Data centre

OPTICAL AND COPPER CABLING SYSTEMS





Who are we?

With 14 years of experience in the telecoms field, Idea Optical is now a leading French specialist in the connection and management of solutions for fibre-optic cables.

The company is now a **partner of the largest French contractors**, particularly in the telecoms, energy and transport sectors.

Every customer receives personalized support and advice to meet their needs.

Our integrated design office, at the heart of our production site, develops innovative solutions and constantly strives to improve our products, keeping them perfectly aligned with market needs.

10 million INTEGRATED PIGTAILS



A subsidiary of the ACOME Group since strengthened the Group's expertise in opti bringing French industrial know-how to very everyone, everywhere.

In 2019, in order to reaffirm its membership company adopted the group's colours. Idea Or purple to blue and created a new visual identit









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2

3



ACOME

In order to support the company's development, our manufacturing facility in Lannion, Brittany, was relocated in the summer of 2019 to a site of approximately 9,500 m². This site hosts, in particular, the administrative and quality departments, production, the design office, etc.



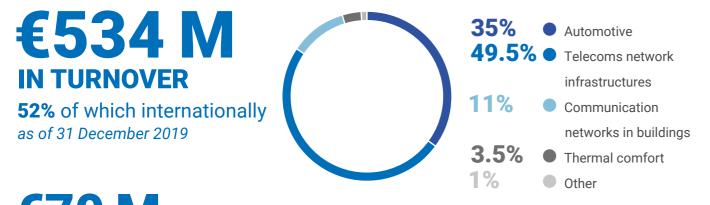
Our showroom, located in Guyancourt in Ile-de-France, allows our customers to discover all our products and see them in operation. On site, our sales team will answer all your questions.

Idea Optical, a subsidiary of the ACOME Group

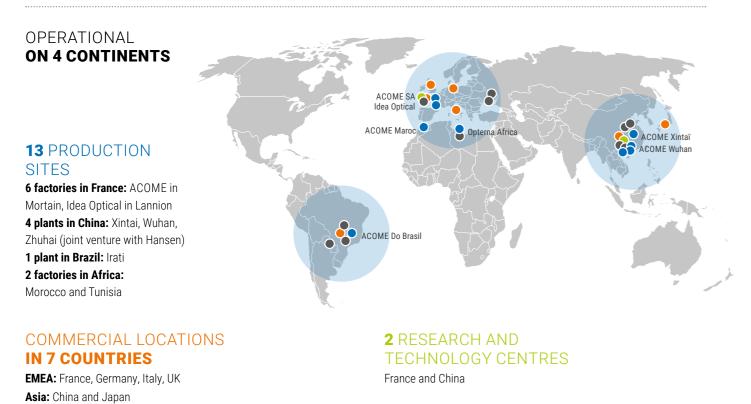
ACOME is a French group specialising in the manufacture of high-tech cables for the telecoms and automotive markets.

ACOME develops and manufactures high-quality products and solutions for building and telecoms infrastructure networks, with the aim of constantly improving the efficiency of its installations.

As the leading cooperative company in France, with a turnover of €534 million in 2019 and 1,800 employees, ACOME has promoted a cooperative, democratic and responsible governance model since 1932.

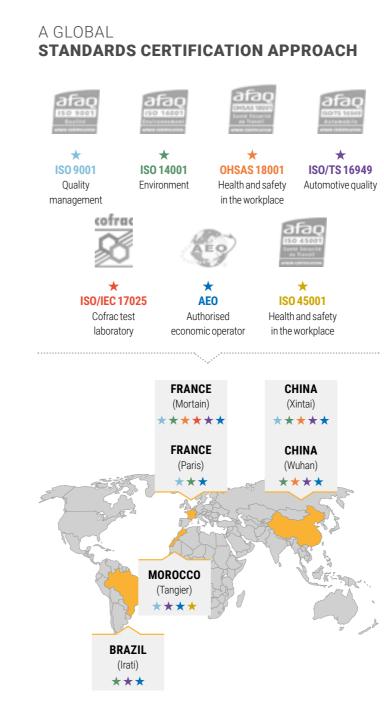


€70 M IN INVESTMENTS between 2017 and 2020, of which €15.8 M in 2019



12 LOGISTICS HUBS (EMEA, South America and Asia)





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South America: Brazil

73% EMEA (Europe, Middle East, Africa)

22% China

5% Brazil

A CSR APPROACH

(corporate social responsibility)



ACOME's societal responsibility is at the heart of our status as a cooperative company, of our values and ambitions as a Group. Our CSR performance is structured around four priority areas:

- R Reliable, efficient and environmentally friendly manufacturer;
- R Values and ethics;
- R People at the heart of the system;
- R A responsible offer that listens to our customers and partners.

ACOME is SILVER certified by EcoVadis, an independent agency responsible for assessing the company's CSR practices.

ACOME stands out by its sustainable use of resources and waste management.

- R 70% use of industrial water;
- R 87% of materials from packaging waste reused;
- R 100% copper and wood waste recovered.

ideaoptical ACOME GROUP



Sales

At the heart of Idea Optical's business, our sales engineers are your privileged point of contact. Experienced in their fields (Telecoms, Data Centres, Transport, Energy, Smart City, Mobile, etc.), they assess and respond to the specific needs of each of our customers.

In direct contact with all national and third-party operators, our sales team can offer you personalised support and advice, helping you to choose the solutions best suited to your market's specific engineering needs.





Design office









Quality





Production

Our wiring solutions are fully assembled and integrated at our production site in Lannion, where our workshops extend over 3,000 m². In addition to the development of industrial employment in France, this organisation gives us greater responsiveness to support you more effectively with your deployment projects.



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7



Logistics



PRODUCT DESIGN



Integrated design office

Rapid product development and customisation in line with customer needs

PRODUCTION



Complete control over production chain Industrial flexibility Rapid delivery

ADVICE AND EXPERTISE



Needs analysis

Technical recommendations



COPPER CABLES AND COMPONENTS



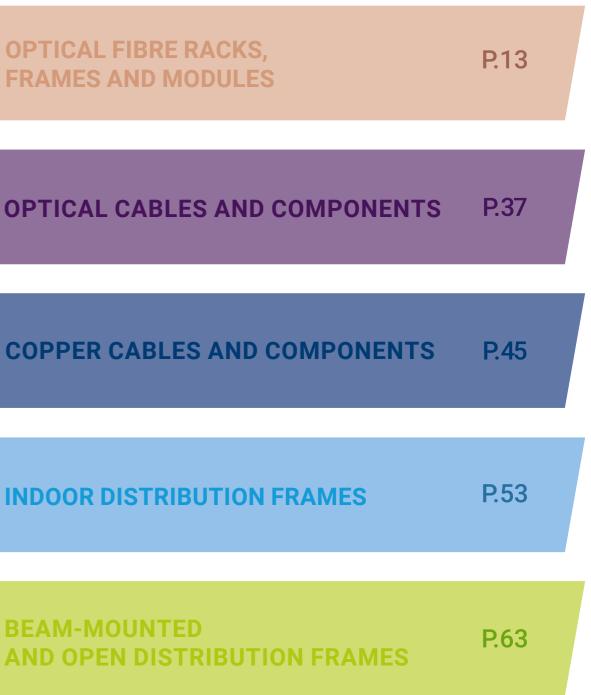


BEAM-MOUNTED AND OPEN DISTRIBUTION FRAMES

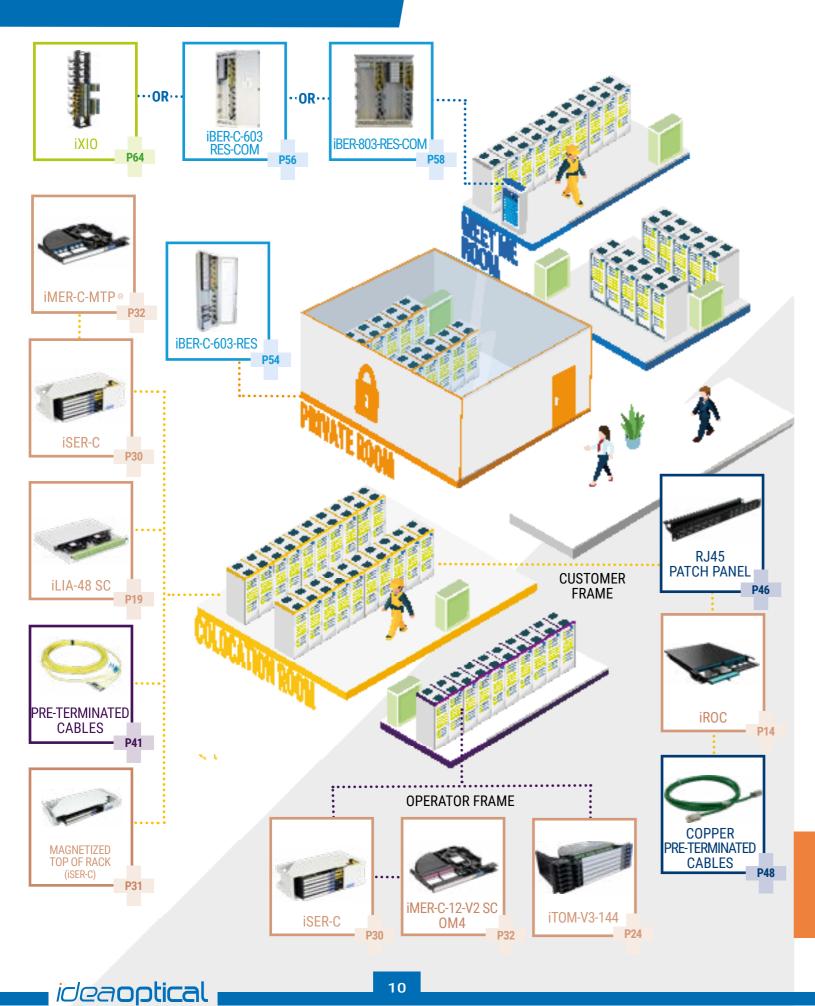
Guaranteed products

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TABLE OF CONTENTS



DATA CENTRE





Project management

We also propose the turnkey delivery of your project through our partner network. Installation of containments, CFA contractor management, we work with you to make your project a success.



Thanks to the synergy between Idea Optical and ACOME, we are the only French manufacturer that fully controls cable and terminal equipment production. Our sales team is available to put you in touch with a partner installer near you so that they can propose an effective cabling solution adapted to your needs!

11

SERVICES

Technical recommendations

Based on your datacenter layout, we can propose cabling solutions for your computer room or your Meet-me-Room.

Distribution frame location, cable trays, cabling rules, etc. all compliant with the TIER III or TIER IV engineering recommendations.



Training and Guarantee

Our training program allows us to certify installers and offer an extended 25-year guarantee on our cabling solutions. You can therefore be certain of your network performances.

