MULTIFIT

Semi-automatic solar panel cleaning brush

MULTIFIT GROUP

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Contact Us

Download Catalogs

More Power More Life

https://www.vmaxpowerpv.com

COMPANY HONOR



MULTIFIT PROFILE

2009
Since

17+
Years In Solar Industry

CERTS

100+ Patents
40+ CE Certificates
20+ Software Copyrights

CLEAN

In Total **10+GWp**
More Power More Life

Stock Exchange
280768
Established in 2009

Multifit is a national high-tech enterprise committed to the R&D, manufacturing, and global sales of solar energy technologies, as well as PV power station construction, cleaning, and maintenance services. Headquartered in Beijing with a production base in Shantou and branches in Shenzhen and Sichuan, Multifit owns subsidiaries including Multifit Electrical, Multifit Solar, and Multifit Smart.

Our main products include solar panel cleaning robots, PV inverters, portable solar generators, MPPT controllers, and solar LED lighting systems.

Since 2009, our innovations have earned over 100 patents, and our products have been exported to more than 50 countries across Europe, the Americas, Asia, and Africa. Our company is certified under ISO9001, ISO14001, and OHSMS standards.

Multifit is also recognized as a National High-Tech and "Specialized & Innovative" Enterprise. Guided by the mission "High efficiency and energy saving, bringing green energy", we aim to become a global leader in solar power construction, cleaning, and maintenance.

Research and development | **Production** | **Sales**

Solar cleaning brush MULR-A

Scraper brush





Angle adjusting head

T connector quality assurance



Two water outlets

Locking device for easy adjustment of telescopic rod

- √ Manual operation
- √ Portable and flexible
- √ Economical and practical

MODEL —

MULR-A

Product Parameter ▸ **MULR-A** Scraper brush

Name	Scraper	Brush head
Size		
Material	Silica Gel	PP

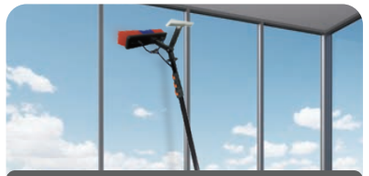
Telescopic rod	
Length	
Material	Aluminum Alloy

Product accessories

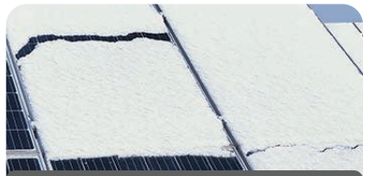




Solar Panel System



Exterior Glass Wall



Snow Scraping

Solar cleaning brush MULR-B

Single-head brush



MULR-B Product features

Cleaning range
The single-head cleaning brush can be used to clean small-area solar panels.

Brush characteristics
The bristles are moderately soft and firm, and do not harm the photovoltaic panels.

Angle adjustment
The angle of the brush head matches the solar panel and can be adjusted according to the panel angle.

