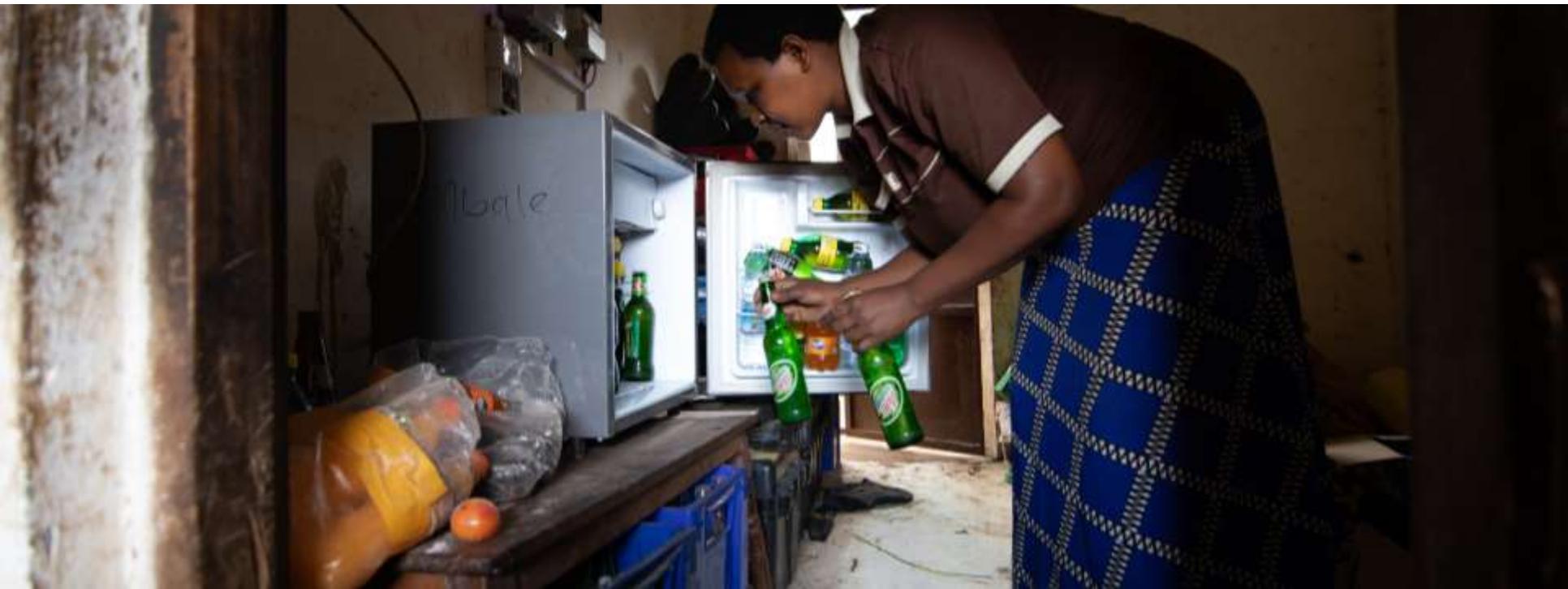


**EFFICIENCY
FOR
ACCESS**

**Global
Distributors
Collective**

Remote Trade Show: Solar water pumps and refrigerators 29 September



Agenda

- Welcome & Introduction
- Overview of SWP products
- Overview of fridge products
- Q&A
- Wrap up and close

Why an appliance roadshow?

- Strong interest from GDC members in selling appliances
- The GDC's 2019 State of Sector report found that 22% of GDC members sell appliances – fans, TVs, refrigerators, solar water pumps, mills and more. We think that number today is more like 30%.
- But there is still an information gap
- We've teamed up with Efficiency for Access to help bridge this gap

About Efficiency for Access

- A global coalition working to promote high performing appliances that enable access to clean energy
- Consists of 15 Donor Roundtable Members, 10 Programme Partners, and more than 30 Investor Network members.
- Coordinated jointly by CLASP and Energy Saving Trust
- Find out more at www.encyforaccess.org

The products on show today

- ▶ All manufacturers today are finalists or winners of the Global LEAP Awards
- ▶ Product presentations will be short but manufacturers will focus on details important to distributors seeking new partners
- ▶ We encourage you to connect directly with suppliers afterwards – contact details will be shared along with recording and slides

