

# **ECOframe**

19" ECOframe Open Rack Systems



#### 19" ECOframe OPEN Racks

#### W=530mm ECOframe Open Racks

ECOframe Open Racks are designed to perform for the best cost conduciton to customers, with the strong and sturdy design, customer friendly assembly instructions, and superior logistical cost saving thanks to the intelligent flat packing mode. Totaly Modular System designed, with quick assembly timing.

ECOframe Open Racks are proper for secure IT rooms, Labratories, Clean rooms where no any door or panels required on the system for protection of IT equipments. As well the Ecoframe open rack systems would provide the best passive ventilation, but requires climatized and clean IT rooms.

In respect to the design which does not have door or panels, simply would provide the economical offer for network housing, in parallel functioning to mainly Security and Surveliance applications, audio video applications, Server and Storage applications.

While product gives maximum performance in parallel provides a very valuable economy compared to its quality which is based on high technologic fully automated industry.

The ECOframe series is available in 5 heights from 27U through to 48U, and in certain sizes a choice of depth is also available including 600, 800 and 1000mm options. The wide product height portfolio meets any U requirement in infrastructure needs.

The product range allows with 1000mm depth versions, usage in private / low density server and storage applications.

ECOframe series have a professional technical but aesthetic look with the mostly environmentally fit and selected color of RAL 9005 Black, and RAL 7035 Light Grey, with fine wrinkle soft touch paint.

Completely standard and stocked product portfolio, being delivered as un-assembled in flat pack, as shipping configuration the adjustable feet group is included. ECOframe series product range with optimal panel mounting size, and a variety range of accesorries enclose the whole expectation of users.







#### **CONSTRUCTION DETAILS:**

Main Profile- Framework- Top/Bottom Cases:

Multi Folded Automated Bending technology applied monoblock frame/base system, provides a heavy duty structure results to high load capacity of: 600 kgs.

Monoblock multi folded Frames, tighty fixed to the base system with fixing hardware, fully modular system generated.

t=1,5mm thickness frame system

t=2,5mm thickness L connection brackets on top and bottom

t=1,5mm thickness connection bracket on top connecting the double frames

t=3,0mm base group created the strength of product

#### **Available Sizes:**

Single Frames, 27U,36U,42U, 45U, 48U avaible
Double Frames 27U,36U,42U, 45U, 48U avaible for D600mm,
D800mm,D1000mm applications









Width: 530 mm. Depth: 570 mm.

Width:530mm Depth:570mm

5 different U heights: 27U,36U

42U, 45U, 48U



#### ISO 9001:2008

Quality Management System

Mechanical Structures for Electronic Equipment

IEC 297-1, 19" mounting IEC 297-2 Overall cabinet dimentions



#### CE conform to

EN 60950-1:2006 Information Technology Equipment - Safety - Part-1-General Requirement



#### **UL** listed to

UL 2416, Outline of Investigation for Audio/Video, Information and Communication Technology Equipment Cabinet, Enclosure and Rack Systems; UL 60950-1 and CSA C22.2 NO. 60950-1-07, Information Technology Equipment Safety Part 1: General Requirements



#### **Environment Friendly**;

- \* ISO 14001 Environmental
- Management System
- \* RoHS compliancy
- \* %100 Recyclable Material

ECOframe Open Racks, Single Frame with 19" w:530mm and d:570mm physical sizes, 5 different height, gives a wide selection chart for users.

