



COSAF

INNOVATIVE ENGINEERING

Ref: Evapolar
Date: 14 August 2017
Prepared by: Sam Troughton



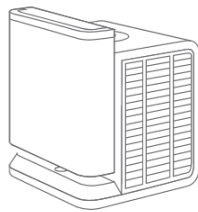
Contents

Contents	1
Quick Start.....	2
Technical Specifications.....	2
Temperature Table	3
How it works	4

Quick Start



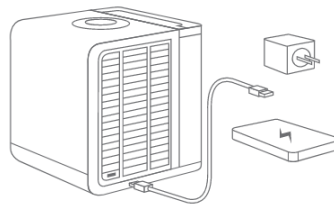
Add Water



Fill up the tank with water



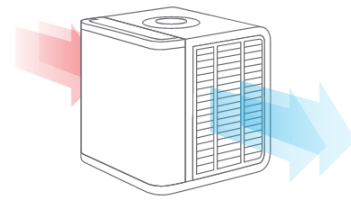
Add Power



Connect USB cable to a power outlet or power bank



Enjoy



Get the full cooling effect after the cartridge has fully absorbed the water (after about 10 minutes)

Technical Specifications

Technical Specifications

Performance

Cooling power: up to 1200 BTU/hr
Cooling area: 45 sq ft (3-4 sq m)
Noise level: 28-40 dB

Power

Power consumption: 10W
Micro-USB plug 5V 2A
Works with USB power bank



Body

Size: 6.87 × 6.70 × 6.69 inches
(174 × 170 × 170 mm)
Weight (without water):
2.87 lbs (1.3 kg)
Water tank capacity: 25.36 fl oz
(750 ml)

Maintenance

Water tank refill cycle: every 4-6 hours
Cartridge replacement period:
every 3-6 months

Temperature Table

Outcoming temperature table

Evapolar's efficiency depends on the air's humidity and temperature. The table below shows expected initial outgoing temperature values calculated for different air conditions

Celsius Fahrenheit

Humidity ↓	Temperature →				
	20 °C	25 °C	30 °C	35 °C	40 °C
30%	11,0 °C	15,4 °C	19,0 °C	22,6 °C	26,3 °C
40%	12,9 °C	16,9 °C	21,9 °C	24,8 °C	28,8 °C
50%	14,4 °C	18,4 °C	22,5 °C	26,7 °C	30,9 °C
60%	15,6 °C	19,7 °C	24,1 °C	28,5 °C	32,9 °C
70%	17,0 °C	20,9 °C	25,5 °C	30,0 °C	34,6 °C

Innovative Evabreeze material inside



Bio-resistant stable compound

Made from natural basalt fibers. Doesn't contain any nutritious elements that lead to bacteria and mold growth compared to cellulose materials



Intense evaporation effect

Provides highly intense evaporation from a small surface. This allows Evapolar to be compact, yet powerful



Advanced capillary effect

The device uses the capillary effect to raise the water up to a height of 11.81 inches (30 cm) and saturates the whole area of the Evapolar cartridge. This feature makes the Evapolar cartridge compact and doesn't require a pump.



Eco-friendly and fully biodegradable

Evapolar filters are made from a mineral compound. Mineral compound that doesn't harm the environment and saves energy due to compact cartridge size

How it works

How Evapolar works



Microclimate area:
45 sq ft (3 – 4 sq m)

Cools a single person's work space, sleeping area or traveling tent. Most efficiently cools an area of 21 – 32 sq ft (2 – 3 sq m). Doesn't cool the whole room.

[Read more.](#)



Temperature reduction:
39 – 63°F (4 – 17°C)

Decreases outgoing airflow temperature down to 17°C / 63°F degrees depending on the humidity level. Works best in a dry, hot climate. Has a limited cooling effect in an area with a humidity higher than 70%.