	10 20 21 22 23	24 ACTES 24	Ideaoptical Ideaoptical
	Optical	fibr and	e racks, modules
Travit 1 2 3 4 3 6 7 8 9 10 11 12 13	iROC	P.14	iMOD-ROC
Mang 1 2 3 4 5 8 7 8 9 10 11 12 13	iLIA-V2-12/24/48-1U	P.18	iLIA-48 P.19
	iLIA-96	P.20	ILIA MONITORING P.21
2	iLIA MIXTE	P.22	ILIA RACK OPTIONS P.23
1 2 3 4 5 6 7 8 9 10 11 12 13	iTOM-V3	P.24	PRE-WIRED iTOM-V3-144 P.26
	3U HORIZ. OVERLENGHT STORAGE	P.27	iTOR-24 P.28
	iTOD-24/48	P.29	iSER-C P.30
	ISER-C RACK OPTIONS	P.31	COMPACT MODULES P.32
	CABLES ANCHORING	P.34	
		24	

.

9



144 OF HIGH DENSITY OPTICAL RACK

USE

The iROC rack is intended for high-density applications requiring 144 optical fibres on 1U. Its modular design provides the flexibility and scalability needed for all uses.



iROC-4 equipped with iMOD-ROC-12 modules















Anchoring of pre-terminated or spliced cable

Cord guide and marking area



N/	AME	UNIT		
Height		U	1	
	fibres		144	
		iMOD-ROC-8	18	
Capacity	moduloo	iMOD-ROC-12	12	
	modules	iMOD-ROC-24	6	
		iMOD-ROC-36	4	
Access			Insertion / extraction of modules from the front or rear	
Cable anchorin	g		12 BEC anchoring locations (12 to 135° or 12 in-line) 24 T-cuts (12 to 90° and 12 in-line)	
Overall dimensi	ions (HxDxW) ⁽¹⁾	mm	44 x 490 x 301	
Distance front	panel / upright	mm	95 / 215	
Weight ⁽²⁾		kg	2.9	
Operating temp	erature	°C	-25 / +70	
Material			Steel and polycarbonate	
Colour		RAL	9005 (dark black)	
Option			Rear cable anchoring tray	

⁽¹⁾ With rear cable anchoring tray and front cable guide. ⁽²⁾ Empty.

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DESCRIPTION

The iROC consists of:

- 1 modular 19" 1U chassis accommodating 4 / 6 / 12 / 18 modules;
- 1 swivel flap on the front face for marking fibres and guiding cords;
- 1 removable rear tray for anchoring pre-terminated or spliced cables.



iROC-6 equipped with iMOD-ROC-8 modules



iROC-2 equipped with iMOD-ROC-24 modules

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14







144 OF HIGH DENSITY OPTICAL RACK



Shutter panels

Removable rear cable anchoring tray (option)



iMOD-ROC

iROC OPTICAL RACK MODULES

USE

The iMOD-ROC modules are used to equip the iROC rack with all the features necessary for connection, splicing, monitoring, coupling or multiplexing. They can be inserted from the front or rear of the frame for ease of use during installation and maintenance.

DESCRIPTION

- 4 formats available :
 - 8 optical positions on 1/3 of U; _
 - 12 optical positions on 1/3 of U;
 - 24 optical positions on 1/3 of U; -
 - -36 optical positions on 1U;
- Splice connection, microbreakout cable or MPO/MTP® Base-8, 12 and 24;
- Front panel connectors available in LC, SC, MPO/ MTP®, SN or MDC;
- TAP monitoring modules.

A shutter panel for each module format is available as an option.

iMOD-ROC-ER

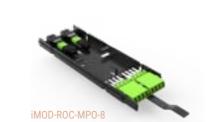
SPLICING AND CONNECTION MODULE

iMOD-ROC-ER modules are available for 12 and 24 fibres, with one or two cassettes of 12 single or ribbon splices respectively. The pins at the rear of the module are used to attach the Idea Optical range of Ø5 mm tubes or cables.



iMOD-ROC-ER-24







CONNECTION MODULE FOR PRE-TERMINATED CABLE

iMOD-ROC-R modules are available in 12 and 24 LC connectors and permit connection of pre-terminated cables up to 24 OF. The 5 mm pins at the back of the module are suitable for anchoring the Idea Optical 6, 12 and 24 OF cables.



iMOD-ROC-R-24





iMOD-ROC-MPO/MTP®-8/12/24

CONNECTION MODULE FOR MPO/MTP®

PRE-TERMINATED CABLE

iMOD-ROC-MPO/MTP® modules are available in 8, 12 and 24 LC connectors and enable pre-terminated MPO/MTP® cables to be connected. The 24-connector module enables 1 base-24 cable, 2 base-12 cables or 3 base-8 cables to be connected.

iMOD-ROC-MPO/MTP®-36 **CONNECTION MODULE FOR MPO/MTP®**

PRE-TERMINATED CABLE

iMOD-ROC-MPO/MTP®-36 modules are available in 12, 24 or 36 LC connectors and enable the 3 types of connection : splicing, pre-terminated LC cables or MPO/ MTP®.





iMOD-ROC-TAP-24





Lashing comb for 2 cables Ø5 mm

Marking and tracking areas

NAME		UNIT	iMOD-ROC-8	iMOD-ROC-12	iMOD-ROC-24	iMOD-ROC-36
Capacity	SC-MPO/MTP [®] LC	fibre	4 (2 DX) 8 (2 QUAD)	6 (6 SX) 12 (6 DX)	12 (12 SX) 24 (12 DX)	18 (18 SX) 36 (18 DX)
MPO/MTP® a	dapter inputs		2	4	8	3
Tray		12 splices	-	1	2	1
Cable inputs / protection tube			-	1 (2 x Ø5 mm)	2 (2 x Ø5 mm)	1 (1 x Ø5 mm)
TAP module			Yes (consult us)			
Fibre type			G.652.D, G.657.A2, G.655, OM3, OM4 et OM5			
Max. patch co	rd diameter	mm		2.	.0	
Overall dimens	sions (HxDxW)	mm	13 x 249 x 69	13 x 249 x 105	13 x 249 x 214	40 x 219 x 103
Weight ⁽¹⁾		kg	0.1	0.1	0.1	0.6
Operating temperature °C		-25 / +70				
Material		Polycarbonate Steel			Steel	
Colour	Ir RAL		9005 (dark black)			
) Empty						

(1) Empty

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iMOD-ROC

iROC OPTICAL RACK MODULES



iMOD-ROC-TAP

MONITORING MODULE

iMOD-ROC-TAP modules are available in 8, 12 et 24 fibres and enable all configurations for network monitoring. Modules are supplied with a wiring diagram.



MPO/MTP® input



iLIA-V2-12/24/48-1U

SLIDING OPTICAL RACK

USE

The iLIA-V2-12/24/48 is a sliding 19"-1 U optical rack for connecting fibre-optic cables by splicing or direct connection. Light and ergonomic, it offers complete safety and reliability for the installation and maintenance of your fibre-optic networks.

To save time during installation, the racks come pre-equipped with adapters and pigtails.



DESCRIPTION

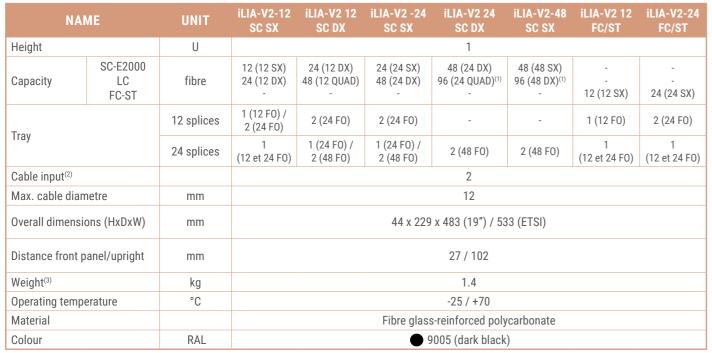
The iLIA-12/24 optical rack is composed of:

- 1 fixed metal cover supporting and protecting the whole unit;
- 1 sliding tray for anchoring up to two cables in the right input or two cables in the left input, equipped with a device for locking in open position;
- 2 19" and ETSI compatible fastening struts for mounting in all types of frames;
- 1 complete mounting kit (cages, screws, cable gland, cable ties)





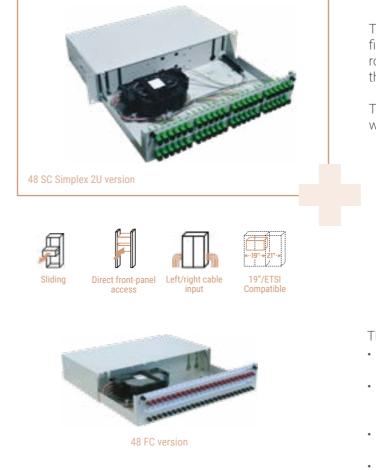




⁽¹⁾ Version with 96 connection points in connection only (without splice tray). ⁽²⁾ Number of cable inputs available in splicing version (trays and pigtails). By default the cable inputs are on the right but can be configured with cable inputs on the left. (3) Configuration 24 SC without cable gland.

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NAME		UNIT	iLIA-48	iLIA-48 FC/ST	
Height		U	2	2	
Capacity	SC-E2000 LC FC-ST	fibre	48 (48 SX) 96 (48 DX)	- - 48 (48 SX)	
Τ		12 splices	4 (48 OF)	4 (48 OF)	
Tray		24 splices	2 (48 OF)	2 (48 OF)	
Cable input ⁽¹⁾			2		
Max. cable diar	netre	mm	12		
Overall dimensi	ions (HxDxW) ⁽²⁾	mm	88 × 220 × 483 (19") /533 (ETSI)		
Distance front	panel/upright	mm	-55	/ 154	
Weight		kg	6.0 ⁽³⁾		
Operating temperature °C		°C	-25 / +70		
Material			Steel		
Colour ⁽⁴⁾ RAL		7 035 (light grey)			

⁽¹⁾ Number of cable inputs available in splicing version (trays and pigtails). By default, the cable inputs are on the right but the rack can be configured with cable inputs on the left. ⁽²⁾ With adapters, without cable glands. ⁽³⁾ Configuration 48 SC 2U. ⁽⁴⁾ Other colours by assessment.

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iLIA-48

SLIDING OPTICAL RACK

USF

The iLIA-48 is a sliding 19" optical rack of 2U, for connecting fibre-optic cables by splicing or direct connection. Thanks to its robust construction, it offers complete safety and reliability for the installation and maintenance of your fibre-optic networks.

To save time during installation, the racks come pre-equipped with adapters and pigtails.