Gen 1

Solar cleaning brush MULR-C

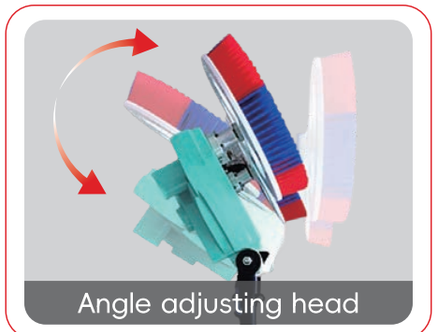
Double-head brush



Soft bristles, safe for PV panels

Built-in dual motors


Water Spray Technology


Angle adjusting head

MODEL —

MULR-C



Gen 2

Solar cleaning brush MULR-C Pro

Double-head brush



Soft bristles, safe for PV panels

Two built-in brushless motors

Water Spray Technology

Angle adjusting head

MODEL —

MULR-C Pro

Gen 1

Solar cleaning brush MULR-D

Rolling brush



Soft bristles, safe for PV panels

Water blocking brush

Water Spray Technology

Angle adjusting head

MODEL —

MULR-D

Gen 2

Solar cleaning brush MULR-D Pro

Rolling brush



Three water outlets

Forward / Reverse rotation

Soft bristles, safe for PV panels

Locking device for easy adjustment of telescopic rod



MODEL —

MULR-D Pro

Solar cleaning brush MULR-E

Water-driven brush



Specialized brush

Oversized brush disc

The connection part of the water pipe

Locking device for easy adjustment of telescopic rod

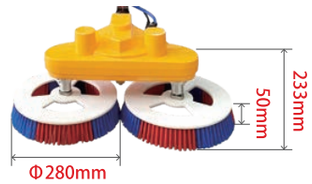


MODEL —

MULR-E

PRODUCT PARAMETER

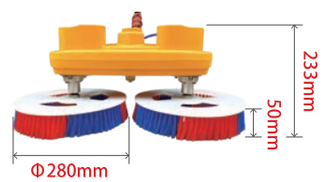
MULR-C Double-head brush



Electrical parameters			
Rated voltage	24 VDC	Rated power	130 W
Motor rotational speed	260 rpm	Power supply	grid / lithium battery
Grid voltage range	100 VAC - 240 VAC	Lithium battery capacity	25.6 V 15 Ah
Running time	4-6 hours	Charging time	4.5 hours

Mechanical parameters			
Housing material	ABS	Brush disc diameter	Φ 280 mm
Bristle material	PP	Brush bristle length	50 mm
Telescopic rod material	Carbon fiber	Telescopic rod length	3.5 m; 5.5 m; 7.5 m

MULR-C Pro Double-head brush

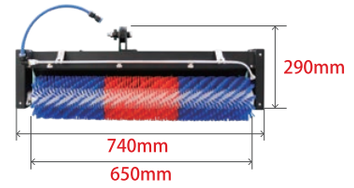


Electrical parameters			
Rated voltage	24 VDC	Rated power	170 W
Motor rotational speed	360 rpm	Power supply	grid / lithium battery
Grid voltage range	100 VAC - 240 VAC	Lithium battery capacity	25.6 V 25 Ah
Running time	3-5 hours	Charging time	6.5 hours

Mechanical parameters			
Housing material	ABS	Brush disc diameter	Φ 280 mm
Bristle material	PP	Brush bristle length	50 mm
Telescopic rod material	Carbon fiber	Telescopic rod length	3.5 m; 5.5 m; 7.5 m

MULR-D Rolling brush

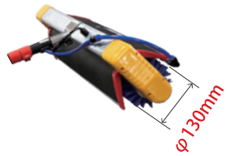




Electrical parameters			
Rated voltage	24 VDC	Rated power	150 W
Motor rotational speed	400 rpm	Power supply	grid / lithium battery
Grid voltage range	100 VAC - 240 VAC	Lithium battery capacity	25.6 V 25 Ah
Running time	5-6 hours	Charging time	6.5 hours

Mechanical parameters			
Housing material	Sheet metal	Brush disc diameter	Φ 130 mm
Bristle material	PP	Brush bristle length	50 mm
Telescopic rod material	Carbon fiber	Telescopic rod length	3.5 m; 5.5 m; 7.5 m

MULR-D Pro Rolling brush





Electrical parameters			
Rated voltage	24 VDC	Rated power	200 W
Motor rotational speed	420 rpm	Power supply	grid / lithium battery
Grid voltage range	100 VAC – 140 VAC; 200 VAC – 270 VAC	Lithium battery capacity	25.6 V 25Ah
Running time	5-7 hours	Charging time	6.5 hours

Mechanical parameters			
Housing material	PC	Roller brush diameter	Φ130 mm
Bristle material	PP	Roller brush bristle length	650 mm
Telescopic rod material	Carbon fiber	Telescopic rod length	3.5 m; 5.5 m; 7.5 m

