IASO®

Better Outside

TECHNICAL DATA SHEET | ENGLISH | PARASOLS | SPECIAL COLLECTION | INDUS
INDUS D

INDEX —

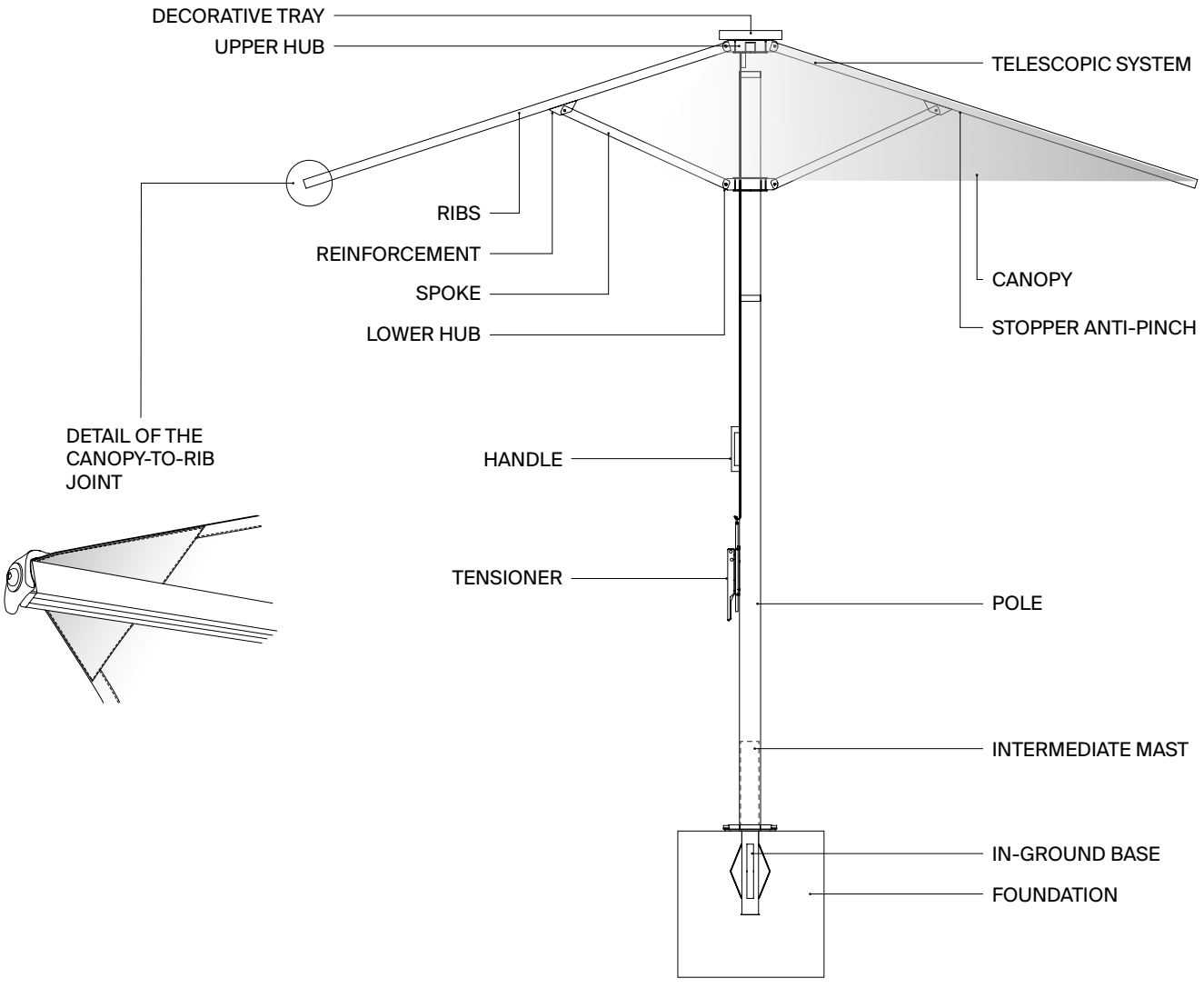
DESCRIPTION

Lightweight parasol with a simple opening system, capable of covering areas up to 12 m².
The frame consists of ribs and struts connected to a square mast by two joining pieces. It includes an internal telescopic profile that raises the parasol as it closes.
Manual opening by tensioner.
The fabric cover, made in a single piece, is attached to the top of the frame and to the ends of the ribs.

