

**EFFICIENCY
FOR
ACCESS**

**Global
Distributors
Collective**

Remote Trade Show: Fans and TVs Tuesday 9th February 2021



Agenda

- 9:00 – 9:05: Welcome & Introduction
- 9.05 – 9.10: Scene setting presentation on the off-grid fan and TV landscape – Ruth Kimani, CLASP
- 9:10 – 9.50: Manufacturer Presentations
- 9.50 – 9.58: Q&A
- 9.58 – 10.00: Close

Why a product roadshow?

- Efficiency for Access and GDC have joined forces to fill the information gap on off-grid fans and TVs:
 - Manufacturers offering high-performing fans and TVs can show their products that are appropriate for last mile customers.
 - Last-mile distributors to connect with manufacturers on their needs and priorities.
- It follows our first product roadshow on solar water pumps and fridges in 2020.

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 about Efficiency for Access @ www.efficiencyforaccess.org

About GDC

- A global collective of last mile distribution companies working to bring beneficial products to underserved populations.
- Two strategic goals: help members improve business performance and grow; and build a collective voice for the last mile distribution sector.
- Consists of 200+ members working in 50+ countries
- Find out more about Global Distributors Collective @ www.globaldistributorscollective.org

The products on show today

- All manufacturers today are finalists or winners of the Global LEAP Awards or participated in the Global LEAP RBF/have VeraSol certified products.
- 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.

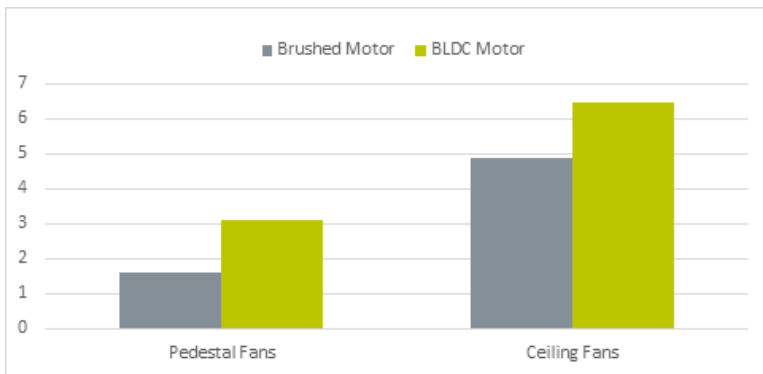
Off-grid Fan Landscape

Market Opportunity:

- Off-grid fans are used in household, commercial, health, and agricultural settings and rank fifth in terms of consumer demand globally.
- The off-grid fan market has the potential to grow exponentially to \$1.5 billion by 2030.

Efficiency Trends:

- Fan efficiency improved by 49% over a one-year period, possibly due to the adoption of energy-efficient motors.
- Fans that use brushless DC (BLDC) motors demonstrated higher efficiency on average.



Efficiency for Access – GDC Remote Trade Show

Pricing Trends:

- Fan size and type of motor are both key factors that contribute to the price of fans.
- Fan prices continued to drop year-by-year. The average price of fans in 2018 decreased by 47%, compared to 2016.

Consumer Impacts:

- Increased productivity and comfort
- Contributed to income-generation
- Empowered women
- Reduced risks of air pollution and diseases

Off-grid TV Landscape

Market Opportunity:

- TVs are one of the most desired appliances by off-grid consumers and 471,000 units were sold in 2019.
- The estimated global market opportunity for off-grid TVs is \$8.2 billion by 2025 and predicted to grow to \$9.5 billion by 2030.

Efficiency & Performance Trends:

- Despite a market shift toward larger screens, the average efficiency of TVs has improved by 48% since 2016.
- In terms performance, there are no clear trends in TV brightness, and the average brightness varies significantly across regions.

Pricing Trends:

- The price of TVs continues to drop as products become more commonly available.
- Since 2016, the price index for TVs (price relative to size) has improved by 44%.