Overview of solar water pump products

- ▶ Jakob Olesen, **Grundfos**
- ▶ Brian Marsh, **Futurepump**
- ▶ Tapan Ghos, **Super Star Group**
- ▶ Karin Jeanneret, **Ennos**
- ▶ Hack Stiernblad, **SunCulture**
- ▶ Chen Huimin, **Solartech**





Solar Pumping Products

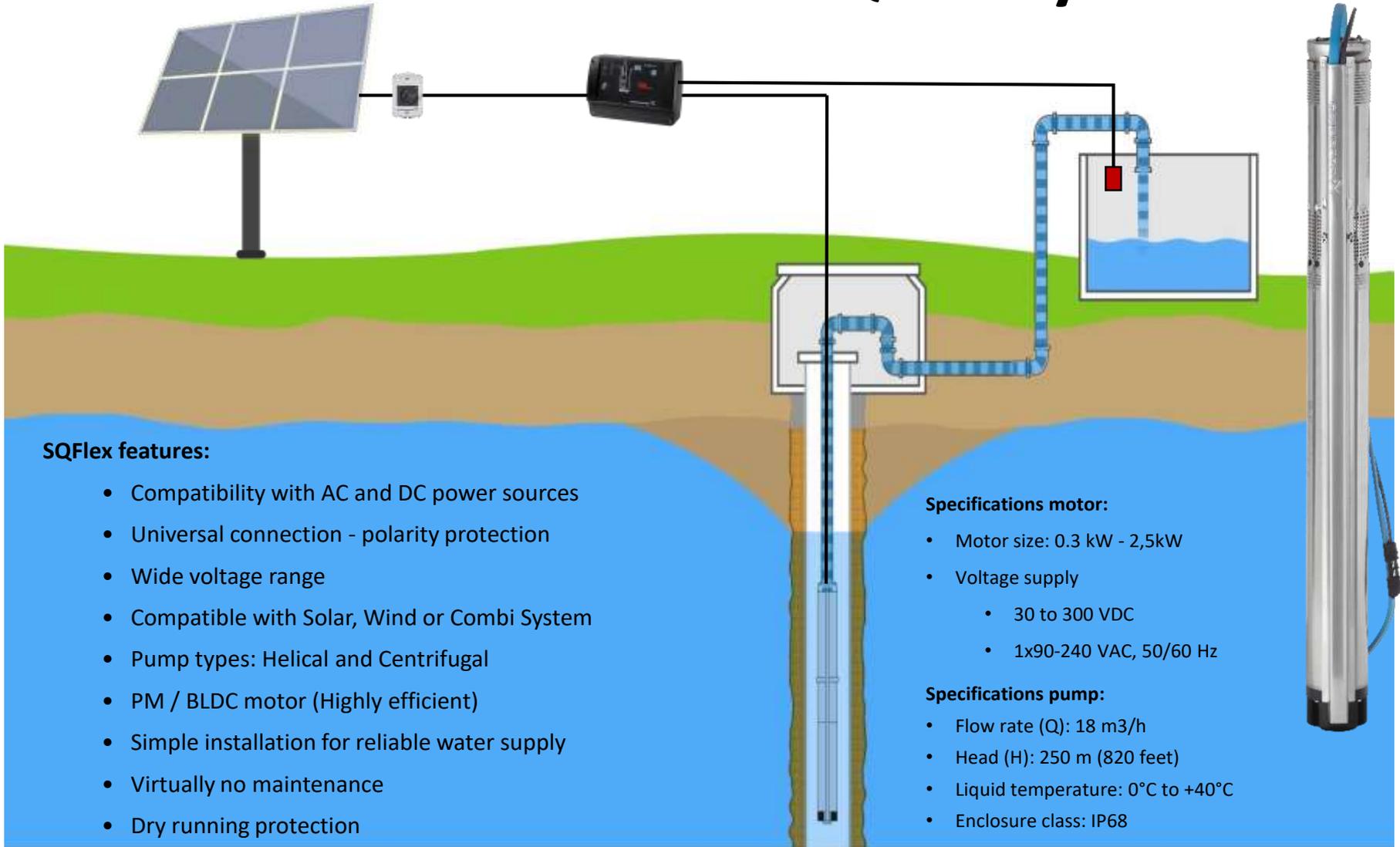
Solar Water Solution

be
think
innovate

GRUNDFOS 



SQFlex system



SQFlex features:

- Compatibility with AC and DC power sources
- Universal connection - polarity protection
- Wide voltage range
- Compatible with Solar, Wind or Combi System
- Pump types: Helical and Centrifugal
- PM / BLDC motor (Highly efficient)
- Simple installation for reliable water supply
- Virtually no maintenance
- Dry running protection

Specifications motor:

- Motor size: 0.3 kW - 2,5kW
- Voltage supply
 - 30 to 300 VDC
 - 1x90-240 VAC, 50/60 Hz

Specifications pump:

- Flow rate (Q): 18 m³/h
- Head (H): 250 m (820 feet)
- Liquid temperature: 0°C to +40°C
- Enclosure class: IP68

Our products

- Solar powered surface irrigation pumps and irrigation kits (available with or without solar panels)
- Pumps for 1- or 2-acre farms
- Compatible with sprinklers, drip, hoses or overhead tanks
- Available through our network of distributors (15 countries) or direct from our factory

Model	RRP
SE1 – 60W	\$395
SF2 – 120W	\$695
SF2 – Irrigation kit	\$775

- T&Cs:



Support from Futurepump

➤ As the manufacturer, we also supply:

- A service pack with every pump
- Remote monitoring
- In every container:
 - Free demo stand
 - Marketing materials
- Training (sales and technical)
- Technical support (support.futurepump.com)
- 5 years warranty (warranty.futurepump.com)



Company Overview and Product Specification

1 Super Star Renewable Energy Limited (SSREL), also known as SUPER STAR SOLAR, stands as one of the pioneers for providing innovative renewable energy focused energy efficient products related to Solar PV based home systems that are best suited to the end users of remote areas and intelligent energy solution for any kinds of renewable energy projects. Currently operating with countries largest solar product distribution network consists of 150+ Distributors, 750+ Dealers & 6,500+ Retailers nationwide.

Most of the products received quality certifications & recognitions by both international and local bodies like ISO, BUET, IDCOL. SUPER STAR SOLAR received prestigious Global LEAP Awards consecutively in 2014, 2015-16, 2017 and 2019 session for energy efficient LED Light, DC Table Fan, DC Ceiling Fan & DC LED TV and Water Pump.



2

Product Name	Specification		
	Model Number	ASSG-GLSP-04, ASSG-GLSP-03	
Solar Submersible Pump System	Pump Type	Helical rotor, Helical rotor	
		Hydraulic energy (Wh/d)	1576.3, 4287.2
	Sunny, high irradiance day (1000W/m ₂ peak)	Total volume of water moved (m ³ /d)	14.5, 78.7
		Hours of operation (hrs)	9.2, 9.2
		Maximum head (m)	75.6, 50.7
		Minimum irradiance required to start the pump	200, 250



Product Price, Term & Condition and Service



1 Country Availability

- Bangladesh, Africa, Middle East

2 Terms & Condition

- 20% TT in advance, rest by LC at side. Delivery around 45 days after confirming LC and TT.

3 Service

- We will provide virtual training to support sales, marketing, software operation and remote monitoring



The **sunlight pump** by ennos Switzerland a surface solar pump with the best range in its category

Key features **0.5HP sunlight pump**

- Excellent performance
- Up to **22'000 litres** per day in solar mode
- Total delivery head of **40 metres**
- **100-500 Watt**
- You can pump more than **2000 metres** from source
- Portable (**14kg**) and self protected and automated system
- Free ennos App for monitoring the system
- Battery mode to extend running hours
- PAYG solution available
- Swiss Design – manufactured in India (www.jains.com)

Key benefits for the end-user

The 0.5HP **sunlight pump** has the power for

- drip systems up to 8000m²
- sprinkler systems for covering 2000m² and more
- drinking water systems up to 1500 litres per hour
- running by cloudy weather
- doubling the water output when it is used in combination with batteries

Additional advantages are:

- no operational costs and almost maintenance free
- lifespan of 10+ years
- warranty 24 months from installation

Announcement

2HP sunlight pump

Available soon

Up to 200'000 litres per day



check the versatile applicability on www.ennos.ch

“Trust begins with giving your partner what you have and sharing knowledge and experience”

active in >30 countries



ennos QM



ennos App



Online and remote support



Tutorials and marketing documents



Terms and conditions

100% advance payment except in case of export risk insurance

Spare parts available

Stock in India and shipped from India

SunCulture's Smallholder farmer progression ladder

ClimateSmart™ Direct RainMaker2S / RainMaker2C Kubwa



- GSM PAYG Enabled
- 310W or 620W Solar panel
- Head and flow up to 30m and 2,750m³/hr
- Manual/hose pipe watering or to tank
- Optimized for < 2 Acre irrigation

