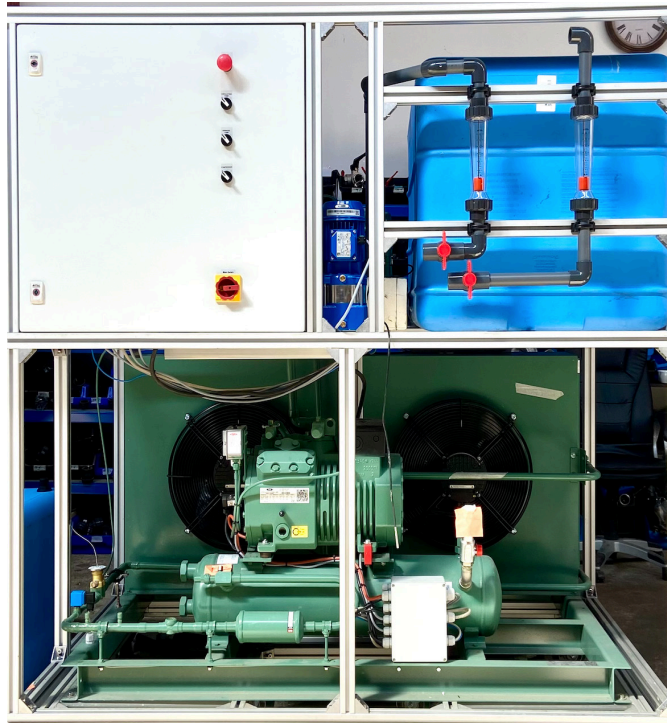


ABOUT BOREAL LIGHT

Boreal Light GmbH is a Berlin based company specialized on renewable energy solution for water treatment facilities. The company designs and manufactures affordable solar water desalination and cooling systems for off-grid communities around the globe.

Systems manufactured by Boreal Light are capable of delivering high quality hygiene drinking, irrigation, fish farm and sanitation water from any kind of high saline and polluted water resources. Powered fully by solar, simplicity of the design and affordability of the cost of the systems manufactured by Boreal Light are the three great competences the company is proud of.

NOTES:



GET IN TOUCH!



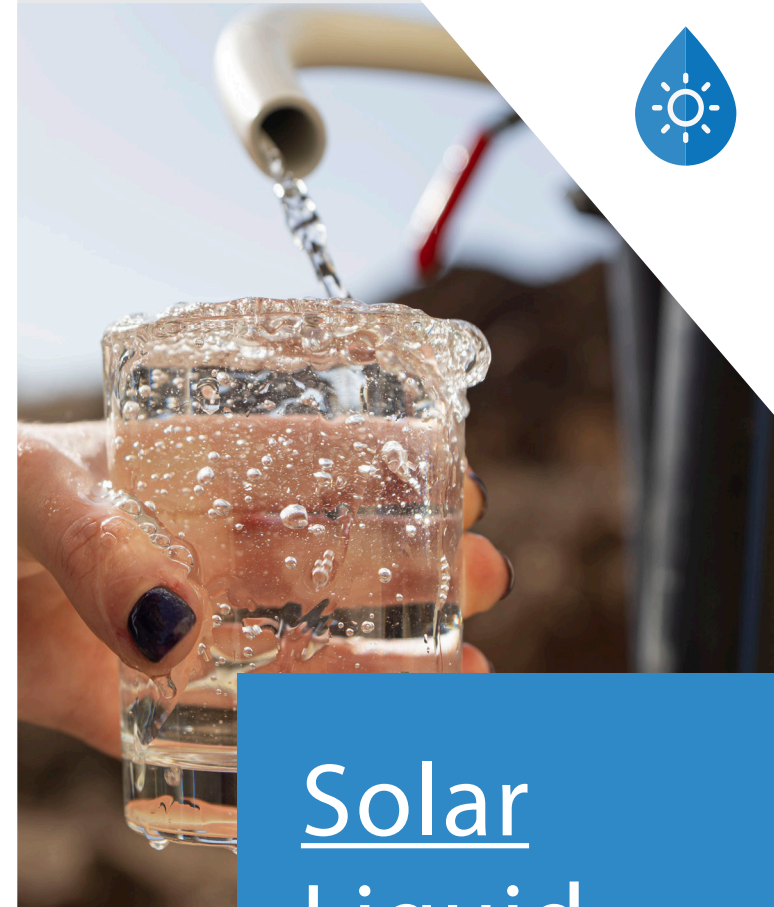
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Solar Liquid Cooling System

WWW.WINTURE.DE



BOREAL LIGHT

TECHNICAL SPECIFICATIONS

Process characteristics

Flow, l/h	2000 - 50 000
Cooling capacity, kW	22.22
Coefficient of performance	3.73

Electrical specifications

El. Supply, grid, V / Ph / Hz	~400 / 3 / 50
El. Supply solar, VDC	550
Power consumption, kW	5.96
Operating current, A	19.7
Fuse, chiller unit, A	25
Fuse, pumps, A	4
Remote monitoring	Weidmüller IOT system
Display	8"

Equipment

Tank drinking water, l	400
Tank transfer water, l	500
Refrigerant, Kg	7
Oil BSE32, Kg	2
Chiller unit	Bitzer LH124E/4CES-6Y
Pumps	Ebara CVM/I A/4 IE3
Heat exchanger chiller cycle	EWT WP-52
Heat exchanger water cycle	EWT-B3-12A
Safety valve	Danfoss PS65
Thermostatic expansion valve	Danfoss TE5
Pressure switch	Johnson controls P78
Solenoid valve	Danfoss EVU8
Piping	PVC or Stainless steel
Disinfection	UV light
Battery	50 Ah 24 V Li-Battery
Frame	Aluminium

Dimensions and weight and materials

HxWxD, mm	1945x1820x1800
Net weight, Kg	900
Gross weight, Kg	1800

USE CASES

Solar-Powered Liquid Cooling System by Boreal Light is designed to revolutionise liquid cooling in remote areas by utilising the abundant and renewable energy of the sun. This advanced system provides a sustainable solution for cooling lukewarm water, milk or other liquids to a lower required temperature.



DRINKING WATER COOLING



MILK & DAIRY COOLING



LIQUID COOLING FOR FOOD & BEVERAGE INDUSTRY



COOLING WATER FOR AIR CONDITIONING / CLIMATE CONTROL



COOLING WATER FOR AIR CONDITIONING / CLIMATE CONTROL



KEY BENEFITS



Cools liquids using solar power, even in cloudy weather



Ideal for off-grid locations, reducing reliance on traditional electricity



Maintains freshness and quality of milk and liquids



Hybrid mode: solar by day, grid power at night



No need for batteries, lowering investment and maintenance costs

Revolutionising Cooling
in Remote Areas with
Renewable Solar Energy