48 ST version

DESCRIPTION

The iLIA-48 optical rack is composed of:

• 1 fixed metal cover supporting and protecting the whole unit;

1 sliding tray for anchoring up to two cables in the right input or two cables in the left input, equipped with a locking device in open position;

2 19" and ETSI compatible fastening struts for mounting in all types of frames;

1 complete mounting kit (cage nuts, screws, cable gland, cable ties)

iLIA-96

SLIDING OPTICAL RACK

USE

The iLIA-96 is a sliding 19"-1U optical rack for connecting fibre-optic cables by splicing or direct connection. Thanks to its robust construction, it offers complete safety and reliability for the installation and maintenance of your fibreoptic networks.

To save time during installation, the racks come pre-equipped with adapters and pigtails.



DESCRIPTION

The iLIA-96 optical rack is composed of:

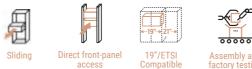
- 1 fixed metal cover supporting and protecting the whole unit;
- 1 sliding tray for anchoring up to two cables in the right input or two cables in the left input, equipped with a locking device in open position;
- 2 19" and ETSI compatible fastening struts for mounting in all types of frames;
- 1 complete mounting kit (cage nuts, screws, cable gland, cable ties).





THA AC MULTI MODE





00000 Assembly and factory testing

COLUMN DESCRIPTION

U TAP

mm

kg °C

iLIA MONITORING V1 SC/APC version

NA	ME	UNIT	iLIA-96 SINGLE-MODE	iLIA-96 MULTI-MODE
Height		U	1	
Capacity	LC	fibre	96 (24 Q	UAD)
Tray	Tray		4	
Fibre type			G652 D, G657 A2 OM2, OM3, OM4, OM5	
Cable input			2	
Max. cable diam	netre	mm	12	
Insertion loss (I	L)	dB	≤ 0.25 max ≤ 0.12 average Grade B	≤ 0.3 max ≤ 0.10 (low loss version)
Return loss (RL)		dB	UPC ≥ 50 (Grade 2) APC ≥60 (Grade 1)	PC ≥ 30
Overall dimension	ons (HxDxW) ⁽¹⁾	mm	88 × 220 × 483 (1	9")/533 (ETSI)
Distance front panel/upright		mm	-55 / 1	54
Weight ⁽²⁾	Weight ⁽²⁾ kg		3.3	
Operating tempe	Operating temperature		-25 / +70	
Material			Steel	
Colour ⁽³⁾		RAL	9005 (dark	black)

⁽¹⁾ With adapters, without cable glands. ⁽²⁾ Empty. ⁽³⁾ Other colours by assessment.

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20





⁽¹⁾ With adapters. ⁽²⁾ Empty.

NAME

Overall dimensions (HxDxW)⁽¹⁾

Operating temperature

LC

Height

Capacity

Weight⁽²⁾

Material Colour

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iLIA MONITORII

8

iLIA MONITORING

OPTICAL RACK FOR SUPERVISION

USE

iLIA Monitoring devices are 19"-1U optical racks for supervision of optical networks.



ILIA MONITORING V2

DESCRIPTION

iLIA Monitoring systems include up to 12 TAPs (Test Access Points) and enable reliable, permanent access to network traffic without degrading performance.

Three versions are available:

iLIA MONITORING V1: full front-panel access;

• iLIA MONITORING V2: "Operations" access on the front panel and "Supervision" access at the rear;

• iLIA BIDIRECTIONAL MONITORING: a version dedicated to single-fibre dual-wavelength optical transmissions (1310/1550 nm.

Different splitting rates are available (50/50, 70/30, 80/20, etc.) according to the application.

The racks come in single or multi-mode versions.

IG V1	ILIA MONITORING V2	ILIA MONITORING BIDIRECTIONAL
	1	
	12	12
	44 × 220 × 483 (19")/533 (ETSI)	
	3.5	
	-25 / +70	
	Steel	
	7 035 (light grey)	



ILIA MIXTE

COMBINED OPTICAL - COPPER RACK

USE

The iLIA MIXTE optical fibre rack is a scalable solution for providing optical and copper connectivity in a 19" frame. The fibre and copper parts are separated mechanically in order to clearly distinguish between the two transmission media. The iLIA MIXTE optical fibre rack is designed to allow optical connection with a pre-terminated or spliced cable.



Optical fibre rack equipped with a 12 OF pre-terminated cable and 12 four pair twisted cables

DESCRIPTION

The iLIA-MIXTE optical fibre rack is composed of:

- 1 fixed metal cover supporting and protecting the whole unit;
- 1 sliding tray for anchoring up to two optical cables to be spliced or pre-terminated on the left, and up to 12 twisted pair cables on the right, separated by a partition;
- 1 complete mounting kit (cage nuts, screws, cable gland, cable ties).



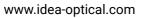


Optical fibre rack equipped with a 12-splice tray

N/	ME	UNIT	
Height		U	1
	SC-E2000		12 (12 SX)
Concoity	LC	fibre	24 (12 DX)
Capacity	RJ45	copper	12
	breakouts	fibre	2
Tray		12 splices	2
Overall dimens	ions (HxDxW)	mm	44 x 271 x 484 (19") / 534 (ETSI)
Distance front	panel / upright	mm	-55 / 154
Weight ⁽¹⁾		kg	4.0
Operating temp	erature	°C	-25 / +70
Material			Steel
Colour		RAL	9005 (dark black)

(1) Empty.

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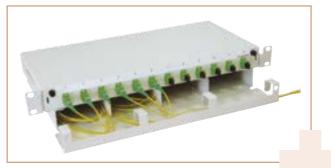


22



PATCH-CORD GUIDES

Can be used to guide patch cords connected on the front panel to the sides of the frame, to prevent snagging or jamming when closing doors. Overall dimensions (HxDxW): 44 × 282 × 483mm (19") 533mm (ETSI) on iLIA 1 U 41 × 71 × 415mm patch-cord guide only.



1U PATCH-CORD STORAGE

The patch-cord storage rack is attached by rivets under the iLIA connection rack.

It can be used to organise overlengths of optical patch cords, thereby facilitating network maintenance. It has four compartments which can each hold up to 12 m of 2.8mm diameter cable. Overall dimensions (HxDxW): 88 × 282 × 483mm (19") 533mm (ETSI) (including iLIA rack)



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23

iLIA RACK OPTIONS



EXTERNAL REMOVABLE ANCHORING

iLIA racks can accommodate, at the rear, ACS or BEC-72/144-6T anchoring devices. The protective tubes (corrugated or smooth) link the anchoring device and the rack. External anchoring enables a multi-tube optical cable to be distributed to multiple racks.



iLEO

iLEO is a patch-cord storage rack designed to coil overlengths of optical patch or copper cords in crossconnect frames. It is equally well suited to a 19" or ETSI chassis and enables optimal wiring management.

It can also be equipped with the patch cord guide shown above.

Overall dimensions (HxDxW):

44 × 205 × 483mm (19") 533mm (ETSI)

iLEO-12

iLEO-12 is a slanted 12-compartment, depth-adjustable storage rack, designed to coil overlengths of optical patch or copper cords in cross-connect frames. It can be installed in a 19" or ETSI frame.

It can also be equipped with the patch cord guide.

Overall dimensions (HxDxW):

44 × 249 × 483mm (19") 533mm (ETSI)



iTOM-V3

PIVOTING OPTICAL FIBRE RACK

USE

The iTOM-V3 is a 19" optical rack for connecting fibre optic cables by splicing.

With its very compact design, it supports up to 144 SC type connection points for a height of 3U. It is particularly suitable for FTTH subscribers in indoor or outdoor fibre distribution terminals.



iTOM-V3-144-CG 3U







Simple locking

The pivoting front shutter facilitates cleaning operations



The iTOM-V3 is composed of:

- 1 fixed section for guiding the protective tubes to the splicing trays;
- up to 6 individual trays pivoting right or left with a capacity of 24 fibres on SC connectors;
- 1 transparent pivoting front shutter per tray, giving direct visual and physical access to the adapters (for maintenance and cleaning operations);
- 1 large-format splice tray per tray. ٠

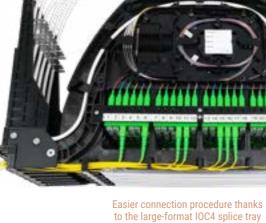


Light

Identification

Right/left hinge





N	AME	UNIT	iTOM-V3-1U	iTOM-V3-2U	iTOM-V3-3U
Height		U	1	2	3
O on a citu(1)	SC-E2000	films	48 (48 SX)	96 (96 SX)	144 (144 SX)
Capacity ⁽¹⁾	LC	fibre	48 (48 SX or 24 DX)	96 (96 SX or 48 DX)	144 (144 SX or 72 DX)
Tray 24 splices		24 splices	2	4	6
Max. cord dian	netre	mm	2.0		,
Overall dimens	ions (HxDxW)	mm	$44 \times 260 \times 483^{(2)(3)}$	88 × 260 × 483 ⁽²⁾⁽³⁾	133 × 260 × 483 ⁽²⁾⁽³⁾
Distance front	panel / upright	mm		29.5	,
Weight ⁽⁴⁾		kg	1.6	2.9	4.2
Operating temperature °C			-25 / +70		
Material			Fibre glass-reinforced polycarbonate		ate
Colour		RAL	9005 (dark black)		

⁽¹⁾ Other connectors on request. ⁽²⁾ Depth 310mm with rear anchoring option for BEC. ⁽³⁾ ETSI adaptation available on request. (4) Empty.

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24

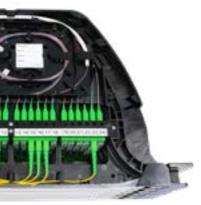




PIVOTING OPTICAL FIBRE RACK



Quick identification by using a VFL, thanks to the transparent front shutter.





PRE-WIRED ITOM-V3-144

COMBINED OPTICAL FIBRE RACK - PRE-WIRED

3U HORIZONTAL OVERLENGHT STORAGE MODULE

USE

The PRE-WIRED iTOM-V3-144 is a 19" pre-terminated pivoting optical fibre rack. It is highly compact and incorporates 144 SC or LC connection points for a height of 3U.



25 m pre-wired iTOM-V3-144 packaging



DESCRIPTION

The PRE-WIRED iTOM-V3-144 is composed of:

- 1 fixed part integrating a fan-out device for guiding the protection tubes to the splices trays;
- 6 individual trays pivoting right or left with a capacity of 24 fibres on SC/APC connector;

The cable fibres are pre-terminated on the optical fibre rack's pigtails by means of soldering.