PRODUCT PARAMETER

MULR-E Water-driven brush



Mechanical parameters

Working medium	Clean water	Maximum pressure resistance	⩽10 MPa
Motor rotational speed	550 rpm	Working pressure	7 MPa
Housing material	Aluminum alloy	Bristle material	PP
Disc brush diameter (optional)	Φ125 mm*4 Φ350 mm*2		
Telescopic rod material	Carbon fiber	Telescopic rod length	3.5 m; 5.5 m; 7.5 m
Water pump (optional)	220 VAC / 50 Hz, 2.2 kW Rated pressure: 7 MPa Flow rate: 17 L/min Weight: 56 kg		

Product features ▾

MULR-B MULR-C MULR-C Pro MULR-D MULR-D Pro MULR-E

Easy to clean

The use of a two-way cleaning brush makes it easy to remove dirt or residue without chemical cleaning agents

High performance

Better cleaning performance in high areas and better lateral force balance.

Easy to operate

Lightweight, high-strength structure, easy to handle and operate at height.

Support customization

The length of the water supply pipe can be customized. Please contact us for details.

APPLICATION SCENARIO

· Supplementary O&M cleaning · Aging Power Station Maintenance
· Residential & industrial & commercial rooftops · Localized Key Cleaning









MULTIPLE CLEANING EQUIPMENTS FOR VARIOUS SCENARIOS

CONFIGURATION LIST

— MULR-B;
— MULR-C; MULR-C Pro;
— MULR-D; MULR-D Pro;

Lithium Battery Supply Version

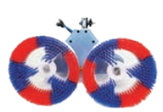

MULR-B02


MULR-C02


MULR-C Pro02


MULR-D02


MULR-D Pro02



Brush head




Telescopic pole


Backpack


Accessories


Lithium battery


Battery charger


15m Water pipe


Electrical spring wire

AC Power Supply Version

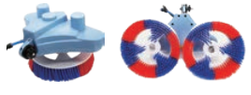

MULR-B01


MULR-C01


MULR-C Pro01


MULR-D01


MULR-D Pro01



Brush head



Telescopic pole


Accessories


Power adapter


8m Extended power cable


15m Water pipe

Dual Power Supply Version


MULR-B03


MULR-C03


MULR-C Pro03


MULR-D03


MULR-D Pro03


Backpack


Accessories


Lithium battery


8m Extended power cable


15m Water pipe


Brush head


Power adapter


Battery charger

Electrical spring wire

Telescopic pole

Solar cleaning system MULR-EW03

Automatic solar panel cleaning system



Highly efficient cleaning

Using a special nozzle design to control water consumption, it can quickly remove dust and bird droppings from the surface of PV panels.

Automatic control

Equipped with an intelligent control system, the cleaning schedule can be set according to the requirements of the solar power station.



MODEL —

MULR-EW03

Working process

The user sets up the scheduled cleaning time for each nozzle.

① When it reaches the scheduled cleaning time, the pump will start running and the first electric valve will open automatically, cleaning the surrounding PV panels.

② After the set time is up, the first water valve will automatically close and the second water valve will open. Each valve will open and close automatically in sequence according to the preset time.

③ After all cleaning cycles have been completed, the water pump will automatically shut down.



Before cleaning



After cleaning

High-efficiency cleaning

The water cleaning system provides powerful hydraulic impact, effectively removing various types of stubborn dirt, including oil stains, rust, dust, etc., achieving a high-efficiency cleaning result.

User-friendly operation

With a simple design, users can easily set the cleaning time and intensity through the control panel for automatic cleaning, eliminating the need for complex operations.

Low maintenance costs

The system has a simple structure that is easy to maintain, reducing maintenance costs and downtime.

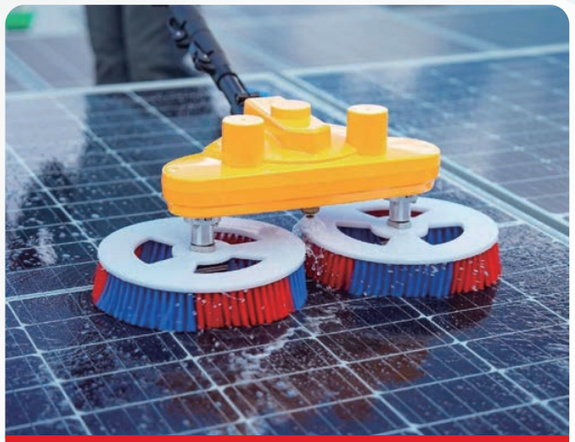
Safe and reliable

Using water as the cleaning medium is safe and harmless, posing no risk of pollution to the pipes or the surrounding environment.