#### **Standard Colors:**





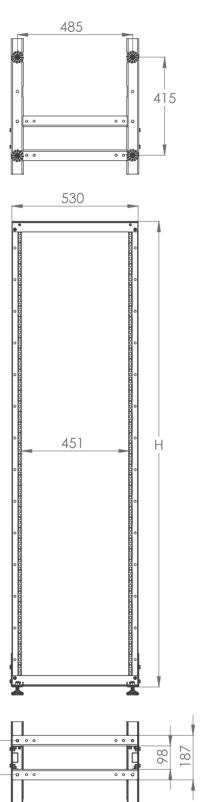
RAL 9005 Black

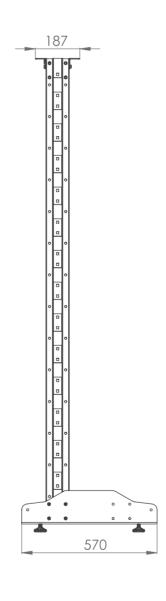
RAL 7035 Light Grey

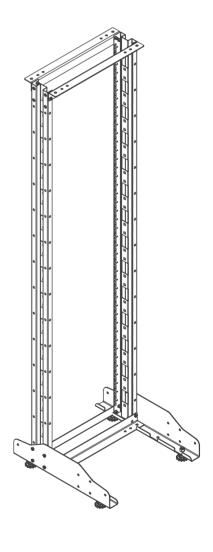


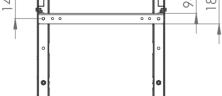


Width: 530 mm. Depth: 570 mm.



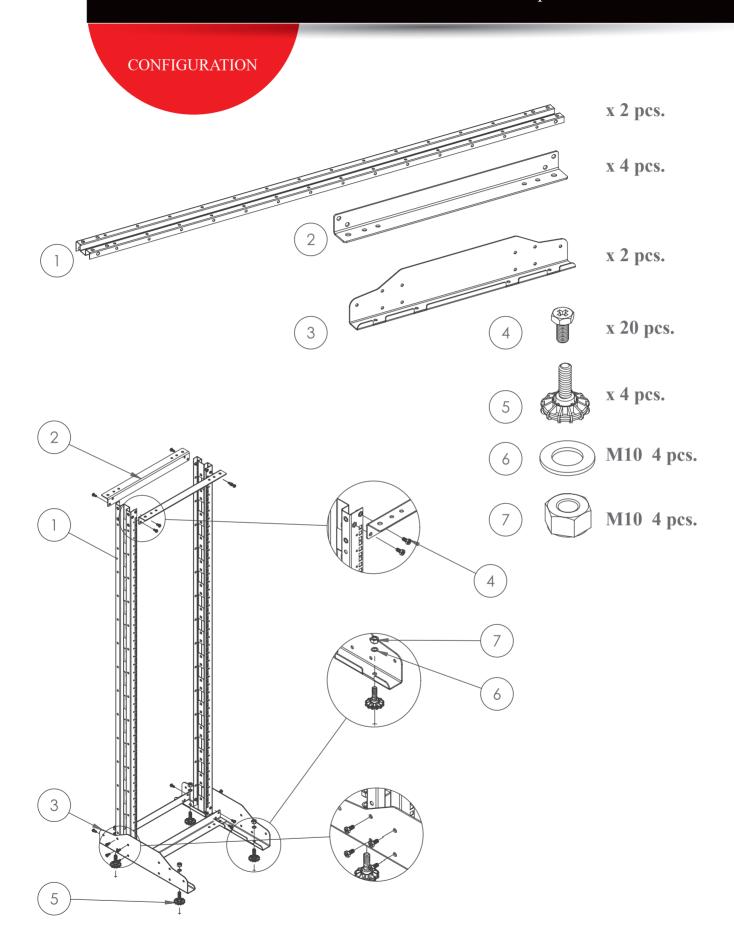








Width: 530 mm. Depth: 570 mm.





Width: 530 mm. Depth: 570 mm.



	ECOframe Open Rack /	Single Frame 1	9" W	/=530n	nm D=5′	70mn	1					
Product Number	Product Description	Size WXDXH mm	HU size (U)	HU in mm	Hmm, overall without feet and/or castor	Width Overall mm	Width Rail to Rail	Depth Overall mm	QTY IN PACK AGE	PACKAGE DIMENTIONS WXDXH mm	Standard NET Weight of product kgs	Gross Weight of Products kgs
LN-ECO-FR27US-LG	27U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x1290	27U	1200	1290	530	19"	570	1set	60x170x1410	10,5	11
LN-ECO-FR36US-LG	36U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x1690	36U	1600	1690	530	19"	570	1set	60x170x1820	12	12,5
LN-ECO-FR42US-LG	42U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x1957	42U	1867	1957	530	19"	570	1set	60x170x1980	13,5	14,5
LN-ECO-FR45US-LG	45U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x2090	45U	2000	2090	530	19"	570	1set	60x170x2115	14,5	16
LN-ECO-FR48US-LG	48U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x2224	48U	2133	2224	530	19"	570	1 set	60x170x2230	16	17,5
LN-ECO-BG-D600-LG	Eco Frame base Group, including 2 pcs Side Frames of Base, and 4 pcs leveling feet, depth connection brackets 2pcs for double frame connection, for D600mm Single and Double Frame Ecoframes	530x570	-	-	-	-	-	570	1set	590x170x120	5,5	6