Consumer Impacts:

- Prime source of entertainment and public health information
- Lead to improved educational outcomes and positive behavior change
- Empowered women and children
- Contributed to income-generation

Fan and TV companies

- Robert Woolery, Amped Innovations
- Guzman Zotes, BioLite
- Elizabeth Johnson, Fosera
- Lotis Lau, Metropolitan Electrical Appliance Mfg Co Ltd
- Leslie Hu, Micergy Company Ltd
- Claire Muchiri, Omnivoltaic Energy Solutions
- Joseph Fernandez, Solageo
- Tapan Ghos, Super Star Renewable Energy Ltd





WOWsolar, Television & Fan



Experience city TV brightness with off-grid efficiency

- 22" TV, 120 Nits (cd/m^2), @ 8.6W
- 32" TV, 120 Nits (cd/m^2), @ 10.8W
- 43" TV available upon request
- Why Amped TV?
 - Brightest Off-grid TV... with long run times
 - 22" TV – 10.5 hours
 - 32" TV – 10 hours
 - Amped TV Security (beyond PAYGO)



Premium Lighting Offering

- 140 or 400 Lumens
- Radio and/or torch
- Phone charging
- Upgradeable to a TV and fan

New Premium Offering

- 16" Pedestal Fan
- 3 Speed Fan Oscillation
- Only 9W



HELP YOU SELL FASTER

- Amped Partner Services
 - Onsite and video product and sales training
 - Sales Incentive Programmes
 - PAYGo-agnostic
 - Upya, Solaris, Angaza, Paygee, and proprietary systems
 - In country technical support
 - Product warehouse in Africa and China
- Cash or credit terms available (on approved credit)
- Product available in Africa and Asia

Robert Woolery
Chief Commercial Officer
robert@ampedinnovation.com

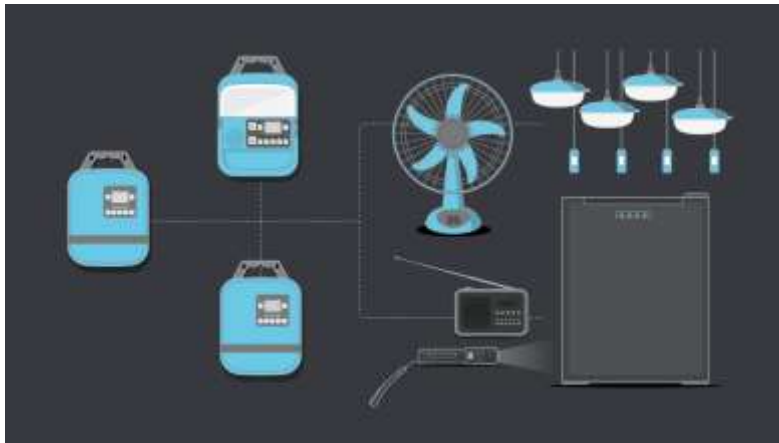
BioLite

- Leading designer and manufacturer of solar home systems and clean cookstoves
- BioLite's solar home system is the #1 impact product in the off-grid sector (60 Decibels 2020)
- Products are modern, aspirational, and extremely high quality
- Deeply invest in partnerships with distribution and financing companies:
 - Specialized partner training
 - Extensive marketing support
 - Comprehensive after-sales service
 - Flexible PAYG compatibility
- Payment upon shipment from our warehouses, flexible upon track of records
- Warehouses in Kenya and Hong Kong
- Shipping all around the world
- <https://global.bioliteenergy.com/>



BioLite Appliance System – SH5000

- 50Wp panel
- 115Wh battery
- 4x 200lm lamps
 - One with motion sensor
- 24" or 32" TV
- Up to 11 hours of TV runtime



Modular and expandable





Energy efficient TVs for flexible home entertainment

- Designed to run with our IGNITE 12V Solar Home System (PAYG available), Plug
- Country availability: ships worldwide
- Pricing, terms & conditions: contact us for further information
- Support services provided:
 - Training to support sales
 - Marketing support
 - Installation/maintenance training and guidance
 - Flexible kit configuration