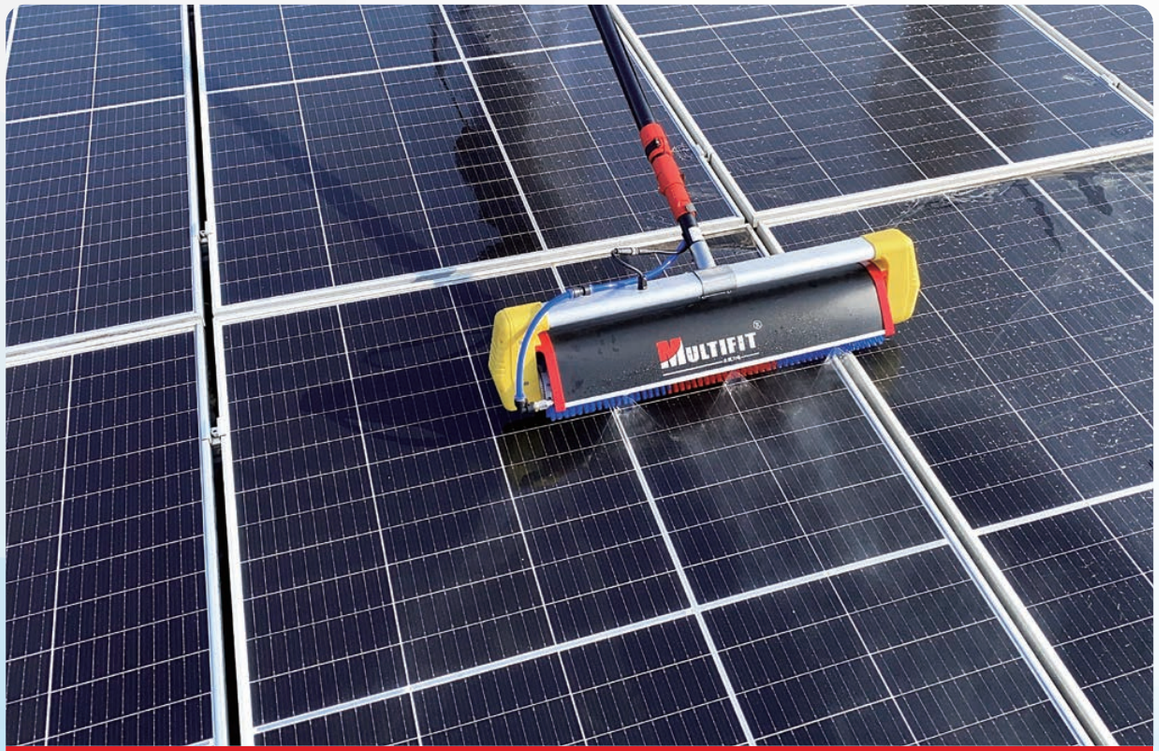
PROJECT CASES



MULR-A on rooftop system



MULR-C on ground system



MULR-D Pro on factory rooftop system

CLEANING BRUSH



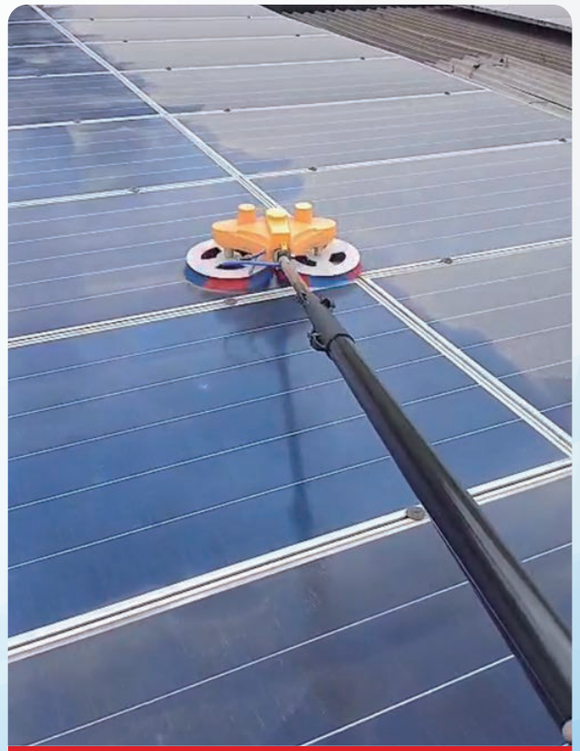
MULR-C Pro on solar farm



MULR-C on mountain system



MULR-D on industrial area



MULR-C on rooftop system