<sup>\*\*\*</sup> Above given Product gross and net weight info is defining weight of one pack/part number, for the configured product weight info please multiply the weights with your configuration.



<sup>\*</sup> Standard Supply is in Flat pack and RAL 7035 light Grey Color, incase requested Black put BL instead of LG.

\*\* Sample ordering, for creating 42U single Frame Open Rack, order will be consist of LN-ECO-FR42US-LG + LN-ECO-BG-D600-LG

Width: 530 mm.

Depth: 570 / 770 / 940 mm.

Width: 530mm

Depth: 570mm/770mm/940mm

Standard Heights:

5 different U heights: 27U,36U

42U, 45U, 48U

Standards, and Compliances



#### ISO 9001:2008

Quality Management System

EN 61587 -1:2012 Mechanical Structures for Electronic Equipment

IEC 297-1, 19" mounting IEC 297-2 Overall cabinet dimentions



#### CE conform to

EN 60950-1:2006 Information Technology Equipment – Safety – Part-1-General Requirement



#### **UL** listed to

UL 2416, Outline of Investigation for Audio/Video, Information and Communication Technology Equipment Cabinet, Enclosure and Rack Systems; UL 60950-1 and CSA C22.2 NO. 60950-1-07, Information Technology Equipment Safety Part 1: General Requirements



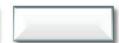
#### **Environment Friendly;**

- \* ISO 14001 Environmental
- Management System
- \* RoHS compliancy
- \* %100 Recyclable Material

ECOframe Open Racks , Double Frame with 19" w:530mm and d:570mm/770mm/940mm physical sizes, 5 different height, gives a wide selection chart for users.

#### **Standard Colors:**

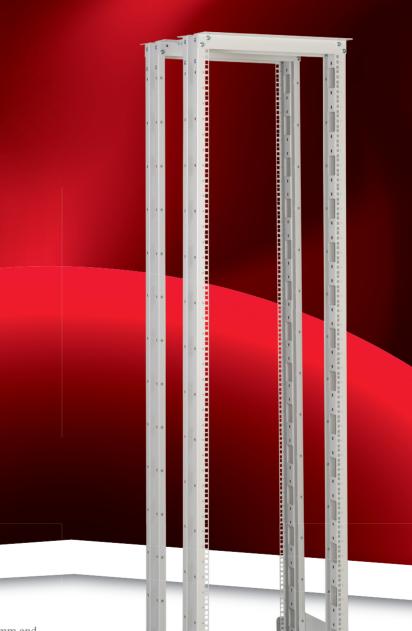




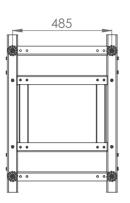
RAL 9005 Black

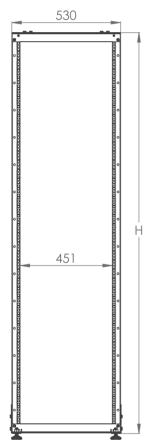
RAL 7035 Light Grey

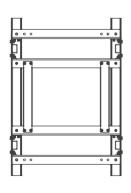


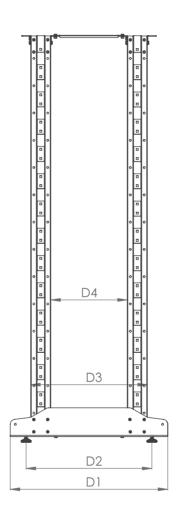


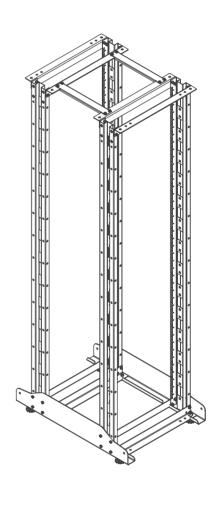
Width: 530 mm. Depth: 570 mm.