Includes USB port, HDMI, AV inputs to enjoy personal entertainment



TFT LED technology for vivid image quality



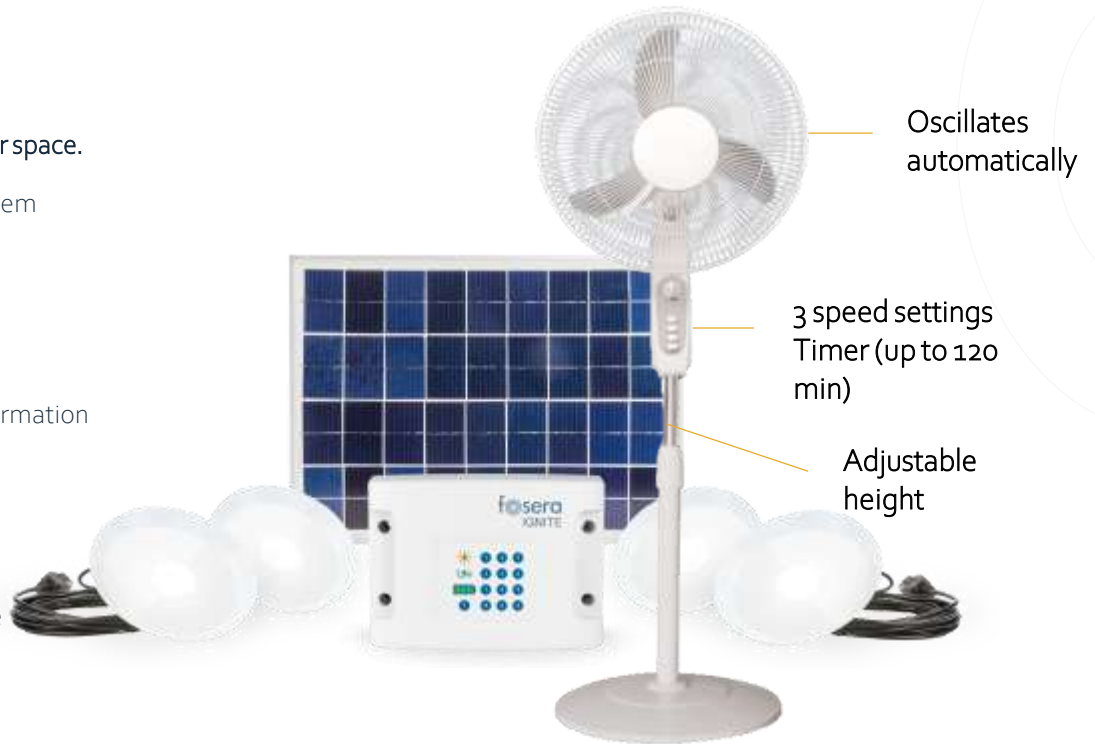
Covers VHF, UHF, DVB-C, DVB-T/T2, DVB-S/S2

www.fosera.com



Efficient cooling and improved air circulation for any indoor space.

- Designed to run with our IGNITE 12V Solar Home System (PAYG available).
- Plug & Play
- Country availability: ships worldwide
- Pricing, terms & conditions: contact us for further information
- Support services provided:
 - Training to support sales
 - Marketing support
 - Installation/maintenance training and guidance
 - Flexible kit configuration



Oscillates automatically

3 speed settings
Timer (up to 120 min)

Adjustable height



**48" SOLAR CEILING FAN
MODEL NO. ME-103-DC**

- DC 12V/24V
- With light optional
- Wall control



**56" SOLAR CEILING FAN
MODEL NO. ME-701**

- DC12V
- Wall control



**42" SOLAR CEILING FAN
MODEL NO. ME-203**

- DC12V / AC110-230V
- Remote/wall control
- 1 light



**42" SOLAR CEILING FAN
MODEL NO. ME-301**

- DC12 V/24V / AC110-230V
- Remote/wall control
- 1 light

Country availability: Worldwide

Delivery time: 45-60 days after order confirmation

Support services: Customization, product development, installation/maintenance

Price and payment: Based on your requirement and quantity. Please contact us for more details.

METROPOLITAN ELECTRICAL APPLIANCE MFG. CO. LTD.

Email: Lotis <lotis@metropolitanfan.com>

Email: Victoria <pw-poon@metropolitanfan.com>

Metropolitan

www.metropolitanfan.com
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**16" SOLAR STAND FAN
MODEL NO. MEUC16S**

- DC12V
- 3 speed



**16"/18" SOLAR STAND FAN
MODEL NO.
ST40DC / ST45DC**

- DC12V
- 3 speed
- Built-in battery



**12"/16" SOLAR TABLE FAN
MODEL NO.
MEU12DCT / MEU16DCT**

- DC12V
- 3 speed



**12" SOLAR ORBIT FAN
MODEL NO. OF-16**

- DC12V
- 3 speed

Country availability: Worldwide

Delivery time: 45-60 days after order confirmation

Support services: Customization, product development, installation/maintenance

Price and payment: Based on your requirement and quantity. Please contact us for more details.