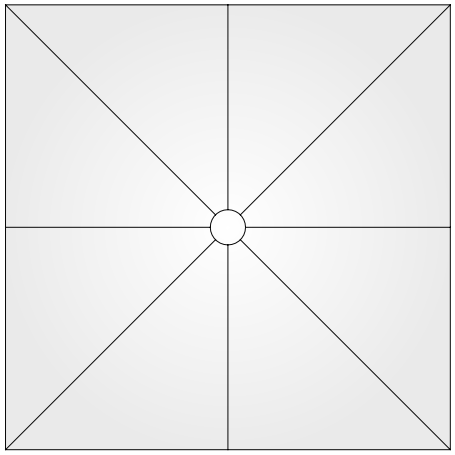
MATERIALS

- Structure: Aluminium 6060-T5 profiles
- Screws: Stainless steel AISI 304 (A2 grade)
- Membrane for the textile roof:
  - Sauleda acrylic - Force
  - Sauleda acrylic - Top - FR
  - Sauleda plastic - Vip - FR
  - Sauleda plastic - Port M1 - FR

MAIN COMPONENTS

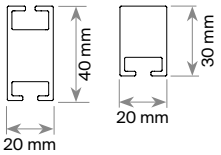


VIEWS

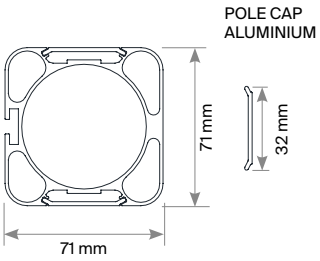


MAIN PROFILES

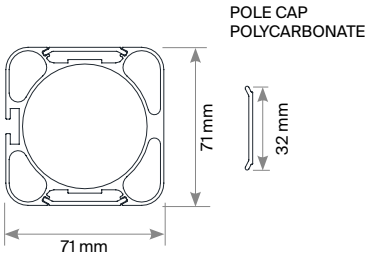
RIBS AND SPOKES



POLE WITHOUT LIGHTING



POLE WITH LIGHTING

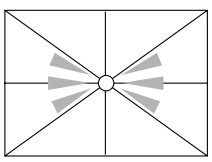


LIGHTING ORIENTATION

FOR RECTANGULAR PARASOL

INDUS

STANDARD



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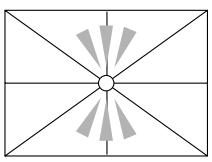
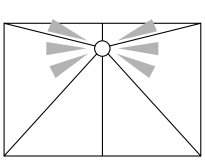


INDUS D

STANDARD



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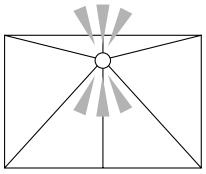
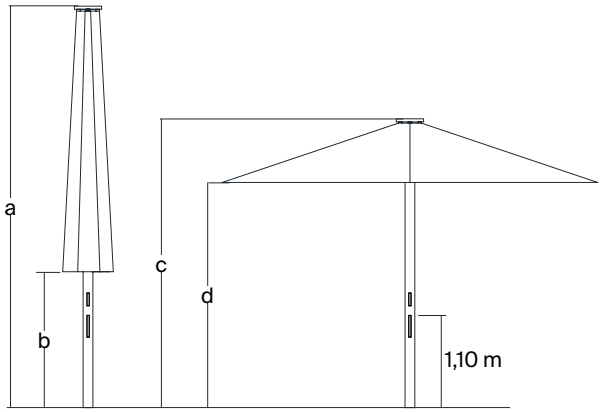
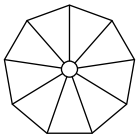
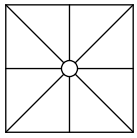


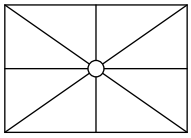
TABLE OF MEASUREMENTS

INDUS



Model	Measures (m)	N° Ribs	a	b	c*	d*
	2,00	8 - 20 x 30	3,38	2,40	2,65	2,30
	2,50	8 - 20 x 30	3,36	2,13	2,71	2,30
	3,00	8 - 20 x 30	3,53	2,00	2,81	2,30
	3,50	8 - 20 x 30	3,53	1,76	2,89	2,30
	4,00	8 - 20 x 30	3,52	1,52	2,88	2,30
	4,50	8 - 20 x 30	3,52	1,28	2,88	2,30