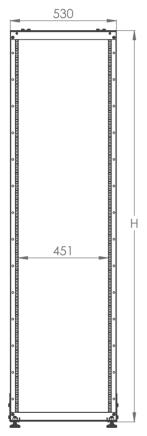


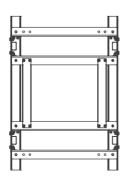
(U)	H <sub>mm</sub>	D1 <sub>mm</sub>	D2 <sub>mm</sub>	D3 <sub>mm</sub>	D4 <sub>mm</sub>
27U	1290	570	415	370	170
36U	1690	570	415	370	170
42U	1957	570	415	370	170
45U	2090	570	415	370	170
48U	2224	570	415	370	170

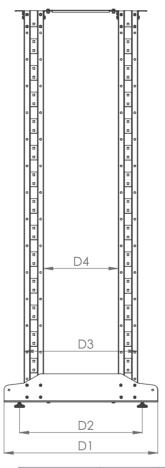


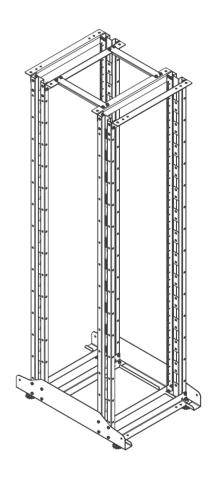
Width: 530 mm. Depth: 770 mm.







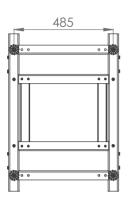


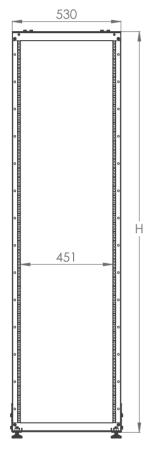


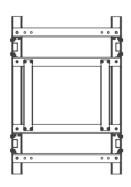
(U)	H <sub>mm</sub>	D1 mm	D2 <sub>mm</sub>	D3 <sub>mm</sub>	D4 <sub>mm</sub>
27U	1290	770	615	570	370
36U	1690	770	615	570	370
42U	1957	770	615	570	370
45U	2090	770	615	570	370
48U	2224	770	615	570	370

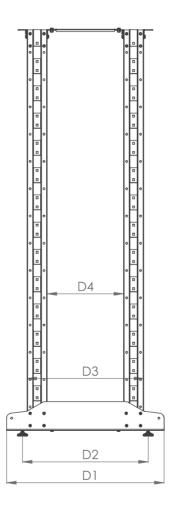


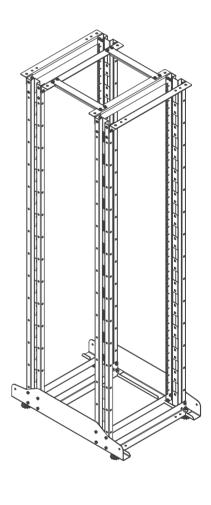
Width: 530 mm. Depth: 940 mm.