Depth

Left/right cable input



19" / ETS

N <i>A</i>	ME	UNIT		
Height		U	3	
SC-E2000	SC-E2000	fibre	144 (144 SX)	
Capacity ⁽¹⁾	LC	lible	144 (144 SX ou 72 DX)	
Tray		24 splices	6	
Max. cord diam	eter	mm	2.0	
Cable length		m	25 ⁽²⁾	
Overall dimensi	Overall dimensions (HxDxW)		133 x 260 x 483 ⁽³⁾⁽⁴⁾	
Distance front p	Distance front panel / upright		29.5	
Weight ⁽⁵⁾		kg	4.2	
Operating temp	erature	°C	-25 / +70	
Material			Fibre glass-reinforced polycarbonate	
Colour	RAL		9005 (dark black)	
Pack	aging			
Dimensions (H) of the packagin			180 x 810 x 1210	
Weight ⁽⁵⁾			8.9	
Packing			1230 x 800 x 1210 (3 boxes/pallet)	

⁽¹⁾ Other connectors on request.⁽²⁾ Other lengths available upon request.⁽³⁾ Depth 310 mm with rear anchoring option for BEC.⁽⁴⁾ ETSI adjustment available on request.⁽⁵⁾ Empty.

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DESIGNATION		UNIT	
Height		U	3
Concoity	cords		288 (with Ø 2,00 mm cords)
Capacity overlenght		m	0,4 min / 0,9 max
Overall dimens	sions (HxDxW)	mm	133 x 190 x 483
Weight ⁽¹⁾		kg	4,0
Operating tem	perature	°C	-25 / +70
Material			Steel / Fibre glass-reinforced polycarbonate
Colour		RAL	9005 (dark black)

(1) Empty.

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USE

The horizontal overlength storage module manages cable overlength in a 19"-3U (height) space.



3U Horizontal Overlength Storage integrated in 19" frame

DESCRIPTION

The horizontal overlength storage module includes:

- 1 3U patch cord management space;
- 1 patch cord inputs to the right or left depending on how the 19" horizontal overlength storage module is mounted on the chassis;
- 3 cylinders and two half-cylinders that comply with G652 and G657 fibre bend radii.



iTOR-24

PIVOTING OPTICAL FIBRE RACK

USE

The iTOR-24 is a 19"-1U pivoting optical fibre rack for splicing optical cables or for direct connection with pre-terminated cables.







1		N.	
iTOD-48			
Ē	£1_		

IJ ∕₽ Identification Pivotina

Secure

≪··19"·**>** 21"·**>** 19"/ETSI Compatible



iTOD-24

N	AME	UNIT	iTOD-24	iTOD-48
Height		U	1	
Capacity	SC-E2000	fibre	24 (24 SX)	48 (48 SX)
Tray		24 splices	1	2
Overall dimens	sions (HxDxW)	mm	44 × 274 × 483 (19")/533 (ETSI)	
Weight ⁽¹⁾		kg	2.8	1
Operating temperature		°C	-25 / +70	
Material			Steel	
Colour		RAL 07035 (light grey)		nt grey)

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(1) Empty.

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DESCRIPTION

The iTOR-24 consists of:

- 1 fixed side part allowing one or more cables to be anchored using the ACS plate or the BEC-72/144-6T;
- 1 pivoting tray consisting of a strip of adapters, splice . trays, a patch cord coiling area, and a metal cover;
- 1 mixed fixing system allowing it to be mounted in a 19" . or ETSI frame.

N	AME	UNIT	
Height		U	1
Capacity SC-E2000 LC FC-ST		fibre	24 (24 SX or 12 DX) 24 (12 DX) 12 (12 SX)
Tray		12 splices	1 (12 OF)/2 (24 OF)
Overall dimensions (HxDxW)		mm	44 × 220 × 483 (19")/533 (ETSI)
Distance front	panel/upright	mm	45
Weight ⁽¹⁾		kg	2.4
Operating tem	perature	°C	-25 / +70
Material			Steel
Colour		RAL	7035 (light grey)

(1) Empty.

28



iTOD-24/48

PIVOTING OPTICAL CONNECTION RACK

USE

The iTOD is a 19" pivoting optical rack designed for splicing optical cables or direct connection via pre-terminated cables.



iTOD-48 with open front shutter

DESCRIPTION

The iTOD is composed of:

• 1 fixed metal section equipped with cable guides to guide the protective tubes;

24 adapters with external dust-proof valve or 48 SC simplex adapters;

- 2 splice trays 24 splices;
- 1 hinged front-panel shutter.

HORIZONTAL MANAGEMENT AREA DISTRIBUTION RACK

USE

iSER-C racks are used for anchoring optical cables, distribution of fibres to connection modules, and management of crossconnect patch cords on the front panel.

They are installed on 19" or ETSI-format frames and receive the splicing and/or connection modules (see "Compact modules") as well as various cable anchoring systems (see "Cable anchorings").

iSER-C racks come in 1U to 6U versions, thereby enabling a wide range of configurations.

Attachment options are also available, enabling installation above an existing frame, under a cable tray, or directly on the ceiling.





iSER-C 6U with 12 iMER-C

iSER-C equipped with two cable anchorings

DESCRIPTION

The ISER-C is composed of:

- 1 metal chassis used to anchor one or more cables on the rear panel, using anchoring elements (BEC-48, BEC-72/144-6T or BEC-144/288-12T);
- 1 side coiling area for each module, with protective shutter or a vertical half-cylinder management area (iSER-C-RES);
- 1 adapter kit for ETSI frames.



2 Stackable iSER-C-RES 6U

Idea Optical has developed several options for mounting the iSER-C racks, allowing for optimal space management.

MAGNETIZED TOP OF RACK

The magnetic top of rack is a chassis that fits easily into any type of frame and allows the optical rack to be easily aligned with the openings at the top. It is available in 1, 2 and 3U sizes, with a maximum capacity of 72 fibres.

The 54Kg neodymium magnets are non-slip and give the chassis a firm grip on the existing frame.

UPPER PANEL OR CABLE TRAY MOUNTING

The upper panel mount bracket holds 4 iSER-C 3U's with a maximum capacity of 288 fibres.

This option is used for overhead mounting directly in the ceiling. The telescopic mounting feet allow for precise adjustment to suit the on-site configuration.

NAME		UNIT	iser-c 1u	iser-c 2u	iser-c 3u	iser-c 4u	iSER-C 6U	
Height		U	1	2	3	4	6	
	modules	P ⁽¹⁾	2	4	6	8	12	
Capacity	SC-E2000 LC	fibre	24 (24 SX) 24 (24 SX or 12 DX)	48 (48 SX) 48 (48 SX or 24 DX)	72 (72 SX) 72 (72 SX or 36 DX)	96 (96 SX) 96 (96 SX or 48 DX)	144 (144 SX) 144 (144 SX or 72 DX)	
	MTP®	iMRS-C MTP® 24 version fibres	48	96	144	192	288	
Tray		12 splices	2	4	6	8	12	
Overall	Н	mm	44	88	133	176	266	
dimensions	DxW	mm	240 × 483 (19")/533 (ETSI)					
Weight ⁽²⁾		kg	2.2	2.5	3.8	4.7	6.0	
Operating temperature		°C	-25 / +70					
Material			Steel					
Colour		RAL	7035 (light grey)					

CABLE TRAY MOUNTING

The rack attaches directly to cable tray.

Its quick installation is suitable for providing a connection aera with a 3U capacity.

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⁽¹⁾ 1 P = 20mm in height. ⁽²⁾ Empty.

31

iser-c rack options









COMPACT MODULES

DESCRIPTION

The compact modules fit into the entire range of Idea Optical distribution frames. The various configurations offer a wide range of connection possibilities for all types of fibre optic networks.

The modules are designed around a pivoting axis, with a quick opening/closing device. They are available in right- or left-hand pivoting versions.

Easy access to the splice tray and connectors facilitates installation and maintenance. The fibre protection tubes, coming from the breakout boxes, are anchored on a multi-pin directly in the tray.

iMER-C-12-V2

COMPACT SPLICING AND CONNECTION MODULE

The iMER-C-12-V2 can be used to splice 12 optical fibres from a pigtail cable and to perform cross-connection using patch cords.



iMER-C-12-V2 SC OM4

iMER-C-12-V2 LC OM5





iMES-C-12-V2

COMPACT SPLICING MODULE

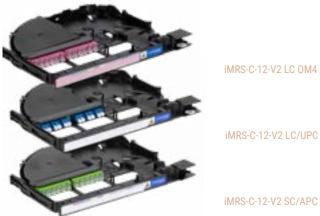
The iMES-C-12-V2 is used to splice optical fibres in continuity or to connect fibre ends to half-patch cords for the cross connection or connection to active equipment. Each module is equipped with a 12-position splice tray.

iMRS-C-12-V2

COMPACT CONNECTION MODULE

The iMRS-C-12-V2 is used to cross-connect optical cables. The internal cabling of the module is done by micro breakout cable or patch cords.



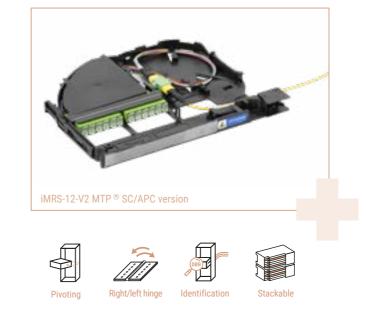


iMRS-C-12-V2 LC/UPC

iMRS-C-12-V2 SC/APC

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32





NA	ME	UNIT	iMER-C	iMRS-C	iMES-C	
	SC-E2000 LC	fibre	12 (12 SX) 12 (12 SX or 6 DX)	12 (12 SX) 24 (24 SX or 12 DX)	-	
Capacity	MTP fanout		-	1 MTP Base-8 SC/LC 2 MTP Base-8 LC 1 MTP Base-12 SC/LC 1 MTP Base-24 LC	-	
Tray		12 splices ⁽¹⁾	1	-	1	
Max. cord diametre mn		mm		2.0		
Overall dimensi	ions (HxDxW)	mm		20 × 205 × 262		
Weight ⁽²⁾		kg	0.4			
Operating temperature		°C	-25 / +70			
Material			Glass-fibre reinforced polycarbonate.			
Colour RAL				9005 (dark black)		

⁽¹⁾Ø 2.4 × 40. ⁽²⁾ 0.6kg in 24 LC version.

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33

COMPACT MODULES

iMRS-C V2 MTP®

MULTI-FIBRE CONNECTION COMPACT MODULE

The iMRS-C V2 MTP® is equipped with a fan-out of 8, 12 or 24 MTP®-SC or MTP®-LC pre-installed fibres. The connection is made directly to the MTP® connector inside the module. This version is ideal for Datacentres.





CABLE ANCHORING

12 TO 1152 OPTICAL FIBRES

Anchoring and fanning out of all types of optical cables up to 1152 OF before distribution to the equipment (optical rack, splice tray, connection strip, etc.).

Fan outs are performed by the protection tubes (corrugated or smooth).

BEC-72/144-6T

BEC-72/144-6T are anchoring and fan-out devices for optical cables.

They are intended for 72-fibre cables (12 fibres per tube) or 144-fibre cables (24 fibres per tube). They are directly mounted onto Idea Optical products (frames, street cabinets, boxes and racks) or onto connection plates.