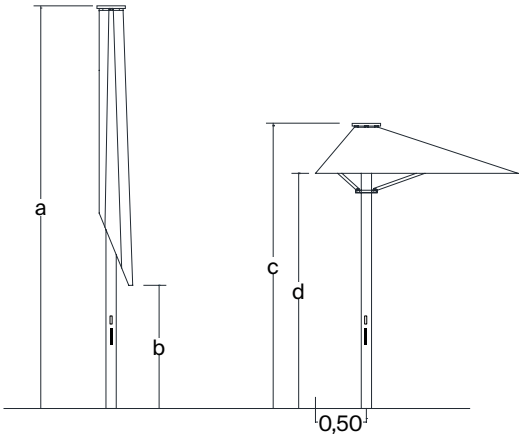
Model	Measures (m)	N° Ribs	a	b	c*	d*
	2,0x2,0	8 - 20 x 30	3,38	2,00	2,65	2,30
	2,5x2,5	8 - 20 x 30	3,37	1,63	2,71	2,30
	3,0x3,0	8 - 20 x 30	3,52	1,42	2,81	2,30
	3,5x3,5	8 - 20 x 30	3,53	1,06	2,89	2,30
	4,0x4,0	8 - 20 x 30	3,55	0,72	2,90	2,30

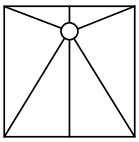
Model	Measures (m)	N° Ribs	a	b	c*	d*
	2,5x1,5	6 - 20 x 30	3,37	1,79	2,72	2,30
	2,5x2,0	8 - 20 x 30	3,37	1,80	2,72	2,30
	3,0x1,5	6 - 20 x 30	3,46	1,81	2,84	2,30
	3,0x2,0	8 - 20 x 30	3,52	1,73	2,80	2,30
	3,0x2,5	8 - 20 x 30	3,61	1,67	2,82	2,30
	3,5x1,5	6 - 20 x 30	3,50	2,65	2,88	2,30
	3,5x2,0	8 - 20 x 30	3,60	1,59	2,87	2,30
	3,5x2,5	8 - 20 x 30	3,60	1,45	2,89	2,30
	3,5x3,0	8 - 20 x 30	3,61	1,31	2,89	2,30
	4,0x2,0	6 - 20 x 30	3,39	1,21	2,64	2,30
	4,0x2,5	8 - 20 x 30	3,75	1,37	2,97	2,30
	4,0x3,0	8 - 20 x 30	3,75	1,25	2,97	2,30
	4,0x3,5	8 - 20 x 30	3,75	1,08	2,97	2,30

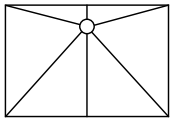
* Parasols can be manufactured with an additional 20 cm in mast length, affecting dimension (c) and the **clear passage height** (d), which will be **2.50 m**.

TABLE OF MEASUREMENTS

INDUS D



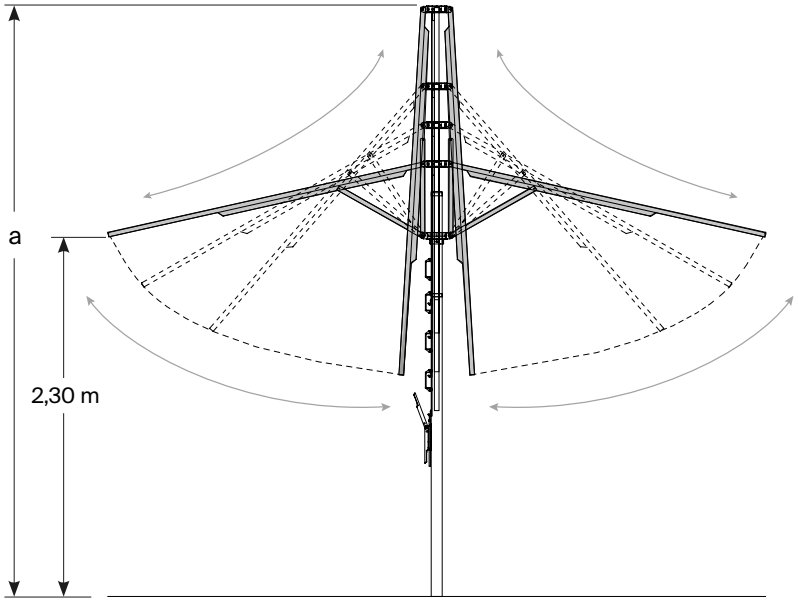
Model	Measures (m)	N° Ribs	a	b	c*	d*
	2,0x2,0	6 - 20 x 30	3,50	1,72	2,80	2,30
	2,5x2,5	6 - 20 x 30	3,52	1,16	2,96	2,30
	3,0x3,0	6 - 20 x 30	3,80	0,86	3,13	2,30