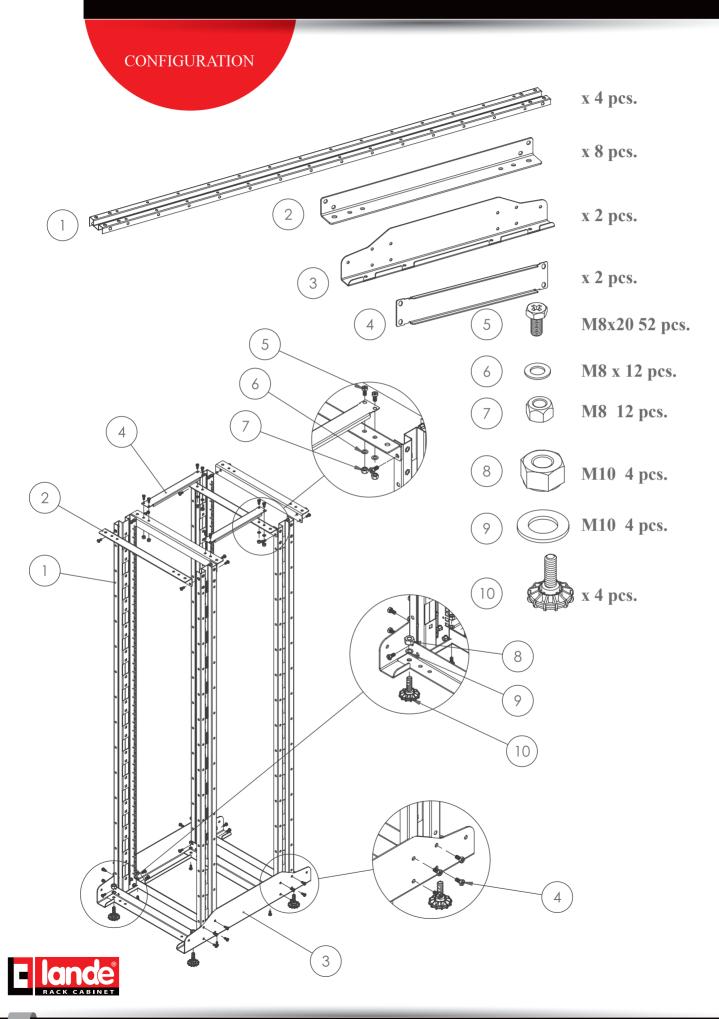


(U)	H <sub>mm</sub>	D1 <sub>mm</sub>	D2 <sub>mm</sub>	D3 <sub>mm</sub>	D4 <sub>mm</sub>
27U	1290	940	785	740	540
36U	1690	940	785	740	540
42U	1957	940	785	740	540
45U	2090	940	785	740	540
48U	2224	940	785	740	540



Width: 530 mm.

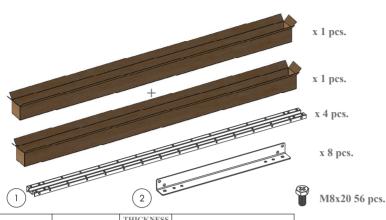
Depth: 570 / 770 / 940 mm.



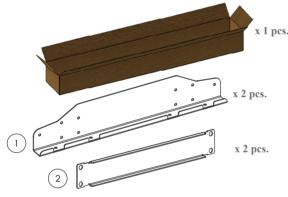
Width: 530 mm.

Depth: 570 / 770 / 940 mm.

#### **CONFIGURATION**



PART NUMBER	PART NAME	THICKNESS (mm)	DRAWING
1	Equipment mounting part	1,5	***************************************
2	Vertical support part	3	<u>*</u>



PART NUMBER	PART NAME	THICKNESS (mm)	DRAWING
1	Horizontal foot	3	
2	Horizontal support part	1.5	



M8 12 pcs.

M8 4 pcs.

M10 4 pcs.

M10 4 pcs.

x 4 pcs.



	ECOframe Open Rack / Double Fran	ne 19" W=530mi	m D=5′	70mm	/ 770mn	ı / 940	mm					
Product Number	Product Description	Size WXDXH mm	HU size (U)	HU in mm	Hmm, overall without feet and/or castor	Width Overall mm	Width Rail to Rail	Depth Overall mm	QTY IN PACK AGE	PACKAGE DIMENTIONS WXDXH mm	Standard NET Weight of product kgs	Gross Weight of Products kgs
LN-ECO-FR27US-LG	27U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x1290	27U	1200	1290	530	19"	570/770/940	1set	60x170x1410	10,5	11
LN-ECO-FR36US-LG	36U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x1690	36U	1600	1690	530	19"	570/770/940	1set	60x170x1820	12	12,5
LN-ECO-FR42US-LG	42U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x1957	42U	1867	1957	530	19"	570/770/940	1set	60x170x1980	13,5	14,5
LN-ECO-FR45US-LG	45U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x2090	45U	2000	2090	530	19"	570/770/940	1set	60x170x2115	14,5	16
LN-ECO-FR48US-LG	48U D:100mm Frame for Open System Rack , just 1set=2pcs Frame, including L parts and the fixing hardware.	530x570x2224	48U	2133	2224	530	19"	570/770/940	1set	60x170x2230	16	17,5
LN-ECO-BG-D600-LG	Eco Frame base Group, including 2 pcs Side Frames of Base,and 4 pcs leveling feet, depth connection brackets 2pcs for double frame connection, for D600mm Single and Double Frame Ecoframes	530x570	-	-	-	-	-	570	1set	590x170x120	5,5	6
LN-ECO-BG-D800-LG	Eco Frame base Group, including 2 pcs Side Frames of Base, and 4 pcs leveling feet, depth connection brackets 2 pcs for double frame connection, for D770mm Double Frame Ecoframes	530x770	-	-	-	-	-	770	1set	790x170x120	7,3	8
LN-ECO-BG-D100-LG	Eco Frame base Group, including 2 pcs Side Frames of Base, and 4 pcs leveling feet, depth connection brackets 2pcs for double frame connection, for D940mm Double Frame Ecoframes	530x940	-	-	-	-	-	940	1set	970x170x120	9,5	10,5