ClimateSmart™ Battery RainMaker2S / RainMaker2C



- GSM PAYG Enabled
- 444Wh Lithium battery + 310W Solar Panel
- Heads and flow up to 60m and 2,750m³/hr
- 4 x 600 Lumens LED Bulbs + 2 x USB ports
- 4 x sprinklers + fittings
- Optimized for < 2 Acres irrigation

Add-On features

Direct Drip Irrigation & 32" TV



- Direct from pump
- No tank & tank stand
- 500m² (1/8 Acre)
- Can be scaled to 1,000m² (1/4 Acre)
- 20h+ run time
- 32" Digital LED TV
- integrated sound system.
- Controller

Pricing, Delivery timelines & Payment terms

Product:	China FOB Price:	Including:	Excluding:
ClimateSmart Direct + RainMaker2S	396 USD	Submersible pump, 50M power cable, 50M sensor cable, controller, 310W solar panel and necessary fittings	25MM-PN10-HDPE Pipe, Stiling tube - PVC pipe
ClimateSmart Direct + RainMaker2C Kubwa	560 USD	Submersible pump, 50M power cable, 50M sensor cable, controller, 2 x 310W solar panel and necessary fittings.	40MM-PN10-HDPE Pipe
ClimateSmart Battery + RainMaker2S/2C	630 USD	Submersible pump, 50M electric cable, ClimateSmart Battery, 310W solar panel, 4 sprinklers, necessary fittings, 4 x LED Light Bulbs and 2 x USB charging ports.	25MM-PN10-HDPE Pipe, Stiling tube - PVC pipe
Direct Drip Irrigation	95 USD	1,000M of 20/30 CM drip irrigation tape, Pressure regulator valve, Filtration system, Connectors, alves and necessary fittings.	25MM-PN10-HDPE Pipe
32" Solar TV	138 USD	32" Solar powered TV, Integrated sound system, Antenna and Controller	

- Country availability: Africa + other upon request
- Terms & conditions: Upon request
- Manufacturing/dispatch timeline: 30-60 days from China and 5-15 days from Kenya
- Shipping timeline from China: 30-60 days depending on country
- Available services:
 - Training (in country): Sales, financing, marketing, installation and maintenance service
 - Software: PAYG enabled, Sentinel software with device monitoring and lock/unlock features. API Integration available

Permanent Magnet (BLDC) Solar Pumps

- Suitable for Small farm irrigation, Domestic water supply, Livestock drinking water and Artificial waterscape, etc.



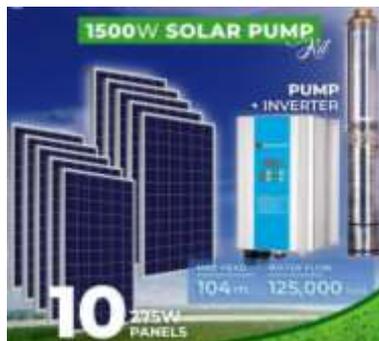
Product Features

- **High efficient Brushless DC motor (BLDC)**, fewer solar panels demand;
- Simple operation, completely **Automatic Running**, **Easy to install and use**;
- **Long Lifespan: Inverter (controller)** with **IP52** full **Aluminum Alloy** case, **3 years** warranty; **Stainless Steel Pump**, **1 year warranty**, centrifugal pump for big flow or helical rotor pump for high lift;
- Terms and conditions: generally 100% T/T in advance; ≤10sets, delivery within 7 days; ≥11sets, delivery within 25~45 days ;

- Country availability: **Global**, it has been installed at **High altitude** region (over 4km), Drought-prone region and Coastal region;
- Support services:
 - **PAYG optional**: Embedded Encryption Technology;
 - **Remote Monitoring**: optional equip our Data monitor for remote monitoring and control via Smart Phone or Web;
 - User **manual**, system installation **guide**, Install reference **video**