BEC-144/288-12T

BEC-144/288-12T are anchoring and fan-out devices for optical cables.

They are suitable for 144-fibre cables (12 fibres per tube) or 288-fibre cables (24 fibres per tube). They are directly mounted onto Idea Optical products (frames, street cabinets, boxes and racks) or onto connection plates.

BEC-288/576-24T

BEC-288/576-24T can be used to anchor and fan out optical cables of high fibre density.

They are suitable for 288-fibre cables (12 fibres per tube) or 576-fibre cables (24 fibres per tube). Their quick-fastening system enables direct mounting onto all Idea Optical products (frames, street cabinets, boxes and racks) and connection plates.





BEC-576/1152-48T

BEC-576/1152-48T can be used to anchor and fan out optical cables of very high fibre density.

They are suitable for 576-fibre cables (12 fibres per tube) or 1152-fibre cables (24 fibres per tube). Their quick-fastening system enables direct mounting onto all Idea Optical products (frames, street cabinets, boxes and racks) and connection plates.

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34





	NAME		UNIT	BEC-72/144 6T	BEC-144/288 12T	BEC-288/576 24T	BEC-576/1152 48T	CONNECTION PLATE 3 POS. ⁽¹⁾	CONNECTION PLATE 7 POS. ⁽¹⁾
Reference				1311	1312	1313	1317	1314	1315
	protection	tube		6	12	24	48	-	-
Capacity	anchoring	3 pos.		3	2	1	1	-	-
bracket	bracket	7 pos.		7	4	2	2	-	-
Max. cable of	diametre		mm	15	18	19	30	-	-
Overall dime	ensions (HxDx	W)	mm	144 × 27 × 25	145 × 27 × 40	162 × 35 × 78	186 × 45 × 96	160 × 25 × 125	160 × 25 × 257
Operating temperature		°C	-25 / +70						
Material			Fibre glass-reinforced polycarbonate			Magnelis® steel			
Colour RAL 09005 (dark			dark black)			Steel			

⁽¹⁾ The number of positions stated corresponds to the maximum BEC-72/144-6T quantity that may be installed.

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CABLE ANCHORING

ANCHORING ACCESSORIES

PROTECTIVE TUBES

Protection tubes preserve the optical fibres after fanning out and link the cable mounted onto the anchoring boxes and the end devices (racks, modules, optical fibre racks, etc.).

CONNECTION PLATES FOR FRAMES

Connection plates are mounted onto 19" or ETSI frame mounts. They can be used to fasten ACS or BEC-type fan-out devices before distribution towards connection units. They come in two versions, enabling the fastening of 3 or 7 fan-out devices.



Optical pre-terminated cables and components

PRE-TERMINATED CSX1811 P.38	
INT / EXT PRE-TERMINATED CABLES P.40	
MESURING AND CONSUMABLES	

OPTICAL PATCH CORDS AND PIGTAILS . P.39

PRE-TERMINATED CABLES P.41



PRE-TERMINATED CSX1811

OPTICAL PATCH CORDS AND PIGTAILS

PRE-TERMINATED CONNECTION CABLE - 6, 12 OR 24 OF

USE

Idea Optical pre-terminated optical cables are custom-made to guarantee the optimal performance of your connections.

With ACOME, we have selected a cable manufactured in France that meets the highest requirements for high-speed transmissions.



DESCRIPTION

The pre-terminated optical connections consist of:

- 1 ACOME CSX1811 cable with 6, 12 or 24 fibres;
- 1 or more levels of custom-made, straight or layered
- . fan-outs:
- Optical connectors with low insertion loss.

EUROCLASS FIRE RATING

B2 _{CA}			low bending radio	IS.
C _{CA} D _{CA} E _{CA}	Cca - s1, d1, a1	L		
F _{CA}	IAME	UNIT	SINGLE-MODE	MULTIMO
Fibre type			G.657.A2	OM4
Connector			LC, SC or MPO	/MTP [®]
Connector typ	0e		UPC or APC	PC
Numbre of fib	res		6, 12 ou 2	4
Insertion loss	(IL)	dB	≤ 0.3 (typical 0.15 dB)	
Return loss (F	RL)	dB	≥ 50 (UPC) or ≥ 60 (APC)	≥ 30
Cable diameter		mm	5	
Cable lenght		m	on reques	t
Material Protection tube			UV-stabilized flame-retardant zer	o-halogen (LSOH) sheath
Pa	ckaging			
Туре			Bag (loop) / I	Drum

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38

Pre-terminated LC DX CSX1811 cable 24 OF

Traceability

Fast deployment

Factory

assembly

G.657.A2 single-mode and OM4 multimode fibres with

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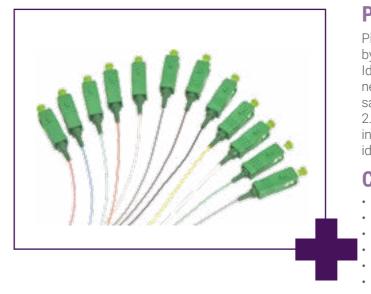
Meets regulatory

standards



Optical patch cords are an integral part of the connection products. Idea Optical offers all types of patch cords used in fibre optic networks. **CHARACTERISTICS** Connectors SC, FC, ST, LC, MU, E2000, etc. PC, UPC and APC polishings; G652 or G657 single-mode fibres; OM2 to OM5 multimode fibres; Simplex, duplex or uniboot cables LSZH; RoHS compliant patch cords.

NAME	UNIT	SINGLE
Insertion loss (IL)	dB	
Return loss (RL)	dB	> 50 (UPC) or
Repeatability (500 cycles)	dB	
Operating temperature	°C	



NAME	UNIT	SINGLE-MODE	MULTIMODE
Insertion loss (IL)	dB	Typ 0.2 max	x. 0.3
Return loss (RL)	dB	> 50 (UPC) or > 60 (APC)	> 30 (PC)
Repeatability (500 cycles)	dB	< 0.2	
Operating temperature	°C	-25 / +7	0

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OPTICAL PATCH CORDS

E-MODE	MULTIMODE
Тур 0.2	max. 0.3
or > 60 (APC)	> 30 (PC)
< ().2
-25 /	/ +70

PIGTAILS

Pigtails are used for equipment where the connection is made by splicing.

Idea Optical offers all types of pigtails used in fibre optic networks. Their Easy Strip structure allows for easy and safe stripping. Pigtails are available in the standard length of 2.0 m, or other lengths as requested. The 12 colours of the international codes (SAT, FOTAG2, DIN/VDE...) allow an easy identification when connecting.

CHARACTERISTICS

- SC, FC, ST, LC, MU and E2000 connectors:
- PC, UPC and APC polishings;
- G652 or G657 single-mode fibres;
- OM2 to OM5 multimode fibres;
- 900µm sheathing Easy Strip (semi-clamped);

RoHS compliant pigtails

INT / EXT PRE-TERMINATED CABLES

PRE-TERMINATED CABLES

FREE BREAKOUT STRUCTURE

Breakout cables can also be made using a single-tube free cable structure, with 6 to 24 fibres.

A fan-out is fitted on the cable and each fibre is then 2 mm sheathed individually. This type of mounting also offers the possibility of splicing one end of the cable into a splice tray.

This type of mounting is available on an indoor / outdoor LSZH cable or HDPE steel strengthened cable.

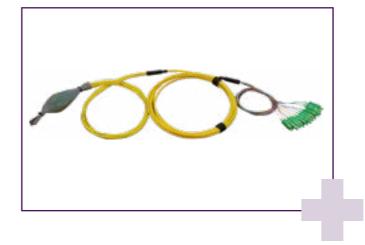


Factory

assembly

Meets regulatory standards

Traceability Fast deployment



Protective sleeve supplied, ensuring integrity of connectors during installation operations.

Ine genera annoan an

Example of connection on front panel of device

unu mun my

Connection example in an iTOM-V3 rack

UNIT

dB

dB

dB °C

NAME

Repeatability (500 cycles)

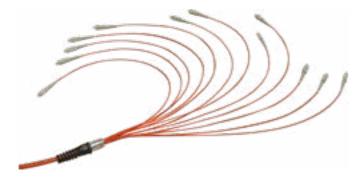
Operating temperature

Insertion loss (IL)

Return loss (RL)

CHARACTERISTICS

- Layered connectors;
- Pulling/installation protection;
- LSZH fibre glass reinforced cables or HDPE steel strengthened cables;
- RoHS compliant.



NAME	UNIT	SINGLE-MODE	MULTIMODE
Fibre type		G.652, G.657	OM2, OM3, OM4, OM5
Connector		SC, FC, ST, L	C, MU, E2000
Connector type		UPC or APC	PC
Numbre of fibres		6 to	0 24
Insertion loss (IL)	dB	≤ 0.3 max. (typical 0.2 dB)	
Return loss (RL)	dB	≥ 50 (UPC) or ≥ 60 (APC)	≥ 30
Repeatability (500 cycles)		< ().2
Operating temperature	°C	-25 /	/ +70

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40



MICRO-BREAKOUT CABLES

Micro breakouts are made using a 5mm diameter cable reinforced by aramid yarn with 12 and 24 optical fibres. A fan-out is fitted on the cable, enabling each fibre to be over-sheathed individually. The half micro breakout configuration allows the connection of one end of the cable in a splice tray.

The micro breakout cables allow a quick connection:

- between active devices;
- between active devices and optical heads;
- between optical heads. ٠

These small diameter micro breakouts facilitate installation and cabling in frames and cable trays. They are composed of single-mode (G652 or G657) or multimode fibres which can be sheathed at 900 µm or 2mm on their ends. They are produced according to the following specifications:

- total length;
- fan-out length;
- sheathing at ends: 900 µm or 2mm;
- straight or offset connectors.

It is also possible to configure half micro breakout cables if one end needs to be spliced.

CHARACTERISTICS

 \bigcirc

- 6, 12 and 24 fibres;
- SC, FC, ST, LC, MU connectors;
- Fitting straight or offset connectors;
- PC, UPC and APC polishings; ٠
- G652 or G657 single-mode fibres;
- OM2 to OM5 multimode fibres;
- aramid yarn reinforced cables LSZH; •
- RoHS compliant.

Specific configuration on request.

SINGLE-MODE	MULTIMODE
Тур 0.2 г	max. 0.3
> 50 (UPC) or > 60 (APC)	> 30 (PC)
< ().2
-25 /	+70

MEASURING AND CONSUMABLES





Reference	Name
14212	Laser defect viewer for 2.5mm ferrule
14211	Laser defect viewer for 2.5mm and 1.25mm ferrule



PIGTAIL CASES

Pigtail fibres are designed for reflectometry measurements. They are composed of one or more strands of fibre integrated into a rigid case meeting the demands of on-site use. The ends are terminated on request.