<sup>\*</sup> Standard Supply is in Flat pack and RAL 7035 light Grey Color, incase requested Black put BL instead of LG, incase assembled product request, put A notification at the end of part number, ie LN-EUBOX16U6080-LG-A, unless defined light Grey-Flat pack product will be shipped

\*\* Sample ordering, for creating 42U Double Frame Open Racks orders will be consist of



LN-ECO-FR42US-LG x 2 pcs + LN-ECO-BG-D600-LG x 1 pcs, for D570mm Double frame ECOframe Open Rack LN-ECO-FR42US-LG x 2 pcs + LN-ECO-BG-D800-LG x 1 pcs, for D770mm Double frame ECOframe Open Rack

EN-ECO-FR42US-LG x 2 pcs + LN-ECO-BG-D100-LG x 1 pcs, for D940mm Double frame ECOframe Open Rack

\*\*\* Above given Product gross and net weight info is defining weight of one pack/part number, for the configured product weight info please multiply the weights with your configuration

#### WHY FLAT PACK; WHAT MAKES SENSE in ECOframe!

Delivery of ECOframe, configured as Flat Pack for reducing cost of logistics, comparatively 10 times higher qty can be stacked in transport vehicles which allows 10 times less logistical cost compared occupied space of assembled product in transport vehicle.

Customer friendly assembly, fully modular construction, zero risk of error design for customer assembly (all potential assembly mistakes are avoided), less operation and labour cost while assembly operation to be performed.

Allowing better cost scheme in projects, since the infrastructure installer or customer might operate the assembly operation at site. Thus narrow doors, unavailability of goods-hoist and staircases are no more a problem.

No special assembly tool required. Just a screw driver or a charged screw driwer is enough. Single person can operate the assembly work.

Better Inventory management in partners Warehouse, the products are being delivered seperate boxes of frames and base group, so incase the partner have stock of Frames, and some stock of different sized bases, any customer requirement of single or double frames can be supplied by the distribution partner.



To deliver one Double Frame ECOframe product to customer!!! Deliver= Frame Pack x 2pcs + Base Pack

- \*With 8 part number 20 different size of product should be managed and supplied!
- \*\* Easy to stock on Shelves, Easy to carry to the customers site!!!



# 19" ECOframe Open Rack Frequent Used Accesorry Selection Chart

	NT FIXING_ UNIVERSAL MODEL, tible with any brand cabinet	COMPATIBLE WITH  ECOframe Open Rack W 530 x D (Depth) mm			
Part Number*	Product Description	Single Frame D: 570mm	Double Frame D:570mm	Double Frame D:770mm	Double Frame D:940mm
LN-RAF-SBT-D600-CC-UNV	Fixed Shelf, 19" 1U Metal Bracket, 4 point fixing, Physical Shelf Depth:370mm for D=600mm cabinetles, Load Capacity 50 kg Universal Model, Compatible with any brand cabinet		•		
LN-RAF-SBT-D800-CC-UNV	Fixed Shelf, 19" 1U Metal Bracket, 4 point fixing, Physical Shelf Depth:570mm for D=800mm cabinetles, Load Capacity 50 kg Universal Model, Compatible with any brand cabinet			•	
LN-RAF-SBT-D100-CC-UNV	Fixed Shelf, 19" 1U Metal Bracket, 4 point fixing, Physical Shelf Depth:770mm for D=1000mm cabinetles, Load Capacity 50 kg Universal Model, Compatible with any brand cabinet				•