Control Box



GLOBAL LEAP AWARDS FINALIST 2019

SPM600HS

GLOBAL LEAP AWARDS FINALIST 2019

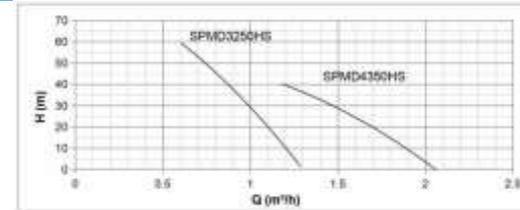
SPM400H

Solar Direct Drive Pumps

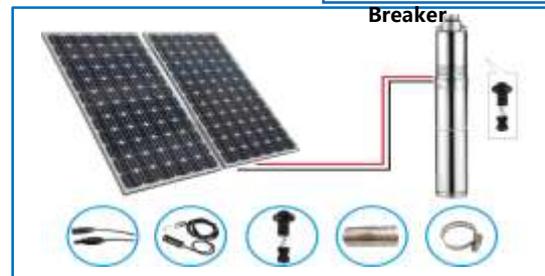
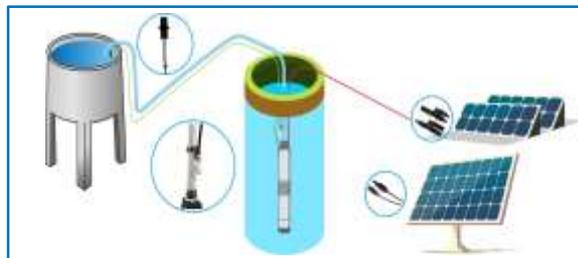


Product Features

- Max. Water Head: 60m
- Full-stainless steel design, excellent cable waterproof design.
- **In-built inverter** design, solar panels can directly connected to drive and pump.
- Completely **Automatic Running, Easy to install and use**;
- Terms and conditions: generally 100% T/T in advance; ≤10sets, delivery within 7 days; ≥11sets, delivery within 25~45 days ;
- Support services: User **manual**, system installation **guide**, install reference **video**;
- Country availability: Global;



■ It is especially suitable for **Smallholder Families**.



Refrigerator companies

- ▶ Tushar Devidayal, Devidayal Solar Solutions
- ▶ Jurgen Aldinger, Global Ice Tec
- ▶ Mike Bauer, SunDanzer



1. Who We Are

Company Overview

Devidayal Solar Solutions focuses on the design, manufacture, sale and distribution of productive use off-grid solar DC appliances for income generation and enhancement. Our flagship product is a solar DC refrigerator:

- Based in India
- Solar refrigeration and cooling solutions to solve cold-chain related issues
- Focus on agriculture, dairy, fishing



2. Solar DC refrigerator



Key Features

- Designed for storage drinks, dairy and food (light commercial use).
- Efficient DC compressor (0.329 Kwhr/24 Hr). Digital display, rugged construction, environmentally compliant refrigerant.
- Solar module and sizing of the freezer is customised to suit the end-use.
- Temperature range 1 -11C and -18C to +8C.
- Solar DC 12V/24V
- Country availability: EXW India – can be delivered anywhere in Africa and Asia
- Tested by CLASP in The Netherlands - IEC 62552 (steady-state operation power consumption at 16C, 32C, and 43C, load processing efficiency, freezing capacity).
- **PayGo model coming soon!**
- **Vaccine racks and temperature data logger kit available!**



THE DATA UNOCOOL® 165 DC

TECHNICAL:

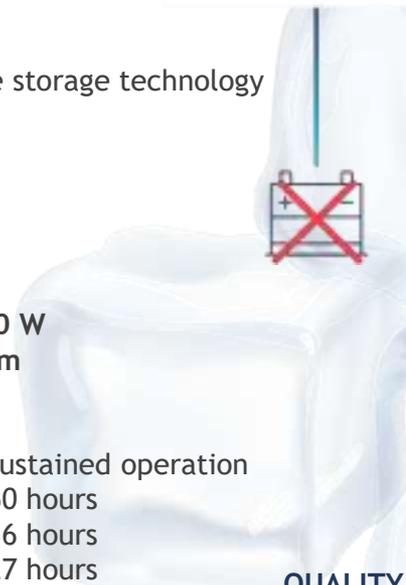
Device type: Household refrigerator with ice storage technology
 Type: Upright unit, freestanding
 Cooling system: Compressor
 Refrigerant: R600a
 Power supply: Direct current (DC)
 System voltage: 10 - 40 V
 Rated power: 50 W ... 80 W
 Power generation: **Photovoltaic module 120 - 180 W without battery storage system**