DESCRIPTION

- Compact pigtail case;
- Standard lengths 500 m in multi-mode, 1,000 m and 2,000 m in single-mode:
- Other lengths available on request;
- The pigtail fibres are supplied terminated (all types of connectors):
- Supplied with a measurement sheet (IL of connectors and reflectometry).

VISUAL FAULT LOCATOR

This laser is designed for detecting or locating a break on an optical fibre.

A red light is injected into the fibre. The break position immediately appears as a red dot on the tube.

DESCRIPTION

- Comes as standard with adapter for 2.5mm ferrules (SC, ST, FC, E2000);
- Optional adapter for 1.25mm ferrules (LC, MU);
- Range 6km in single-mode and 4km in multi-mode (options up to 12km);
- Operating in continuous or modulated mode;
- Voltage 5 mW;
- Laser Class 2:
- Comes with two 1.5 V AAA batteries;
- Dimensions: 13.5 × 170mm:
- Weight: 88g.

CLETOP

Cletop is the essential tool for dry cleaning optical connectors. It is used on connectors with ferrules of 2.5mm (SC-ST-FC-E2000) and 1.25mm (LC-MU) and eliminates dust and pollutants which affect the performance of optical connections. Each Cletop contains 1 cleaning tray which can perform up to 400 operations.

Reference	Name
14059 CLETOP-S Type A (blue ribbon) cleaning tray for 2.5mm ferrule	
14061	Refill for CLETOP-S Type A (blue ribbon) - set of 6 trays

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42



CLEANING PEN

Pens enabling dry cleaning of optical connector ferrules directly through an adapter. They eliminate dust and pollutants which affect the performance of optical connections.

The cleaning process involves pressure on the ferrule, and a distinctive click indicates that the operation is complete. The pens come in two versions, 1.25 and 2.5mm, suitable for all types of connectors (PC or APC) and each one can clean up to 525 times. Tip adjustable up to 45°.

Reference Name		Name
	14275	Cleaning pen for 2.5mm connectors (SC-ST-FC)
	14276	Cleaning pen for 1.25mm connectors (LC-MU)

ISOPROPYL ALCOHOL AND DISPENSER

Isopropyl alcohol is used to prepare the optical fibres before splicing and to clean the optical connectors. 1 litre bottle.

The dispenser makes it possible to control the quantity of alcohol dispensed. Its bayonet closure prevents any risk of leaking during transportation.

20	Cl	dispenser.	

	Reference	Name
14054 Isopropyl alcohol - 1 litre		Isopropyl alcohol - 1 litre
14053 Dispenser - 20 cl		Dispenser - 20 cl

SPLICE PROTECTORS

Transparent thermo-retractable splice protectors, length 40, 45 or 60mm. These take bare fibres of diameter 250 µm or sheathed 900 µm. The final diameter after drawing is 2.4mm. Packet of 100.

Also available in colour (ask us for details).

Reference	Name
14042 Colourless splice protectors W 40mm	
14040	Colourless splice protectors W 45mm
14041	Colourless splice protectors W 60mm

MEASURING AND CONSUMABLES





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Copper pre-terminated cables and components

RJ45 PATCH PANEL	P.46
CRIMPING TOOL	P.47
RJ45 PATCH CORDS	P.49



45

FEMALE RJ45 CONNECTOR P.47

PRE-TERM. COPPER CABLE P.48

RJ45 PATCH PANEL

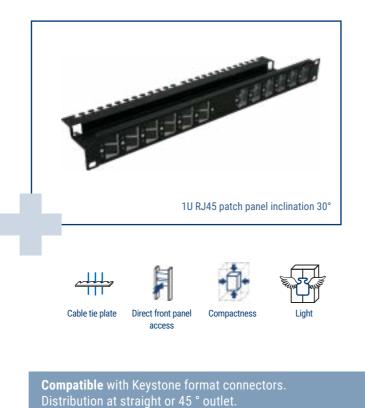
RJ45 24 PORT PATCH PANEL

FEMALE RJ45 CONNECTOR

USE

Idea Optical RJ45 patch panels enable RJ45 pre-terminated cables to be installed and cross-connected via the front panel to active equipment.









1U patch panel

DESCRIPTION

RJ45 patch panels comprise:

- 1 19" steel panel with grounding;
- 24 RJ45 ports;
- 1 complete mounting kit (cage nuts, screws, clamps).

NAME		UNIT	1/2 U PANEL	1 U PANEL	1 U PANEL - 30°
Height		U	1/2	1	1
Capacity	RJ45			24	
Dimensions (HxDxW)		mm	22 x 100 x 483	44 x 100 x 483	44 x 120 x 483
Weight		kg	0.4	0.8	1.0
Operating temperature		°C	-25 / +70		
Material			Steel		
Colour		RAL	Silver grey	9005 (da	ark black)

CRIMPING TOOL

USE

Tool for parallel crimping of female reinforced RJ45 connectors onto a copper cable.

Reference	Name
14366	Parallel crimping tool for female reinforced RJ45 connector

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USE

The reinforced RJ45 Cat. 6A connectors (ISO/IEC) enable 4 pair twisted cables to be connected. Their Keystone format fits all optical fibre racks and panels in the Idea Optical range. They are also compatible with the PoE IEEE 802.3 standards (af/at/bt).

Reference	Name	
882001201	Reinforced RJ45 Keystone CAT. 6A ISO/IEC connector for AWG 22 - AWG 24 to be fitted	
882001202	Batch of 24 reinforced RJ45 Keystone CAT. 6A ISO/IEC connector for AWG 22 - AWG 24 to be fitted	





PRE-TERMINATED COPPER CABLE

USE

Idea Optical pre-terminated copper cables are custommade to ensure optimal performance of your data centre connections.

With ACOME, we have selected a cable manufactured in France that meets the highest requirements for high-speed transmissions.



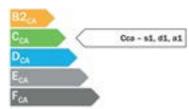
Reinforced RJ45 connector mounted on ACOME Cat. 7A cable

DESCRIPTION

RJ45 pre-terminated cables comprise:

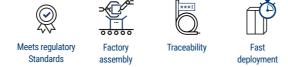
- 1 ACOME ACOLAN S/FTP Cat. 7A 1,500 MH z (22AWG) cable, 2 x to 6 x 4 pairs;
- 1 or 2 RJ45 Cat. 6A connectors in Keystone format.

EUROCLASSE FIRE RATING









Supports all EA 1000 MHz class protocols. Compatible with PoE, PoE+, UPoE & 4PPoE (PoE++) applications. Standards 802.3 af, at and bt.



Compatible with PoE, PoE+, UPoE applications.

	NAME	UNIT		
Cable core type			Twisted pair assembly	
Pair assemb	ly type		4 pair bundle (available in 2 x and 6 x 4 pairs)	
Wire diamete	er	AWG	22	
Operating te	mperature	°C	-25 / +70	
	Conductor		100% Copper cable	
	Reinforcement		Tin-plated copper braid	
Material	Insulation		Coloured cellular polyethylene $\emptyset \le 1.52 \text{ mm}$	
Wateria	Pair reinforcement		Alu/polyester ribbon around each pair	
	Tube		LSFROH	
Fire perform	ance		Smoke emission – Flame retardant - No halogenated gas	
Colour Tube			Green	
Applicable standards			IEEE 802.3 :10Base-T; 100Base-T; 2,5GBase-T; 5GBase-T; 10GBase-T IEEE 802.3 af (PoE) / 802.3 at (PoE+) / 802.3 bt (4PPoE 90W) IEEE 802.5 / FDDI / ATM / RNIS IEC 61156-5 ed.2 / EN 50288-9-1 ISO/IEC 11801-1 / EN 50173-1 EN 50174 RoHS 2011/65/UE REACH 1907/2006/EC	

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48



	NAME	UNIT		
Connector type			Reinforced RJ45 male	
Rated volta	ge	V	250	
Rated current		A	2	
Dielectric working voltage		V	1000V AC RMS 50/60 Hz	
Contact res	sistance	Ω	<20	
Socket lifetime		Connection cycles	750	
Copper gauge		AWG ⁽¹⁾	26	
Cable length		m	1 m or more on request	
	Inner protection		Aluminium foil, tin-plated copper braid	
	Exterior tube		LSOH	
Material	Socket body		Polycarbonate	
	Contact blade		Gold-plated bronze phosphorus (50 microns)	
	RJ45 socket		PVC + PC	
Colour	Exterior tube		🜑 grey, 🌑 green, 🔵 blue, 🔶 yellow, 🛑 red	
Colour	Male connector		Transparent	

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RJ45 PATCH CORDS

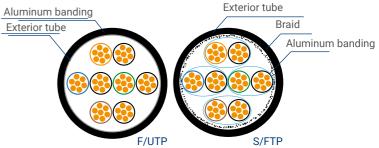
USE

Idea Optical RJ45 patch cords are available in F/UTP and S/FTP with crimped RJ45 connectors, ensuring you a high level of performance.

All of our cords undergo stringent quality control to guarantee their performance.

DESCRIPTION

• Cat. 6A F/UTP or S/FTP multi-strand cable ; 2 moulded RJ45 connectors; • 2 reinforcement versions of twisted pairs: - F/UTP basic reinforcement, - S/FTP optimum reinforcement.





The Meet-me-Room optical distribution frame

The Meet-me-Room is a vital part of the datacenter. It is where operator fibre joins to the fibre of clients hosted in the datacenter or fibres that will be distributed in a private datacenter.

MMRs have several purposes:

- R To host increasing numbers of telecommunications operators;
- **R** Customers' increasing needs for fibre;
- **R** Redundancy to a second MMR (TIER IV Uptime Institute datacenter);
- R Limited physical space (number of optical fibres//m²).

Distribution frame selection

Choosing a dedicated optical distribution frame is a must to be able to manage optical cabling properly. MMRs in a 19" rack should be banned as they make it impossible to maintain structured cabling after a high number of connections/disconnections. The optical distribution frame must allow for the patching of a high number of cords on the front with a single or restricted choice of jumpers and simple cabling rules available to users. It must also allow to fasten and fan out the cables to be spliced and to manage many preconnectorised links to IT racks. The distribution frame must also be selected according to the space available in the MMR room and the number of connectible racks.

The compact iBER-C-603-RES rack distribution frame

The compact distribution frame is suitable for

small Edge datacenters, or to create a patching spot in a private suite. Its compact

600x300mm format that includes the optical connection part and patching management means it can be installed against a wall or on a half slab (600x300mm), or back-to-back on a complete slab. A 300mm side extension

is available as an option

to manage high numbers of preconnectorised cables more comfortably.

This distribution frame is also available as a 1m high wall mounted box.