METROPOLITAN ELECTRICAL APPLIANCE MFG. CO. LTD.

Email: Lotis <lotis@metropolitanfan.com>

Email: Victoria <pw-poon@metropolitanfan.com>

Metropolitan

www.metropolitanfan.com

Energy Efficient DC Powered TV



Micergy

Country availability for products	Manufactured from China
Terms and conditions	Payment by T/T, 30 Days Lead Time
Support Service	Necessary Technical & Marketing Support

Panel Specification

Screen Size	15"	17"	19"	22"	24"	32"	40"
Aspect Ratio	4:3	4:3	16:10	16:9	16:9	16:9	16:9
Resolution	1024x768	1280x1024	1680x1024	1366x768	1366x768	1366x768	1366x768
Brightness	>80 cd/m²	>80 cd/m²	>80 cd/m²	>80 cd/m²	>80 cd/m²	>80 cd/m²	>80 cd/m²
Panel Type	Refurbished Panel, Made in Malaysia			Brand New Panel, Made in China			

Function Description

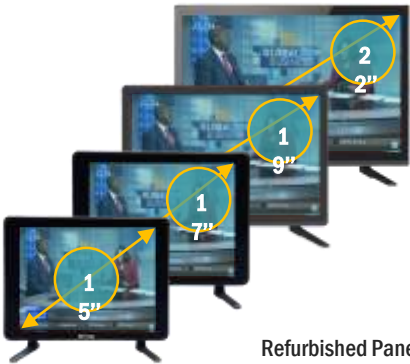
ATV System	PAL, SECAM, NTSC, B/G, D/K, I, L/L', MN, NICAM/A2; 48.25MHz ~ 863.25MHz, 75Ω
DTV System	DVB-T, DVB-T2, DVB-C, DVB-S/S2; VHF(50MHz~230MHz), UHF(474MHz~862MHz), Band Width(7MHz/8MHz), 75Ω
Video System	MPEG-2 MP@ML, MPEG-2 MP@HL, H.265 Main/Main-10, 8-bit/10-bit color depth
Sound System	MPEG-1 Layer 1/2, AAC, HE-AAC
Interface Jacks	DVB-S/S2, ATV/DVB-T/C/T2, COAX, HDMI, USB, YPbPr, VGA, CVBS/Audio In, PC Audio In, Earphone Out
USB Media Function	Video: .avi/.mp4/.mkv/.mpg/.rm/.ts/.mov/.dat/.flv; Music: .mp3/.wma/.wav/.aac; Picture: .jpg/.jpeg/.png/.bmp
Language	Chinese, English, French, German, Italian, Spanish, Portuguese (optional)

Electrical Characteristics

Speakers	2×3W(4Ω)THD+N<10%@1KHz (Audio Input:0.5V RMS)						
AC Input	90VAC-260VAC, 50Hz/60Hz						
DC Input	9VDC-15VDC						
Power Consumption	8W	8W	9W	10W	10W	12W	16W
Standby Power Consumption	Standby Power Consumption < 0.3W(Board Only)						
Protection	Short Circuit Protection, Open Circuit Protection, Fuse Protection, Reset after Fault						

Accessories & Warranty

Standard Accessories	Remote Controller, 5.5*2.1mm DC to DC Cable, Screw, User Manual, Warranty Card
Optional Accessories	AC Adaptor, Wall-Mount Bracket
Operational Temperature	0 to +50°C
Warranty	2 Year Warranty



Refurbished Panel



Brand New Panel

Visit www.micergy.com to learn more about Micergy and its products.