PROJECT CASES



MULR-EW03 for a green energy city



MULR-C for Large industrial plant

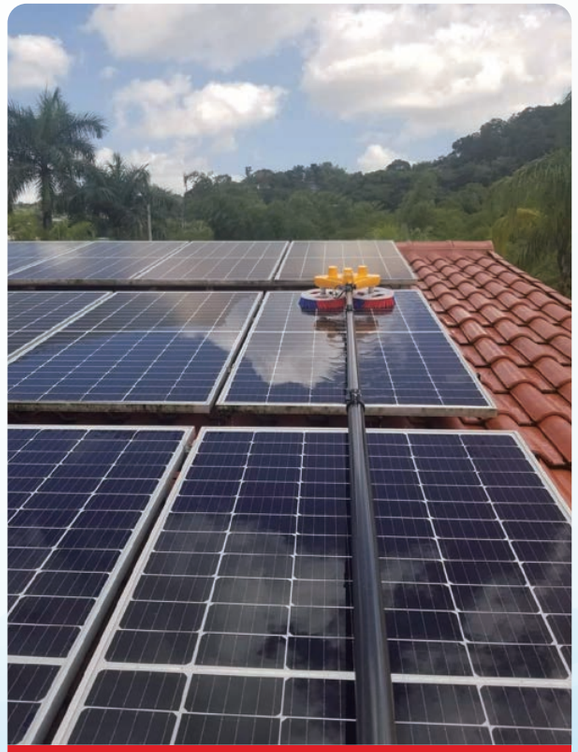
CLEANING BRUSH



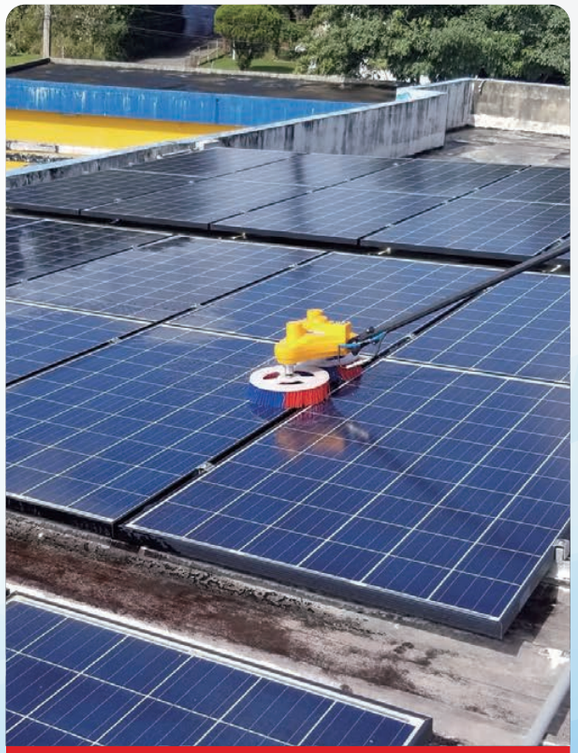
MULR-E for parking station



MULR-D Pro on factory rooftop system



MULR-C for corrugated steel roof



MULR-C for water utility company