► More information on page 54

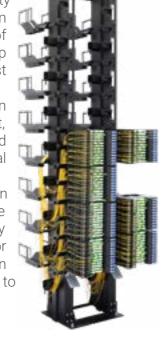


iXIO beam distribution frame

Designed for high capacity datacenters, this system allows the patching of high numbers of cords (up to 20,000 for the largest installations).

All the connection technology is at the front. the back being reserved to route cords on several levels (7 or 8).

This type of distribution frame is scalable and supports many configurations with one or more corners. On the down side, it requires space to move around the frames



► More information on page 64



Communicating racks are a very flexible alternative. They can be used to patch high numbers of jumpers from one rack to the next and to spread out cabling evenly. So a first rack can be reserved for operators, a second to a shared hosting room, another to a specific customer room, etc. Racks can also be added to extend the distribution frame (creation of a new room, redundancy with another site, etc.). The racks can be added side by side, at an angle, or back to back using specially designed built-in cable ducts. This system rationalises the type of cords needed to patch all the available optical points. To facilitate this operation, Idea Optical proposes a cord choice formula to optimise the required number of cord lengths.

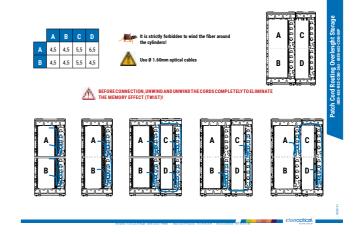


The symmetrical rack iBER-C-1203-RES distribution frame

The symmetrical distribution frame is a simple and effective solution for Edge type or small datacenters (50 to 100 racks). It allows to patch all optical points using a single cord length, thereby limiting the types of cord the operator needs to keep in stock. It can also be managed logically: operator drawers on the left, drawers to IT rooms on the right.

On the down side, the fibre requirement must be properly sized during the design phase as this type of distribution frame is not scalable.

▶ More information on page 55



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50

► More information on page 56





iBER-C-603-RES

OPTICAL DISTRIBUTION FRAME FOR MODULES

CROSS CONNECT OPTICAL DISTRIBUTION FRAME FOR MODULES

USE

The iBER-C-603-RES is a 600 × 300mm optical distribution frame, with a height of 2.0m or 2.2m, specially designed to manage high density optical fibres.



DESCRIPTION

The iBER-C-603-RES is equipped with a vertical cylinder management area, in right or left position, allowing easy crossconnection of optical patch cords inside the distribution frame and enabling patch cord exit from bottom or top. It is only compatible with 1P compact modules from the Idea Optical range (see "Compact modules").

A large lateral area is reserved for the fastening and fanning out of the optical cables by means of BEC type anchoring devices.



Anchoring Top/bottom cable

Ν	NAME		iBER-C-603-RES-47P	iBER-C-603-RES-95P	iBER-C-603-RES-105P		
	compact modules	P ⁽¹⁾	47	95	105		
	fibre		564	1140	1260		
Capacity	cords		282	570	630		
	cable connection plate		2 - Fixed	4 - Repositionable			
Upper/bottom	Upper/bottom panel		Pre-cut				
Door	Door		Solid or with glass door				
Side panels			Fixed Removable				
Overall	Н	mm	1000	2,000	2,200		
dimensions	DxW	mm	300 × 600				
Weight ⁽²⁾		kg	45.0	90.0	105.0		
Operating temp	Operating temperature		-25 / +70				
Material			Steel				
Colour	Colour RAL		🔵 7035 (light grey)				
Option			Brushes for roof and floor				

⁽¹⁾ 1 P = 20mm.⁽²⁾ Empty, without module.

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54



NAME iBER-C-120 UNIT compact P⁽¹⁾ 2 × modules 22 fibre Capacity cords cable connection plate Upper/bottom panel Doors Side panels Н mm 2,0 Overall dimensions DxW mm Weight⁽²⁾ kg 145 Operating temperature °C Material Colour RAL Option

⁽¹⁾ 1 P = 20mm. ⁽²⁾ Empty, without module.

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iBER-C-1203-RES

USE

The iBER-C-1203-RES is a 1200 × 300mm cross connect optical distribution frame, with a height of 2.0m or 2.2m, specially designed to handle high density optical fibres.



DESCRIPTION

The iBER-C-1203-RES is equipped with a vertical cylinderbased management area, allowing easy cross-connection of optical patch cords inside the distribution frame and enabling patch cord exit from bottom or top. It is only compatible with 1P compact modules from the Idea Optical range.

Two large lateral areas are reserved for the fixing and fanning out of the optical cables by means of BEC type anchoring devices.

03-RES-95P	iBER-C-1203-RES-105P					
× 95	2×105					
280	2520					
800 (with patch co	ords of Ø 1.60mm)					
2 × 4 - Rep	ositionable					
Pre	-cut					
So	lid					
Remo	vable					
000 2,200						
300 × 1200						
15.0	160.0					
-25 / +70						
Steel						
7 035 (light grey)						
Brushes for r	oof and floor					



iBER-C-603-RES-COM

COMMUNICATING OPTICAL DISTRIBUTION FRAME FOR MODULES

USE

The iBER-C-603-RES-COM is a 600 × 300mm communicating optical distribution frame, with a height of 2.0m or 2.2m, specially designed for the management of high-density optical fibres, particularly in data centres.



DESCRIPTION

The iBER-C-603-RES-COM is equipped with a vertical cylinderbased management area, allowing easy cross-connection of optical patch cords inside the distribution frame. The distribution frame has two cable raceways, at the top and bottom of the frame, allowing horizontal communication between several adjacent distribution frames (communicating distribution frame).

It is only compatible with 1P compact modules from the Idea Optical range (see "Compact modules"). A large lateral area is reserved for the fastening and fanning out of the optical cables by means of BEC type anchoring devices.



N.	NAME		iBER-C-603-RES-COM-80P	iBER-C-603-RES-COM-90P	
	compact modules	P ⁽¹⁾	80	90	
	fibre		960	1080	
Capacity	cords		480 for internal cross-connection 960 for communicating cross-connection	590 for internal cross-connection 1080 in communicating cross-connection	
	cable connection plate		4 - Repositionable		
Upper/bottom	panel		Pre-cut		
Door			Solid		
Side panels			Removable		
Overall	Н	mm	2,000	2,200	
dimensions	DxW	mm	300 × 600		
Weight ⁽³⁾	·	kg	90.0	105.0	
Operating temperature		°C	-25 / +70		
Material			Steel		
Colour		RAL	7035 (light grey)		
Option			Brushes for roof and floor		

⁽¹⁾ 1 P = 20mm.⁽²⁾ Empty, without module.

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56



NAME		UNIT	iBER-803-COM-36U	iBER-803-COM-40U	
Operational he	ight of 19" areas	U	36	40	
Capacity cable connection plate			6		
Upper/bottom	panel		Pre-c	ut	
Doors			Soli	d	
Side panels			Removable		
Overall	Н	mm	2,000	2,200	
dimensions	DxW	mm	300 × 800		
Weight ⁽¹⁾		kg	60.0	75.0	
Operating temperature		°C	-25 / +70		
Material			Steel		
Colour		RAL	🔵 7035 (light grey)		
Option			Brushes for ro	of and floor	

⁽¹⁾ Empty, without equipment.

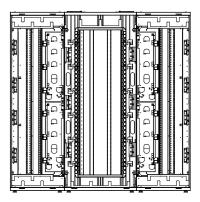
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iBER-803-COM

19" COMMUNICATING OPTICAL FRAME

USE

As part of the family of "communicating" frames, the iBER-803-COM is a distribution frame, in 19" format, dedicated to telecom operators. It allows the installation of all types of equipment and can be inserted into the iBER-C-603-RES-COM or iBER-803-RES-COM frames.



Configuration example: iBER-C-603-RES-COM + iBER-803-COM + iBER-C-603-RES-COM

DESCRIPTION

The iBER-803-COM is equipped with two cable raceways, one at the top and one at the bottom of the frame, which allow horizontal communication between several adjacent distribution frames. In contrast to the iBER-C-603-RES-COM, the iBER-803-COM has a central 19" area surrounded by two vertical cable trays. With no bottom panel, this frame is ideal for the installation of deeper transmission equipment to which the optical connections are made from the right or left.



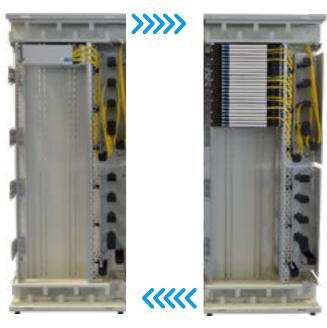
iBER-803-RES-COM

19" COMMUNICATING OPTICAL DISTRIBUTION FRAME

19" COMMUNICATING OPTICAL DISTRIBUTION FRAME

USE

The iBER-803-RES-COM is an 800 × 300mm optical distribution frame, with a height of 2.0m or 2.2m, for all types of equipment in 19" format. The frames are juxtaposed to form an indoor optical distribution frame. In compliance with the regulations in force and adapted to the management of high density optical fibres.



iBER-803-RES-COM 36 U CD distribution frames

DESCRIPTION

The iBER-803-RES-COM is equipped with a vertical cylinder management area, in right or left position, allowing easy crossconnection of optical patch cords inside the distribution frame. The distribution frame has two cable raceways, at the top and bottom of the frame, allowing horizontal communication between several adjacent distribution frames.

It accommodates all types of 19" racks pivoting on right or left, including iTOM racks, and 19" sliding optical racks. Its structure can accommodate all the anchoring and fan-out devices in all capacities, such as BEC type elements.

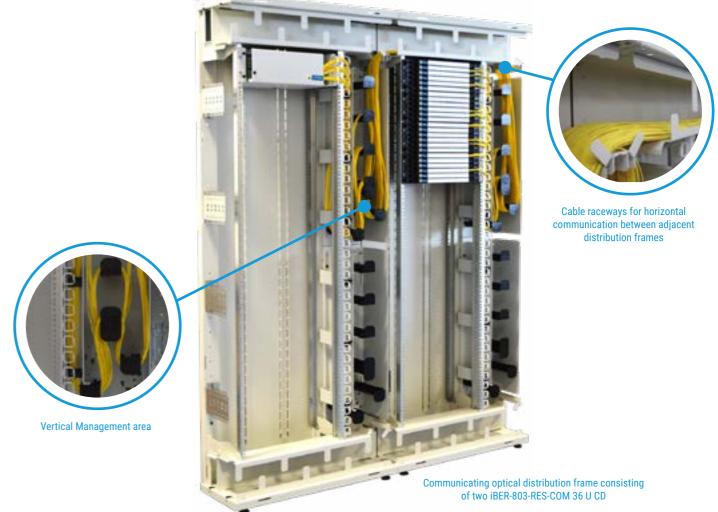








Meet Me Room (MMR) for Data centre.



