



OLIVETEL SA

OLIRack[®]

**OUTDOOR ENCLOSURE CABINETS
DOUBLE WALL**

CONTENTS

Contents

General information, standards and CE compliance _____	1
Introduction _____	1
Standards and CE compliance _____	1
Range and Configurations _____	2
Standard Setup _____	2
Make your own configuration _____	3
Choose the most suitable for your project _____	3
Environment / Corrosion Classes and Raw Materials _____	3
IP Code Table _____	4
Flexibility, Productivity, Quality and Safety _____	5
Flexibility _____	5
Some functional Advantages _____	5
Quality and safety _____	5
Illustrative photos _____	6
_____	7
_____	8
Scalability and Accessories _____	9

OLIRACK – OUTDOOR ENCLOSURE CABINETS

DOUBLE WALL SHEET

General information, standards and CE compliance

INTRODUCTION

With over two decades of evolution, due to the ongoing experience with Designers and IT Service Integrators, the **OLIRACK OUTDOOR ENCLOSURE CABINETS** was designed to outdoor installations in several contexts.

Characterized by its high efficiency, quality, robustness and security, was designed to allow an adequate air circulation between its double walls, providing a natural cooling and control of condensation, prevent access by unqualified persons and protect the contents from weather and vandalism acts. Its functionality and scalability, offers to your project, a wide range of configurations and options such air conditioning systems, access control and remote monitoring.

The interior can be fully configurable, which is a huge advantage to your projects when it is necessary to create and develop installation layouts.



STANDARDS AND CE COMPLIANCE

- 19" according EIA 310 D / DIN 41 494 / IEC 60 297
- 21" according ETS 300 119-3
- IP55 and IP65 according DIN 400 50 / IEC 60 529
- European directives 2014/35/CE (Low Voltage Electrical Equipment)
- European directives 2014/53/CE (telecommunications terminal equipment)

OLIRACK – OUTDOOR ENCLOSURE CABINETS

DOUBLE WALL SHEET

Range and Configurations

Besides the Standard Setup presented, the OUTDOORS ENCLOSURE CABINETS can be manufactured from different raw materials, sizes and configurations.

U's	Body height (mm)	Pedestal Height (mm)	Width (mm)	Depth (mm)	
15	825	100	740	540	740
22	1135	100	740	540	740
30	1490	100	740	540	740
<i>** Different sizes on request **</i>					

STANDARD SETUP

Built in Galvanized Steel Plate, Double-walled to natural fan cooling.



- (1x) Chassis structure w/earthing connection
 - (1x) Top Module
 - (1x) Front Door w/ Double Wall Sheet
 - Sealing gasket
 - Inviolable hinge
 - (1x) Rotating handgrip Lock w/ key
 - Ventilation grids to natural ventilation
 - (2x) Filters to condensation control and ventilation impurities
 - (1x) Door retainer (opening limiter and auto-block system)
 - With earthing connection
 - (3x) Fixed Panels (Side walls and Rear) w/ double Wall sheet
 - Ventilation grids to natural ventilation
 - Sealing gasket
 - With earthing connection
 - (4x) 19" Rack Mounting Profiles w/Adjustable depth system
 - (1x) Stainless steel pedestal to install in concrete block
- COLOUR : RAL 7035

OLIRACK – OUTDOOR ENCLOSURE CABINETS

DOUBLE WALL SHEET

MAKE YOUR OWN CONFIGURATION

Besides the Standard Setup presented, a wide range of configurations are available, as **Side Doors, Rear Door, Removable Panels with interior security system, Doors with Personalized Access Control, Air Conditioning Systems and Personalized Pedestals.**

Inside the cabinet also has a wide range of options to configure your installation as **Bottom Bases with Specific Drilling, Flat or Perforated Metal Screens, Shelving's.** The modular characteristics of OLIRACK Enclosure Cabinets, allow you to customize the interior of the cabinet, adapting it according to the requirements, increasing productivity in your installation.