<sup>\*</sup> CC= Color Code, LG Light Grey RAL 7035, BL Black RAL 9005, customers to define while ordering

FIXED SHELVES 4 POI	NT FIXING, HEAVY DUTY TYPE	COMPATIBLE WITH  ECOframe Open Rack W 530 x D (Depth) mm			Depth) mm
Part Number*	Product Description	Single Frame D: 570mm	Double Frame D:570mm	Double Frame D:770mm	Double Frame D:940mm
LN-RAF-SBA-D100-CC	Heavy Duty Fixed Shelf, 1U 19", 4 point fixing, Physical Shelf Depth:720mm for D=1000mm cabinets. Load Capacity 100 kg				•

<sup>\*</sup> CC= Color Code, LG Light Grey RAL 7035, BL Black RAL 9005, customers to define while ordering

SLIDING SHELVES 4 POINT FIXING, MULTIVENDOR, compatible with any brand cabinet			COMPATIBLE WITH  ECOframe Open Rack W 530 x D (Depth) mm				
Part Number*	Product Description	Single Frame D: 570mm	Double Frame D:570mm	Double Frame D:770mm	Double Frame D:940mm		
LN-RAF-HRK-D600-CC	Sliding Shelf, 4 point fixing, Physical Shelf Depth;370mm for D=600mm cabinets, Load Capacity 30 kg, Compatible with any brand cabinet		•				
LN-RAF-HRK-D800-CC	Sliding Shelf, 4 point fixing, Physical Shelf Depth:570mm for D=800mm cabinets, Load Capacity 30 kg, Compatible with any brand cabinet			•			

<sup>\*</sup> CC= Color Code, LG Light Grey RAL 7035, BL Black RAL 9005, customers to define while ordering

SLIDING SHELVES 4 PO	OINT FIXING, HEAVY DUTY TYPE	COMPATIBLE WITH  ECOframe Open Rack W 530 x D (Depth) mm			Depth) mm
Part Number*	Product Description	Single Frame D: 570mm	Double Frame D:570mm	Double Frame D:770mm	Double Frame D:940mm
LN-RAF-HRA-D100-CC	Heavy Duty Sliding Shelf, 1U 19", 4 point fixing, Physical Shelf Depth:720mm for D=1000mm cabinets. Load Capacity 50 kg, full telescopic				•

<sup>\*</sup> CC= Color Code, LG Light Grey RAL 7035, BL Black RAL 9005, customers to define while ordering

POWER STRIPES ALUMINIUM HOUSING			COMPATIBLE WITH  ECOframe Open Rack W 530 x D (Depth) mm				
Part Number*	Product Description	Single Frame D: 570mm	Double Frame D:570mm	Double Frame D:770mm	Double Frame D:940mm		
LN-PRZ-SGT-1U6P-SC	6xDIN49440 Socket Schuko Power Stripe, 19" 1U, aluminium housing, 1x16A cet breaker, 4000 Watt, 250V AC, 3x1.5mm2, 2,5m cable, DIN 49441 plug, CE approval	•	•	•	•		