[Read more.](#)

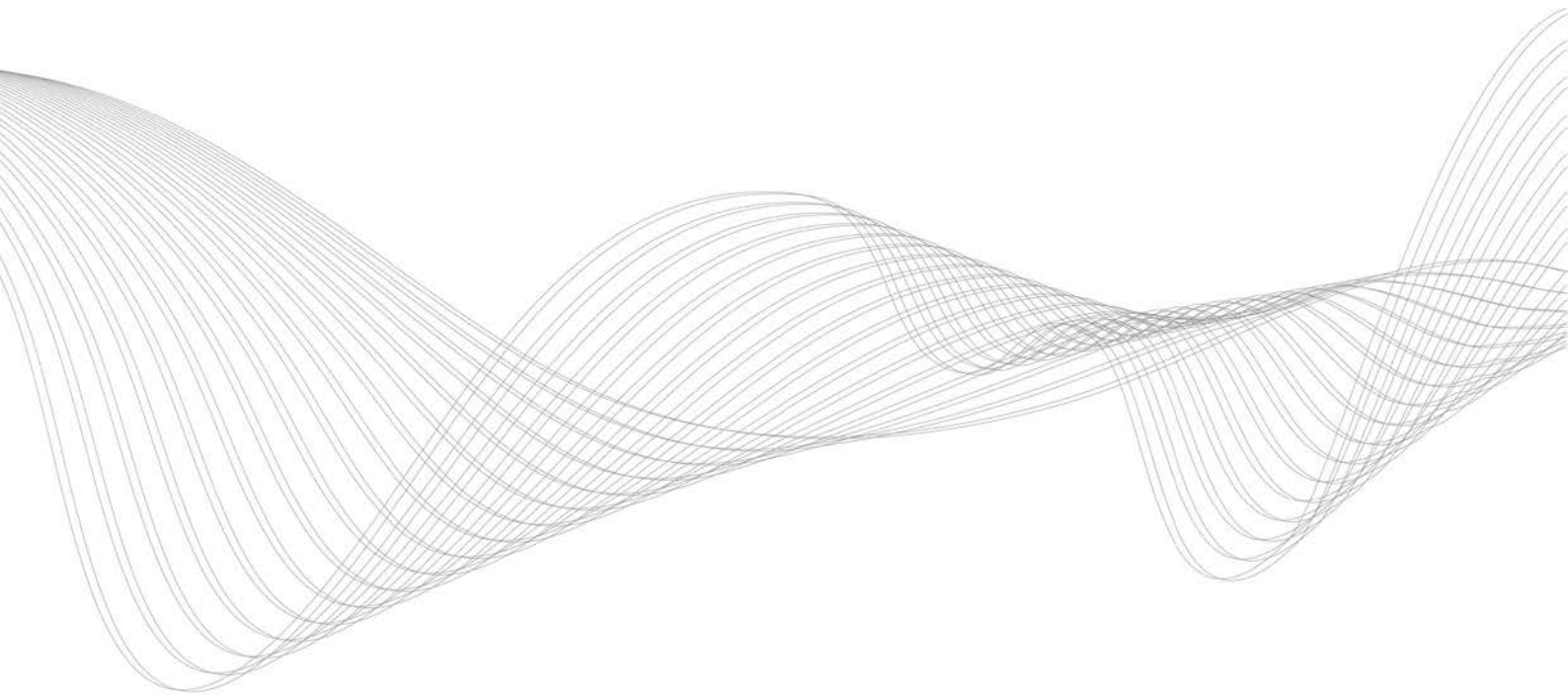


Operating time:
4 – 6 hours

Works for 4 – 6 hours on one tank of water. Operating time depends on the humidity level and temperature of the room.

[Read more.](#)





COSAF

INNOVATIVE
ENGINEERING

Cosaf Environments Limited
Lowry Mill, Lees Street,
Swinton, Manchester. M27 6DB. UK.

T: +44 (0)161 8201322
F: +44 (0)161 7103208
E: enquiries@cosaf.co.uk

cosaf.co.uk