CHOOSE THE MOST SUITABLE FOR YOUR PROJECT

Environmental conditions where the units will be installed, are very important to determine the raw materials and appropriate treatments. All models can be manufactured from various raw materials, including **Galvanized Steel Plate, Aluminium Plate with Chromate Treatment and Stainless Steel Plate,** leading to a distinct corrosion protection and durability.

Environment / Corrosion Classes and Raw Materials

OLIVETEL SA offers the following illustrative table of Corrosion Classes and Raw Materials for decision support, which will allow you to cross the specificities and needs of your project in terms of environmental conditions, and decide the most appropriate for your project. The durability is dependent on surface treatments added to the materials, conditions of installation and use of equipment.

Corrosion classes > ISO 12944 Paints and varnishes Corrosion protection of steel structures by protective paint systems	Environment C1 VERY LOW			Environment C2 LOW			Environment C3 MIDDLE			Environment C4 HIGH			Environment C5 VERY HIGH		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
	2-5 Years	5-15 Years	>15 Years	2-5 Years	5-15 Years	>15 Years	2-5 Years	5-15 Years	>15 Years	2-5 Years	5-15 Years	>15 Years	2-5 Years	5-15 Years	>15 Years
Carbon steel plate	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Galvanized sheet steel	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Red	Red	Red	Red	Red	Red	Red
Aluminium plate with Chroming Surface treatment	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Red	Red	Red	Red	Red	Red
Stainless steel sheet	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow



Appropriate



With Restrictions



NOT Appropriate

OLIRACK – OUTDOOR ENCLOSURE CABINETS

DOUBLE WALL SHEET

The table is not directly associated to specific Olivetel products or their warranty, it provides only generic and empirical data to illustrate the behaviour of the different raw materials when exposed to several environments.


Regardless of the characteristics of raw materials and additional treatments for corrosion prevention, the durability of materials and products are always influenced by their exposure to uncertain and dynamic factors of natural and human characteristics, as well the preventive maintenance practices, with special attention to the periodic cleaning to minimize agents that promote corrosion, due to exposure to pollution and salinity.

IP Code Table

The IP Code, International Protection Marking, IEC standard 60529, sometimes interpreted as Ingress Protection Marking classifies and rates the degree of protection provided against the intrusion (including body parts such as hands and fingers), dust, accidental contact, and water by mechanical casings and electrical enclosures. It is published by the International Electro-technical Commission (IEC).

The materials, manufacturing process, requirements for sealing of the units and investment, will be more demanding as the degree of protection is highest.

The base configuration presented by OLIVETEL SA has an **IP55 degree of protection**, chosen by the majority of projects at the time of investment / benefit analysis. However, for a better analysis of your installation requirements, we provide below a table of IP protection classes.

(DIN 60529) Ingress Protection (IP) Rating			
Protection against solid object		Protection against liquid object	
0	<u>No protection</u>	0	<u>No protection against liquid object</u>
1	<u>Ingress of solid object diameter 50 mm is protected</u>	1	<u>Protection against water drop</u> No harmful effect of vertical water drip By using water drip tool vertically dropping water for 10 min
2	<u>Ingress of solid object diameter 12.5 mm is protected</u>	2	<u>Protection against water drop</u> No harmful effect of water drip from vertical direction when the enclosure is tilted at 15° from its normal position By using water drip tool, move it in angle of 15°, dripping water for 10 min (2.5 min per direction)
3	<u>Ingress of solid object diameter 2.5 mm is totally protected</u>	3	<u>Protection against water spray</u> No harmful effect of water spray at any angle up to 60° from the vertical direction By using tool, spraying water vertically in angle up to 60° for 10 min
4	<u>Ingress of solid object diameter 1.0 mm is totally protected</u>	4	<u>Protection from water splash</u> No harmful effect of water spray from all direction By using tool, splashing water from all direction for 10 min
5	<u>Protected against harmful dust</u>	5	<u>Protection from water jets</u> No harmful effect of water splash from all direction By using tool, Jet the water from all direction to the object surface for 1 m ² /min, at least for 3 min in total.
6	<u>Totally protected against dust</u>	6	<u>Protection from strong water jets</u> No harmful effect of strong water jets from all direction By using tool, Jet the water from all direction to the object surface for 1 m ² /min, at least for 3 min in total.
 OLIVETEL SA		7	<u>Protection from water dip</u> No harmful effect of water dip in certain level of pressure and length of time Dip into 1 m depth water for 30 min
		8	<u>Protection from water sink</u> No harmful effect against water sink which the condition is decided between customer & manufacturer (in severer condition comparing to no.7) Should be decided between customer and manufacturer