Energy Efficient DC Powered Fan



Micergy

Country availability for products	Manufactured from China
Terms and conditions	Payment by T/T, 30 Days Lead Time
Support Service	Necessary Technical & Marketing Support

12" | DC Table Fan

Copper Brushless Motor

ABS Housing Material

12V DC Rated Voltage
55*21 Barrel Jack

3-Level Speed Control

Oscillating Fan

Soft & Strong Wind

Rated Power @ Different Speed

- 6.8W @ High Speed
- 5.6W @ Med Speed
- 2.5W @ Low Speed

3 pcs of Round Blade

16" | DC Table Fan

Copper Brushless Motor

ABS Housing Material

12V DC Rated Voltage
55*21 Barrel Jack

3-Level Speed Control

Oscillating Fan

Soft & Strong Wind

Rated Power @ Different Speed

- 9.2W @ High Speed
- 6.5W @ Med Speed
- 4.0W @ Low Speed

3 pcs of Round Blade

16" | DC Standing Fan

Copper Brushless Motor

ABS Housing Material

12V DC Rated Voltage
55*21 Barrel Jack

3-Level Speed Control

Oscillating Fan

Soft & Strong Wind

Rated Power @ Different Speed

- 9.2W @ High Speed
- 6.5W @ Med Speed
- 4.0W @ Low Speed

5 pcs of Horn Blade

* Power consumption and airflow of the fan can be customized.



Fan is mature product with low technological requirements and easy manufacturing process, Micergy Energy Efficient DC Powered Fan all comes with Brushless DC motors, which don't have the friction losses inherent in standard motors, and makes it much more efficient. The brushless motors are smaller in size, with about 45 percent less materials needed for manufacturing, as opposed to a standard motor. Using brushless DC motors can increase the energy efficiency of a fan by more than 50 percent. In addition to BLDC motors, advanced core design, low-resistance conductors, and low-friction bearings can provide further efficiency gains for DC fans.

DC Fan with built-in battery is available too!

Visit www.micergy.com to learn more about Micergy and its products.

Omnivoltaic Energy Solutions Co., Ltd (off-grid solar technology leader and product manufacturer)
Head quarter in Hong Kong, factory in Dongguan, South Asia branch in New Delhi, Africa branch in Nairobi



Solar Fan Pack

Specification:

75w panel, 18Ah LFP battery with digital display, torch, fan, 3pcs of 240lumen bulbs, a security light with motion sensor

Fan: 16inch standing fan, three speed levels, 4/7/10w
Maximum 50cbm/m airflow

5hours for lights and torch, 21.5hrs on one fan, or 11hours for two fans.



Solar TV Pack

Specification:

75w panel, 12 or 18Ah LFP battery with digital display, torch, 3-5 bulbs, a security light with motion sensor

TV: 24inch, 32inch and 40inch integrated with decoders compatible with DVB-T2/S2

5hours for lights and torch, 8.8-16.8hours on different sizes of the TVs.

www.omnivoltaic.com sales@omnivoltaic.com stock and aftersales support available in Africa
Welcome consulting and Thank you for your time.

About Us



2013: Developed and launched the first Solar TV for off-grid markets



2014: Award Finalist (DC LED TV)

2017: Award Finalist (DC Refrigerator)



2020:
Solar Micro Grid
for Milk Chilling

Innovate UK

PRODUCT PORTFOLIO:



PAY-GO Household Solar Systems



DC Refrigerators



DC LED TVs



DC Motor Fans



UV Water Purifier
Evaluated by WHO's
HWT Scheme

Product Overview: TVs & Fans



DC LED TVs



- 16" to 32"
- Energy-efficient
- High-quality components
- Optimized for off-grid markets
- International testing certifications
- 2-year warranty

DC MOTOR FANS



- 12" Table/Desk Fan
 - <10 Wh Energy Consumption;
 - RPM: 1300;
- 16" Pedestal/Stand Fan
 - <15 Wh Energy Consumption;
 - Air Speed: 33.2 m³/min.
- 2-year warranty

Company Overview and Product Specification

1 Super Star Renewable Energy Limited (SSREL) also known as SUPER STAR SOLAR stands as one of the pioneer 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 consist 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	
DC Table Fan	Model Number	N-FT30-DC02A, N-FT35-DC02A	
	Size	12" & 14"	
	Motor Type	Brush	
		Rated Voltage (DC)	12
		Rated Power (watt)	12 ,13
		Sweep (mm)	300, 350
		Air Delivery(m3/min)	37.5, 40
		Service Value (m3/min/watt)	2.88, 3.33
		RPM	1350, 1380
		Power Factor	1
		Insulation Class	E
		No. of Blade	3



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



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: Would you like to see a roadshow on e-cooking solutions?



Thank you!



GDC@practicalaction.org.uk

Supported by