# 19" ECOframe Open Rack Frequent Used Accesorry Selection Chart

RACK MOUNT SHELVES 2 POINT FIXING		COMPATIBLE WITH  ECOframe Open Rack W 530 x D (Depth) mm				
Part Number*	Product Description	Single Frame D: 570mm	Double Frame D:570mm	Double Frame D:770mm	Double Frame D:940mm	
LN-RAF-RMO-1U20-CC	1U D=200mm 19" Rack Mount Shelf, 2 point fixing, for all cabinets at 19" provision, Load Capacity 30 kg	•	•	•	•	
LN-RAF-RMO-1U25-CC	1U D=250mm 19" Rack Mount Shelf, 2 point fixing, for all cabinets at 19" provision, Load Capacity 30 kg	•	•	•	•	
LN-RAF-RMO-1U30-CC	1U D=300mm 19" Rack Mount Shelf, 2 point fixing, for all cabinets at 19" provision, Load Capacity 30 kg	•	•	•	•	
LN-RAF-RMO-1U40-CC	1U D=400mm 19" Rack Mount Shelf, 2 point fixing, for all cabinets at 19" provision, Load Capacity 30 kg	•	•	•	•	
LN-RAF-RMO-2U35-CC	2U D=350mm 19" Rack Mount Shelf, 2 point fixing, for all cabinets at 19" provision, Load Capacity 30 kg	•	•		•	
LN-RAF-RMO-2U55-CC	2U D=550mm 19" Rack Mount Shelf, 2 point fixing, for all cabinets at 19" provision, Load Capacity 30 kg	•		•	•	
LN-RAF-RMO-1UXX-CC	1U 19" Adapter part, 1set:2 pcs incl the fixing hardware, Allowing rack mount shelves to attach to rear 19" rails, Increasing the original load capacity of shelf		•	•	•	

<sup>\*</sup> CC= Color Code, LG Light Grey RAL 7035, BL Black RAL 9005, customers to define while ordering

RACK MOUNT SHELVES, 4 POINT FIXING		COMPATIBLE WITH  ECOframe Open Rack W 530 x D (Depth) mm				
Part Number*	Product Description	Single Frame D: 570mm	Double Frame D:570mm	Double Frame D:770mm	Double Frame D:940mm	
LN-RAF-RMC-1135-CC	1U 19" frontal, 1 U 19" rear assembly, adjustable rear 19" brackets, D=350mm, for all cabinets at 19" provision, Load Capacity 50 kg		•	•		
LN-RAF-RMC-2135-CC	2U 19" frontal, 1 U 19" rear assembly, adjustable rear 19" brackets, D=350mm, for all cabinets at 19" provision, Load Capacity 50 kg		•	•		
LN-RAF-RMC-1145-CC	1U 19" frontal, 1 U 19" rear assembly, adjustable rear 19" brackets, D=450mm, for all cabinets at 19" provision, Load Capacity 50 kg		•	•	•	
LN-RAF-RMC-2145-CC	2U 19" frontal, 1 U 19" rear assembly, adjustable rear 19" brackets, D=450mm, for all cabinets at 19" provision, Load Capacity 50 kg		•	•	•	
LN-RAF-RMC-2155-CC	2U 19" frontal, 1 U 19" rear assembly, adjustable rear 19" brackets, D=550mm, for all cabinets at 19" provision, Load Capacity 50 kg				•	
LN-RAF-RMC-2165-CC	2U 19" frontal, 1 U 19" rear assembly, adjustable rear 19" brackets, D=650mm, for all cabinets at 19" provision, Load Capacity 50 kg				•	

<sup>\*</sup> CC= Color Code, LG Light Grey RAL 7035, BL Black RAL 9005, customers to define while ordering

HORIZONTAL CABLE MANAGEMENT ACCESSORIES		COMPATIBLE WITH  ECOframe Open Rack W 530 x D (Depth) mm				
Part Number*	Product Description	Single Frame D: 570mm	Double Frame D:570mm	Double Frame D:770mm	Double Frame D:940mm	
LN-KDG-YKD-1UKN-CC	1U 19" cable management panel 5 rings	•	•	•	•	
LN-KDG-YKD-1UKT-CC	1U 19" cable management panel, channel type, removable front cover plate with clips	•	•	•	•	
LN-KDG-YKD-1UKZ-CC	1U 19" cable management panel, channel type, removable insert type sliding cover plate	•	•	•	•	
LN-KDG-YKD-1UFO-CC	1U 19" cable management panel for patchcord entry, brushed type, with L rear bend patchcord holder and tire up panel	•	•	•	•	
LN-KDG-YKD-2UKA-CC	2U 19" cable management panel, channel type, removable angled front cover plate, front cover plate is toolless	•	•	•	•	
LN-KDG-YKD-2UFT-CC	2U 19" cable management panel, channel type, Finger Style PVC organizer integrated, up/down opening toolless front cover plate 2U	•	•	•	•	

<sup>\*</sup> CC= Color Code, LG Light Grey RAL 7035, BL Black RAL 9005, customers to define while ordering.