OLIRACK – OUTDOOR ENCLOSURE CABINETS

DOUBLE WALL SHEET

Flexibility, Productivity, Quality and Safety

Time is a critical factor in installation projects, as well as the quality of the components that are handled. All models were conceived and designed to make a productive and safe installation. For this purpose, are included in OLIRACK Outdoors Enclosure Cabinets a set of details, that are the result of over 20 years of expertise, providing installation projects.

FLEXIBILITY

- Modular concept that allows indoor and outdoor settings
- Manufactured in various sizes, in addition to those presented in Range and Configurations Table
- Manufactured according 19" (EIA 310 D / DIN 41 494 / IEC 60 297) or 21" (ETS 300 119-3) or without Rack Mounting Profiles
- Manufactured in various raw materials, through the requirements of projects
- Adjustments / Integration of new and specific accessories for the projects

SOME FUNCTIONAL ADVANTAGES

- Doors with rotating handgrip lock and door retainer (opening limiter and auto-block system)
- Removable Top through the interior of the cabinet, for access and maintenance
- Lock with locking system with 2 or more fixation points, depends on the height of cabinet
- Closed Top and prepared for integration of forced ventilation
- Bottom prepared for application of specific bases in cabinet floor
- Rack Mounting Profiles with adjustable depth system
- Modular system that allows the joining of cabinets in row
- Allows a huge level of customization

QUALITY AND SAFETY

- All components (panels and door) with ground connectivity to the chassis with M5 screw terminals
- Surface treatment with 80 µm of epoxy-polyester textured w/polymerization, accurate to industrial and outdoor application, with high mechanical resistance and UV resistance
- Totally free from hazardous materials, Manufacture according to European Directive
- CE conformity marking, stamp of quality and tightness level tests
- Serial Number for monitoring and tracking the installed sites



OLIRACK – OUTDOOR ENCLOSURE CABINETS DOUBLE WALL SHEET

Illustrative photos

OLIRACK[®]



OLIRACK – OUTDOOR ENCLOSURE CABINETS DOUBLE WALL SHEET



OLIRACK – OUTDOOR ENCLOSURE CABINETS DOUBLE WALL SHEET



OLIRACK – OUTDOOR ENCLOSURE CABINETS

DOUBLE WALL SHEET

Scalability and Accessories

The ability to increase value in your installation, was previously thought in the design and manufacturing process, so scalability is ensured. A wide range of components and accessories are available:

- Ventilation Systems
- Filters
- Stainless Pedestals with 200mm or by specific request
- Door sensors to check open doors
- Document Holder
- Internal metallic installation plates
- Air-conditioning systems
- Bottom Bases with specific drilling to cable gland, roxtec and brush strip cable entry
- Fixed or Slide Shelf
- Blanking panels or perforate panels (U's)
- Lighting Kits
- PDU and Power strips (simple or w / switch)
- Electrical box chassis / box
- Equipotentialization strip
- Etc.

For a better understanding of existing solutions, we advise you to consult the table of existing accessories OLIRACK on our website or contact our Technical / Commercial area for personalized and assertive advice.

Company Head Office Information

OLIVETEL SA

Rua da Cruz nº66 Naves Industriais A-B-C-D – Algueirão – 2725-663 Mem Martins

Tel (+351) 21 922 98 40

Fax (+351) 21 922 98 50

Email: comercial@olivetel.pt

www.olivetel.pt

