes pre-terminated optical cable, appropriate adapters and PG9 cable grommet (cables  $\phi$  up to 9.0 mm)





2) X - according to fiber subtypes (e.g. G.655C)

# **FP front panel**

The FP front panel introduces a low cost solution for fiber optic cable termination. The modular design can accept a wide range of optical fibers capacity with various connector types.

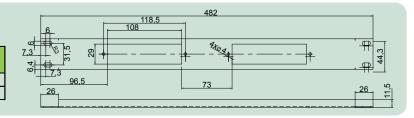
#### **FEATURES**

- Modular design
- 1U or 2U version
- Connector panel or brush entry
- Rack-mount, 19", 21"or 23"

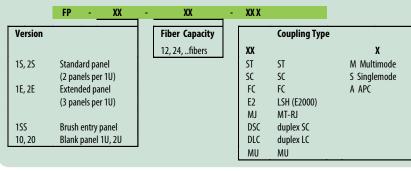


#### **TECHNICAL SPECIFICATIONS**

PART NUMBER	FIBER CAPACITY	RACK UNITS	DIMENSIONS (HxWxD) mm	SHIP WGT (kg)
FP-1S, FP-1E	up to 36	1	44 x 432 x 10	0.3
FP-2S, FP-2E	up to 72	2	88 x 432 x 10	0.8



#### **ORDERING CODE**





# **KNS-12 Splice trays**

The splice trays are designed for installation into the OPTOKON system of optical rack mount distribution frames and wall mount optical boxes. The splice trays are equipped with fixed internal fiber bend radius protectors, which allow storage and organization of spare fiber, both primary 250 µm and 900 µm coating. The KNS-SH-D splice holders can be used in the splice cassettes, designed for standard heat shrinkable protection sleeves. The capacity depending on the outer diameter of protection sleeves after heating is 6 to 12 splices. The KNS-12S stackable series allows installation hinges at the sides of the cassette, which are designed for opening the block of cassettes and enabling easy access to the spliced fibers during fiber optic systems operation. The lid — optional accessories for each cassette type can be used to cover a single or block of cassettes.

#### **KNS-12S**

Stackable splice cassette, removable and changeable splice holders

storage capacity: 12, up to 24 fibers dimensions: 170 x 116 x 8 mm material: plastic standard: splice holder KNS-SH-D

(2 pcs, heat-shrink) cable tie (4 pcs)

options: lid KNS-12S-L, hinge, fiber guide, splice holder



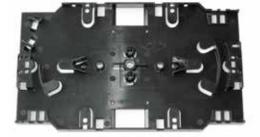
#### KNS-12M

Mini splice cassette, removable and changeable splice holders

storage capacity: 12 fibers dimensions: 155 x 91 x 8 mm material: plastic standard: splice holder KNS-SH-D

(2 pcs, heat-shrink) cable tie (4 pcs)

options: lid KNS-12M-L, splice holder



#### **Cable closures**

Fiber optic cable closures protect fiber optic splices in various installation conditions such as manholes, aerials, walls and poles. The cable closure family includes a wide range of models, a product series with many features:

#### **FEATURES**

Configuration: In-line

Dome type

Application: Backbones and long haul optical lines

Metropolitan lines

Access and local networks

FTTH networks

Installation site: Underground buried

Manhole installations

Aerial – pole, mast, wall mount,

OPGW Optical Ground Wire systems

• Cable inlet ports: Fixed cable entry — cable is sealed using shrinkable tube

Rubber cable entry — graded by cable diameter

Cable bushing with fixation nut



#### **KSO Optical Joint Closure series**

The KSO joint closure provides the perfect solution for the protection of optical fiber junction points from the environment, especially from water permeation of water and is used in underground, aerial, building entrance, and directly buried applications. The KSOSS closure equipped with splice tray OST-B-1 can accept both splice protection sleeves and mechanical splices.

The new drop cable type, 8+1 cable entrances can be used in FTTH applications and it accepts up to 16 drop cables with small diameter and two trunk cables up to 15 mm diameter.

The closure comprises the bottom and the cover. The cover is secured with non-loosening screws. The closure has 2, 3 or 9 cable ports, which as standard, are not pre-opened.

#### **TECHNICAL SPECIFICATIONS**

PART NUMBER	PORTS	CABLE INPUT SIZE (mm)	DIMENSIONS (L×W×H) mm	SHIP WGT (kg)	
KSOSS	3 ports per each end	Min. Ø 8 to max. Ø 19	325×187×130	3.9	
	2-2 ports	Min. Ø 8 to max. Ø 29			
KSOS	2-3 ports	Min. Ø 8 to max. Ø 29	450×187×130	5.0	
	3-3 ports	Min. Ø 8 to max. Ø 24			
	2-2 ports	Min. Ø 8 to max. Ø 29		5.7	
KSOM	2-3 ports	Min. Ø 8 to max. Ø 29	450×187×166		
	3-3 ports	Min. Ø 8 to max. Ø 19			
KSOA	4-4 ports	Ø 3.5 only	200×161×79	0.95	
KSOC	3-3 ports	Min. Ø 3.5 to max. Ø 16	324×198×130	1.8	
KSOL	3-3 ports	Min. Ø 8 to max. Ø 24	510×240×141	6.0	
KSOR	3-3 ports	Min. Ø 8 to max. Ø 32	597×296×213	9.5	



#### **OPTOKON**

OPTOKON, a.s. is a leading global producer and supplier of premium active and passive fiber optic components specializing in fully tested integrated data network, FTTx and tactical military solutions. Our components and solutions can be found in applications in businesses, communities and armed forces throughout the world.







- Fiber optic technology leadership
- 23 years experience on the global fiber optic market
- NATO supplier code: 1583G
- More than 14 years experience of supplying the militaries of over 20 countries
- National Security Authority certified
- ISO and AOAP certified
- Accredited Calibration Laboratory No. 2315

# **OPTOKON PORTFOLIO, SERVICES & DIVISIONS**

#### FIBER OPTIC DIVISION

- Connectors, Cable Assemblies
- Cable Management Systems
- Splitters, WDM, CWDM and DWDM
- Data Network Equipment
- Test Equipment
- Harsh Environment Optical Network
- Service and Calibration Center
- SERVICE DIVISION
- MANAGEMENT & CONTROL DIVISION (SCADA)
- AIR CONDITIONING AND COOLING DIVISION













#### **OPTOKON GROUP HEADQUARTERS** PRODUCTION & RESEARCH CENTER **CZECH REPUBLIC**







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