NAME		UNIT	iBER-803-RES-COM-36U	iBER-803-RES-COM-40U
Operational hei	ight of 19" areas	U	36	40
	fibre		1,728	1,920
Capacity	cords		800 for internal cross-connection 1600 in communicating cross-connection (with patch cords of ø 1.6mm)	800 for internal cross-connection 1600 in communicating cross-connection (with patch cords of ø 1.6mm)
	cable connection plate		4 - Repositionable	
Upper/bottom	panel		Pre-cut	
Overall	Н	mm	2,000	2,200
dimensions	DxW	mm	300 × 800	
Weight ⁽¹⁾		kg	80.0	95.0
Operating temperature		°C	-25 / +70	
Material			Steel	
Colour		RAL	7035 (light grey)	
Option			Solid door - Side panels - 90° a	ngle corner box - Back-to-back

⁽¹⁾ Empty, without equipment.

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58



59

iBER-803-RES-COM



iBER-1635-RES

CROSS CONNECT 2 × 40U OPTICAL DISTRIBUTION FRAME

CROSS CONNECT 2×40U OPTICAL DISTRIBUTION FRAME

USE

The iBER-1635-RES is a cross connect and secure optical distribution frame for cross-connecting fibre-optic cables.

Its structure, made up of painted electro-galvanised steel panels, gives it very good mechanical resistance.



iBER-1635-RES 2 × 40U equipped with iRCP and iTOM racks with "W-type management area"



Designed for use with single length cords (4.0 m).

DESCRIPTION

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The iBER-1635-RES is equipped with a double door and has three areas dedicated to the following functions:

- 2 19" area separate arrivals and departures of optical cables;
- 1 central area is composed of a patch cord management area system that organises the flow and overlengths of patch cord

It is used to anchor cables and distribute optical fibres to the various equipment items.

The iBER-1635-RES frame is compatible with BEC anchoring and fan-out elements of any capacity.



Empty iBER-1635-RES 2 × 40 U with "M-type management area"





Cable gland grommet brush

Access hatch to the management and storage space for pending fibres

N	NAME		
Operational hei	Operational height of 19" areas		2 × 40
	cords		800 (with patch cords of ø 1.6mm)
Capacity	cable connection plate		2 × 4 - Repositionable
Patch cord length	unique	m	4.00
Cable input	Cable input		2 × 16
Overall dimens	ions (HxDxW)	mm	2010 × 350 × 1600 ⁽¹⁾
Weight ⁽²⁾		kg	150.0
Operating temp	erature	°C	-25 / +70
Material	rial		Steel
Protection		IP 43 ⁽³⁾	
Fire performance			Halogen-free UL94-V0 plastic components
Colour		RAL	🔵 7035 (light grey)

⁽¹⁾ 110mm base included. ⁽²⁾ Empty, without equipment. ⁽³⁾ With sealing kit (optional).

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iBER-1635-RES

Cable anchoring





iXIO-G3

OPEN DISTRIBUTION FRAME

USE

The iXIO-G3 free-standing optical distribution frame is a very high-capacity fibre-optic cross-connect open system. This type of solution is suitable for use in Central Office and in data centres.



Rear wiring

Image: Constrained state stat



Separation of the different flows: optical cables to be spliced and pre-terminated, separated from the flow of patch cords.

Extension by addition of extra frames and/or heads. System scalable in linear fashion or at 90° angle.



Mounting on concrete slab. Can be fitted on a false floor using threaded rods.

NAME Height		UNIT	6-level iXIO	7-level iXIO	8-level iXIO
		mm	2,000	2250	2500
	optical heads		б	7	8
Capacity	connection points		864	1008	1152
Cord diametre	2	mm	2.0		
Weight		kg	35.0 40.0 45		45.0
Operating temperature		°C	-25 / +70		
Material			Steel		
Colour		RAL		9005 (dark black)	

		1 BEAM	3 BEAMS	5 BEAMS
Dimensions (DxW) on the ground	mm	700 × 450	700 × 1250	700 × 2050
Dimensions including operating area (DxW)	mm	1800 × 450	1800 × 1250	1800 × 2050
Inter-beam spacing	mm		400	

DESCRIPTION

The iXIO-G3 free-standing optical distribution frame is composed of steel profiles arranged side by side and held together by metal reinforcements. The free standing optical distribution frames are available in 3 different heights (2.0 m, 2.25 m and 2.50 m) for 6, 7 and 8 iTOP-144 optical heads. Optical heads incorporate the range of iMOD-TOP modules. The iXIO-G3 free standing optical distribution frame supports BEC-type anchoring devices (see "cable anchorings").

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64



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65

iXIO-G3

OPEN DISTRIBUTION FRAME



iXIO anchoring bracket for BEC (not included)



iTOP-12P

OPTICAL HEAD FOR BEAMS

USE

positioning.

DESCRIPTION

various flows.

The iTOP-12P is an optical head, with a height of 6U, for beams that can integrate all the pivoting optical modules of the Idea Optical range (see "Compact modules"). The iTOP-12 is fastened directly to a beam (see iXIO-G3) via an indexing system that allows for quick, easy, and accurate



The iTOP-12P is used to anchor breakout cables and

distribute optical fibres to the various pivoting connection,

Patch cords are managed via the left output of the head, then through the guides attached to the racks which manage the

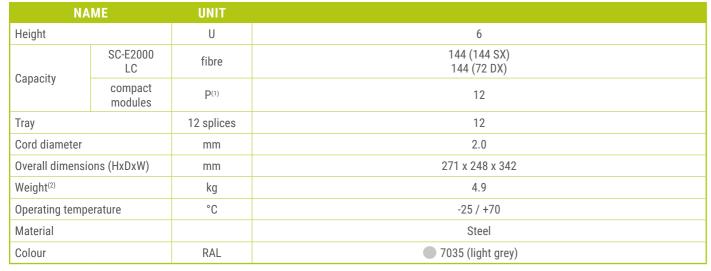
The iTOP-12P is compatible with all Idea Optical compact

splices or splitter modules (see "Compact modules").

modules providing a capacity of up to 144 fibres.







⁽¹⁾ 1P = 20 mm. ⁽²⁾ Empty, without modules.

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 \Leftrightarrow Pivoting access



N.	NAME			
Capacity	SC-E2000 LC	fibre	144 (144 SX) 144 (72 DX)	
	modules	iMOD-TOP	12	
Cord diametre		mm	2.0	
Overall dimens	sions (HxDxW)	mm	250 × 265 × 297	
Weight ⁽¹⁾		kg	3.9	
Operating temperature		°C	-25 / +70	
Material			Steel/glass-fibre reinforced polycarbonate	
Colour		RAL	9005 (dark black)	

⁽¹⁾ Empty, without modules.

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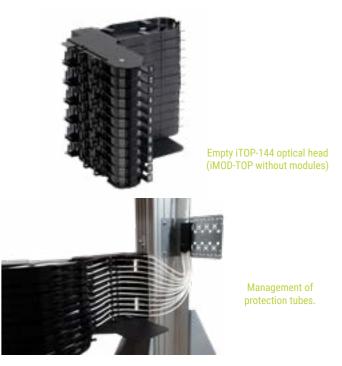


iTOP-144

144 FIBRE OPTICAL HEAD

USE

The iTOP-144 is an optical head with a height of 250mm, for steel or aluminium profiles, designed for iMOD-TOP pivoting optical modules. It is directly fastened to a iXIO or HPUL freestanding optical distribution frame via an indexing system, enabling quick, easy, and accurate positioning.



DESCRIPTION

The iTOP-144 can be used to hold and store 5mm diameter pre-terminated cables and tubes, and to distribute the optical fibres to the various pivoting connection, splice or splitter modules.

Patch cords are managed via the left output of the head, then through the guides attached to the racks which manage the various flows.



iMOD-TOP

MODULES FOR iTOP-144 HEAD

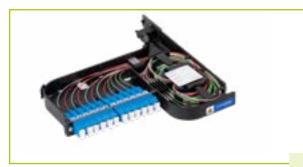
USE

The iMOD-TOP modules are clipped onto the iTOP-144 optical cable head. They have a strip for 12 optical adapters, an integrated splice tray (12 positions) and can accommodate pigtails or optical splitters as required.



iMOD-TOP-ER-12

Splicing and cross-connecting module integrating 12 pre-installed SC or LC pigtails.



iMOD-TOP-CP-R-4

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Optical splitter module with 4 pre-installed 1 × 2 FBT splitters.



iMOD-TOP-CP-ER-4

Optical splicing/coupling module with 4 pre-installed 2×2 PLC splitters.

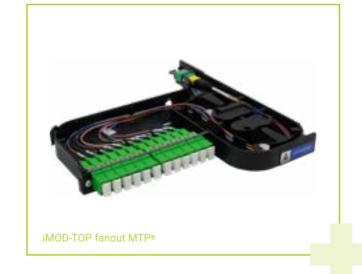


iMOD-TOP-R-12

Return module to accommodate a micro-breakout cable.

N	NAME			
SC-E2000 LC		fibre	12 (12 SX) 12 (6 DX)	
Capacity	aplittara	1 × 2	4	
	splitters	2×2	4 (1 trunk on adapter and 1 trunk to be spliced)	
Tray			1	
Fibre type			G652 D, G657 A2, OM2, OM3, OM4, OM5	
Protection tube input			2 (ø 5mm)	
Max. cord dia	metre	mm	2.0	
Overall dimen	sions (HxDxW)	mm	20 × 223 × 212	
Weight ⁽¹⁾	¹⁾ kg		0.2	
Operating temperature		°C	-25 / +70	
Material			Fibre glass-reinforced polycarbonate	
Colour		RAL	9005 (dark black)	
^{I)} Empty.				

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iMOD-TOP-TAP-MTP®

Optical supervision module for 2 MTP® 8 base.

N.	AME	UNIT		
Capacity	SC-E2000 LC	fibre	12 (12 SX) 12 (6 DX)	
	MTP®/	adapter	6	
Tray		12 splices	1	
Fibre type			G652 D, G657 A2, OM2, OM3, OM4, OM5	
Protection tube input			2 (ø 5mm)	
Max. cord dian	netre	mm	2.0	
Overall dimens	sions (HxDxW)	mm	20 × 223 × 212	
Weight ⁽¹⁾		kg	0.2	
Operating temp	perature	°C	-25 / +70	
Material			Fibre glass-reinforced polycarbonate	
Colour		RAL	9005 (dark black)	

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69

iMOD-TOP MTP®

MTP[®] MODULES FOR iTOP-144 HEAD

USE

iMOD-TOP MTP[®] modules clip onto the iTOP-144 optical head. They have a panel of 12 SC, LC or 6 MTP® adapters, an integrated 12-position splice tray, and can accommodate pigtails or optical splitters as required.

iMOD-TOP fanout MTP®

Connection module equipped with an 8/12 base MTP® fan-out to 8/12 connectors.



Optical connection module for 6 MTP®.





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