Model	Measures (m)	N° Ribs	a	b	c*	d*
	2,0x2,5	5 - 20 x 30	3,60	1,40	2,80	2,30
	2,5x1,5	6 - 20 x 30	3,37	1,81	2,60	2,30
	2,5x2,0	6 - 20 x 30	3,61	1,67	2,81	2,30
	3,0x2,0	6 - 20 x 30	3,71	1,61	2,81	2,30
	3,0x2,5	6 - 20 x 30	3,71	1,20	2,97	2,30
	3,5x2,0	6 - 20 x 30	3,54	1,26	2,80	2,30
	3,5x2,5	6 - 20 x 30	3,66	1,05	2,96	2,30
	3,5x3,0	6 - 20 x 30	3,81	0,73	3,13	2,30
	4,0x2,0	6 - 20 x 30	3,70	1,24	2,81	2,30
	4,0x3,0	6 - 20 x 30	3,80	0,59	3,12	2,30

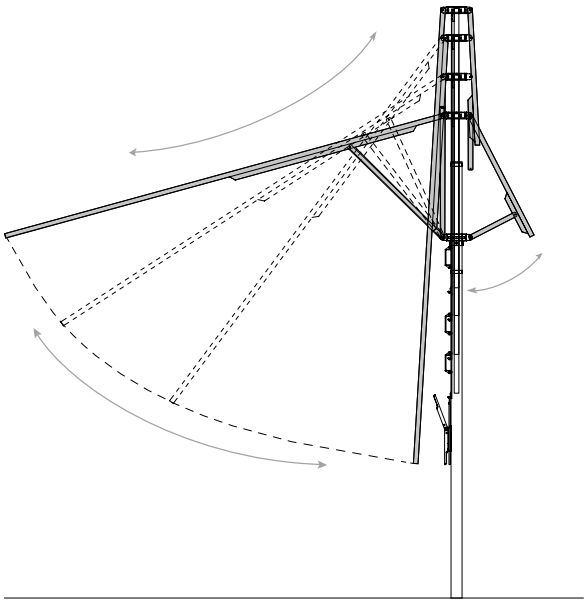
* Parasols can be manufactured with an additional 20 cm in mast length, affecting dimension (c) and the **clear passage height** (d), which will be **2.50 m**.

JUSTIFICATION OF DIMENSIONS

The INDUS and INDUS D models feature a telescopic opening system, with a clearance height of 2.3 metres, as shown in the figure below. These parameters mean that when the parasol is closed, the structure extends in height (a).



INDUS



INDUS D

LOADS

The wind load is classified according to standard UNE EN 13561, as indicated in the table. Therefore, the maximum wind speed that the Indus and Indus D parasols can withstand is 50–61 km/h, equivalent to level 7 on the Beaufort scale (Indus 4x4).

The calculation has been carried out assuming a fixed anchorage to the ground (see page 08, Foundation Plans).

The calculation has been performed in accordance with the following standards:

- UNE EN 1999-1-1 Eurocode 9: Design of aluminium structures.
- UNE EN 13561 External blinds and awnings. Performance requirements including safety.

Not suitable for snow loads. In case of snowfall, the umbrella must be closed.

170 N/m²
4
UNE EN 13561

CLASS*	Grade Beaufort	Wind speed		Pressure	Environmental condition
0	0	0 - 1 km/h	0.0 - 0.3 m/s	0.05 N/m²	Calm
	1	1 - 5 km/h	0.3 - 1.4 m/s	1.21 N/m²	Very light breeze
	2	6 - 11 km/h	1.7 - 3.1 m/s	5.84 N/m²	Light breeze
	3	12 - 19 km/h	3.4 - 5.3 m/s	17.41 N/m²	Gentle breeze
1	4	20 - 28 km/h	5.6 - 7.8 m/s	37.81 N/m²	Moderate wind
2	5	29 - 38 km/h	8.1 - 10.6 m/s	69.64 N/m²	Fresh wind
3	6	39 - 49 km/h	10.9 - 13.6 m/s	115.79 N/m²	Strong wind
4	7	50 - 61 km/h	13.9 - 17.0 m/s	179.45 N/m²	Near gale
5	8	62 - 74 km/h	17.5 - 20.6 m/s	264.08 N/m²	Gale
6	9	75 - 88 km/h	20.9 - 24.5 m/s	373.46 N/m²	Strong gale
	10	89 - 102 km/h	24.7 - 28.3 m/s	501.74 N/m²	Storm
	11	103 - 117 km/h	28.6 - 32.5 m/s	660.16 N/m²	Violent storm
	12	118 - 133 km/h	32.6 – 36.9 m/s	853.06 N/m²	Hurricane