Cooling temperature: + 4°C...+12°C
 Ambient temperature: +16°C...+40°C
 Autarky time: Ice-storage period during self-sustained operation
 at 25°C ambient temperature 60 hours
 at 35°C ambient temperature 36 hours
 at 40°C ambient temperature 27 hours

PHYSICAL:

Dimension: 1300 x 595 x 636 mm
 Weight: refrigerator: 50 kg, Ice storage: 10 kg
 Net capacity: 140 L
 Doors: 1 piece, alternately mountable
 Shelves: 2 pieces grid shelves, height adjustable
 1 piece glass shelf
 Drawer: 1 piece

DAILY ENERGY CONSUMPTION AT 32° C IN KWH/DAY: 0.348



QUALITY:

- » Application of the patented ice storage technology
- » CE-compliant according to EU regulation 765-2008
- » RoHS compliant according to EU 2011-65
- » Use of CFC-free refrigerants according to EC 1005-2009
- » Production in Europe according to ISO 9001 and ISO 14001



Country availability: Africa, South East Asia, South America

Terms & Conditions: payment depending on size of order, small orders cash payment at least 50% in advance, larger orders LOC possible, shipping takes on average 4 to 6 weeks

Support services:

- Flyer, product video and SGD impact presentations for sales and marketing
- Installation video (for connecting solar module), installation guide for initializing ice storage
- Maintenance: Household fridges do not need maintenance except regular cleaning, no battery means no replacement within usual life time of fridge (average 10 years)
- PAYG-integration: simple and robust, providing control signal to all commercially available PAYG-systems (mainly for African market)
- Options for consumer financing based on micro-credits (Indian and South American market) are available

Prices: (FOB from European port, solar module not included) please see below

units per year	UNOCOOL DC (solar module required, but NO battery)	UNOCOOL AC (suitable for grid connection with threat of blackouts)
10,000+ units	299 €	269 €
5,000 - 10,000 units	312 €	282 €
1,000 - 5,000 units	322 €	292 €
100 - 1,000 units	332 €	302 €
1 to 100 units	344 €	314 €

Contact: Global Ice Tec AG, info@global-ice-tec.com. Please ask us for specific COVID-19 offers.

- ▶ A long leader in off-grid, solar refrigeration
 - Brand: Quality, Technology Leader
 - 3 time Global Leap winner, 2 time finalist
 - Product Lines: Productive Use and Medical
- ▶ New, low cost products manufactured in China
- ▶ Seeking in-country LMDs
- ▶ Sold standalone or as a complete PAYG system (solar panels, wiring harness, Zimpertec SHS)

Mike Bauer, Business Development, mike@sundanzer.com
Mobile and WhatsApp +1 415 827 7880, Skype live:mike_53841

3 Solutions for Developing Countries

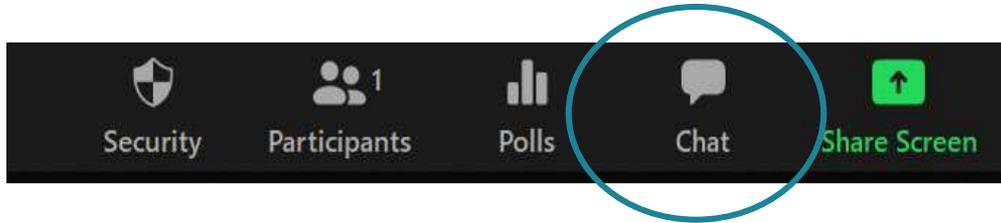
- ▶ 100L Chest Fridge
 - \$225* USD FOB China
 - Domestic or Productive Use
- ▶ 165L Chest Fridge
 - \$375* USD FOB China
 - Milk cooler or kiosks
- ▶ Ice Maker
 - \$475* USD FOB China
 - Fishing communities



* estimated production price, 20' container minimum, 50% deposit,

Q&A

Share your questions in the chat



We will collate questions for manufacturers to answer in follow up



What next?

- Recording to be made available and manufacturer details to be shared in follow up
- Special offers for GDC members:
globaldistributorscollective.org/covid-19-offers/
- POLL: What products do you want to see in future roadshows?
- Don't miss our next webinar on gender inclusion strategies with Value4Women on Oct 15



Thank you!



GDC@practicalaction.org.uk

Supported by



IKEA Foundation



The GDC is hosted by Practical Action, alongside implementing partners Bopinc and Hystra