*The correspondence of the class according to UNE EN 13561 with the wind speed or Beaufort scale is indicative.

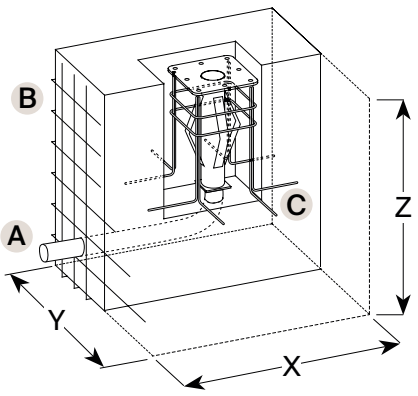
FOUNDATION TABLES

This anchoring must be a built-in ground system capable of withstanding maximum stresses. As for the supporting elements, their dimensions are determined to ensure the necessary stability of the parasol and prevent it from lifting in the event of wind suction, set at a maximum of 62–74 km/h, equivalent to level 8 on the Beaufort scale.

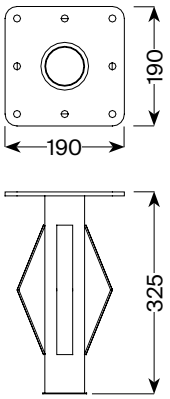
- **A** CORRUGATED TUBE Ø40 máx.
- **B** WELDED MESH ENCLOSURE
- **C** RIBBED ROD

- Concrete HA - 25
- Ribbed rod Ø8 mm
- Electrowelded mesh enclosure 150 x 150 with rib of Ø6 mm

In the case of anchoring with a concrete element, it must have minimum dimensions.



105-2

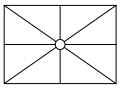


FOUNDATIONS (X, Y, Z)

INDUS

	0,5 x 0,5 x 0,5 m	0,6 x 0,6 x 0,7 m	0,7 x 0,7 x 0,8 m
Ø 2,00	•		
Ø 2,50		•	
Ø 3,00		•	
Ø 3,50			•
Ø 4,00			•
Ø 4,50			•

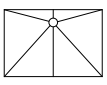
	0,5 x 0,5 x 0,5 m	0,6 x 0,6 x 0,7 m	0,7 x 0,7 x 0,8 m
2,00 x 2,00	•		
2,50 x 2,50		•	
3,00 x 3,00		•	
3,50 x 3,50			•
4,00 x 4,00			•



	0,5 x 0,5 x 0,5 m	0,6 x 0,6 x 0,7 m	0,7 x 0,7 x 0,8 m
2,50 x 1,50	•		
2,50 x 2,00	•		
3,00 x 1,50	•		
3,00 x 2,00		•	
3,00 x 2,50		•	
3,50 x 1,50	•		
3,50 x 2,00			•
3,50 x 2,50			•
3,50 x 3,00			•
4,00 x 2,00			•
4,00 x 2,50			•
4,00 x 3,00			•
4,00 x 3,50			•

INDUS D

	0,5 x 0,5 x 0,5 m	0,6 x 0,6 x 0,7 m
2,00 x 2,00	•	
2,50 x 2,50		•
3,00 x 3,00		•
2,00 x 2,50		•
2,50 x 1,50	•	
2,50 x 2,00	•	



	0,6 x 0,6 x 0,7 m	0,7 x 0,7 x 0,8 m
3,00 x 2,00	•	
3,00 x 2,50	•	
3,50 x 2,00		•
3,50 x 2,50		•
3,50 x 3,00		•
4,00 x 2,00	•	
4,00 x 3,00		•

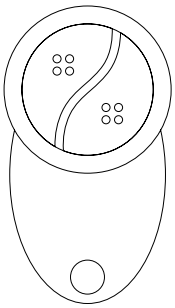
OPTIONS AND ACCESSORIES

- Rib lighting kit
- Pole lighting kit
- 12V portable battery for lighting
- Lighting kit with removable batterie
- Heating kit
- Pre-installed audio wiring
- Valance
- Lighting valance
- Side curtains
- Joint rain gutter between parasols
- Telescopic cover with pole

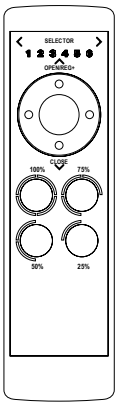
EMITTERS

CONTROL OF THE OPTIONS AND ACCESSORIES OPTIONAL

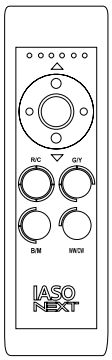
EMITTER TXP	
Power supply	3V ± 10%
Lithium battery	CR2430
Battery lifespan	>2 years
Protection rating	IP20
Measures	86 x 86 x 9,5 mm
Operating temperature	-5°C~50 °C
Radio frequency	868 MHz
Operating range	100 m



EMITTER NOON	
Power supply	3V ± 10%
Lithium battery	CR2430
Battery lifespan	>2 years
Protection rating	IP20
Measures	125 x 40 x 10 mm
Operating temperature	-5° ~ 50 °C
Transmission power	10mW
Radio frequency	433,925 MHz
Operating range	35 m



IASO NEXT HOME AUTOMATION	
Power supply	-10° / +55°C
Reception frequency	868,3 MHz
Standby consumption	< 1W
Typical consumption	< 2,5W
Radio memory capacity (transmitters)	20
WiFi frequency	2,4 GHz (b, g, n)



LIGHTING CHARACTERISTICS

RIBS AND POLE LIGHTING
OPTIONAL

RIBS AND POLE	
Colour	Warm white
Colour temperatura	2700°K
Consumption	4,8W/m
Voltage	24V
Protection rating	IP 64

BATTERY CHARACTERISTICS

RIBS AND POLE LIGHTING
OPTIONAL

REMOVABLE BATTERY KIT
FOR RIB LIGHTING

- 12 V LED light kit with adjustable intensity powered by battery
- Output voltage: 12 V
- Equivalent capacity: 250 Wh
- Waterproof cover tied to the mast, easily removable
- Battery life: 7 h aprox.
- Protection rating: IP54
- 4 aluminium LED strips
- Warm white light
- Length: 530 mm
- Connection cable for 4 LED profiles
- LED protection rating: IP65
- Connection cable
- IP65 connectors
- 2 emitters TXP

REMOVABLE BATTERY KIT
FOR RIB AND POLE LIGHTING

- Output voltage: 12/24 V
- Equivalent capacity: 350 Wh
- Maximum tension: 10 A
- Lithium-ion technology (> 2,000 charging cycles)
- Self-protection system against short circuits
- Safety charger for 220 V recharging included
- Autonomy of approximately 5 hours with all 4 lighting strips on
- Charging time (approximate): 8 hours
- New unified system for fixing, locking and connection in a single device (ULCS)
- Integrated mechanical lock
- High-quality plastic casing
- IP53 (rain protection)
- Measures: 12.5 cm x 6.5 cm x 9.5 cm
- Weight: 1.9 kg

MAINTENANCE

The INDUS parasol is a unique product in which the construction solutions and materials used are of the highest quality, offering maximum durability. Consequently, routine maintenance is minimal, allowing you to keep it in perfect working condition and with an appealing appearance with very little effort. Below are some simple rules to follow.

CANOPY
The maintenance of the canopy is limited to cleaning. To keep the area exposed to the elements looking as good as new, clean it two to three times a year to prevent dust or pollution from settling on the fabric due to sun exposure.

- PVC: Spray with water and neutral soap, wait a few minutes for the soap to act, then remove the dirt gently with a sponge without rubbing. Repeat the process if necessary and rinse thoroughly with clean water.
- ACRYLIC: Dry cleaning
- POLYESTER: Dry cleaning

STRUCTURE
The aluminium should be cleaned with water and neutral soap.

ATTENTION
The main function of the parasol is to reduce the incidence of sunlight; it does not provide complete protection against rain.

The offset parasol with valances may show creases due to the asymmetric distribution of the ribs required for the movement of the mast.

We believe in the *elegance* of engineering.