

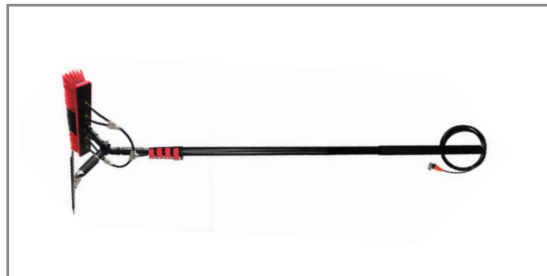


Beijing Multifit Electrical Technology Co.,Ltd

Solar Panel Cleaning Brush

(Semi-Automatic)

Contents



MULR-A
Scrape Brush



MULR-B
Single Head Brush

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Double Head Brush



MULR-D
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MULR-A Scrape Brush

Product Characteristics

- The integrated design of scraping and brushing, one brush for dual use, convenient to carry, easy to clean, and durable.
- Y-shaped universal joint, easy to adjust angle, perfectly fits the surface of the object during cleaning.
- Avoid scratches caused by cleaning solar panels with hard objects. The rubber scraper design doesn't damage the solar module and is used to scrape snow and water.
- The brush disc adopts an integrated molding bristle planting process, which is not easy to fall off and has a wide cleaning range;
- High quality aluminum alloy telescopic rod, good texture and strong toughness, not easy to deform or bend. Customized adjustable telescopic rod with multi-sections according to the length range you need to clean.





Use Scenarios



Product Details



Technical Data:

Name	Scraper	Brush Head
Size		
Material	Rubber Blade	PP
Telescopic Rod		
Length		
Material	Aluminum Alloy	
Product Accessories		
		



MULR-B Single Head Brush

Product Characteristics:

- You can carry lithium battery in a backpack , easy to carry.
- The length of the water supply pipe can be customized, please call for consultation.
- The angle of the brush head fits the solar panel, which can be adjusted with the angle of the solar panel.
- Battery life: can be used continuously for 6-7 hours.
- The length of the telescopic pole is adjustable. The shorter the pole, the lighter it is.
- The bristles are moderately soft and hard ,do not harm the photovoltaic panel.

Use Scenarios



Solar Panel



High-Exterior Walls



Billboard / Doorhead

BRUSH



Technical Data :

MODEL	Power Supply	Accessory	Water Supply
MULR-B01	Be connected to 110-240V power source	Water pipe and accessories*1 Cable extension line*1(8m) Telescopic rod*1 (3.5/5.5/7.5m Optional) Adapter*1 Brush head assembly * 1 set (including 1 pcs brush discs)	Standard water pressure 0.3-0.4mpa Water pipe contains water control valve, can be connected to user's water source
MULR-B02	Be connected to lithium battery (battery can be put in backpack and carried by operator)	Lithium Battery *1 Water pipe and accessories*1 Backpack*1 Battery cable with button*1 Telescopic rod*1 (3.5/5.5/7.5m Optional) Battery charger*1 Brush head assembly * 1 set (including 1 pcs brush discs)	
MULR-B03	Be connected to 110-240V power source, or to lithium battery (user can choose suitable type for different cleaning environment)	Lithium Battery *1 Backpack*1 Battery cable with button*1 Battery charger*1 Adapter*1 Cable extension line*1(8m) Water pipe and accessories*1 Telescopic rod*1 (3.5/5.5/7.5m Optional) Brush head assembly * 1 set (including 1 pcs brush discs)	

Product Details :



Brush Head with Motor:

24V DC high-power drive motor, rated power 80W*2, rated voltage 24V, speed 350rpm

Weight: brush head assembly with brush disc (2.41kg)

Diameter of the Brush Disc: 280mm

Material: PP

Number of bristle circles: 8

Telescopic Rod:

Telescopic material:

Glass Fiber/Carbon Fiber/Aluminum Alloy

Wall thickness: 1-1.2mm

Diameter: $\phi 39$, $\phi 43$, $\phi 47$ (Optional)

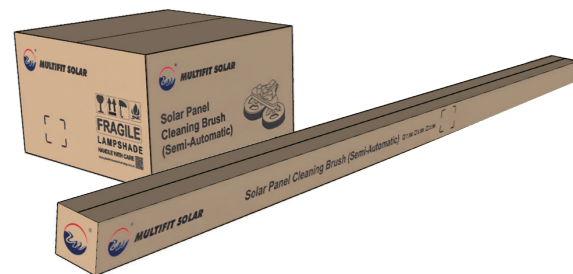
Length: 1.5-3.5m / 1.7-5.5m / 1.9-7.5m (Optional)



Accessories:

1/2 inch PVC water pipe (15 Meters Length)

1/2 Inch Brass Valve , 1/2 Inch Internal Thread Connector, 1/2 Inch PCF Quick Connector ($\phi 10$) , 1/2 PVC Water Pipe Plastic Joint, Spanner



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Power Supply:

MULR-B01

Mains Supply Accessories:



AC Supply (100V-240V)

1. Adapter
2. Power cable(8M)

MULR-B02

Battery Supply Accessories



Lithium Battery DC Supply

1. Lithium battery (Working hours: 6-7h)
2. Spring wire with switch button
3. Lithium battery charger (24V10AH)

MULR-B03

Dual DC and AC Supply



1. Adapter
2. Power cable(8M)
3. Lithium battery
4. Lithium battery charger (24V10AH)
5. Spring wire with switch button

Large-capacity and portable backpack
Battery Supply Accessories

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MULR-C Double head brush

Product Introduction

One of the most popular solar panel cleaning products.
Double headed cleaning brush for more efficient and convenient cleaning
The brush head has a water outlet, and when the brush head is turned on, the water will flow out.

Product Characteristics:



Large-capacity
and portable backpack



AC Supply

Lithium Battery
DC Supply

PVC water pipe (15M)

- Dual DC and AC Supply accessories are carried in a backpack, easy to carry.

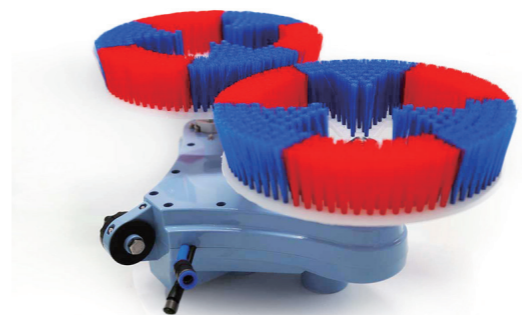
- The length of the water supply pipe can be customized, please call for consultation.



- The angle of the brush head fits the solar panel, which can be adjusted with the angle of the solar panel.
- The shorter the pole, the lighter it is, the telescopic pole can be adjusted in length.



- The bristles are moderately soft and hard, and do not harm the photovoltaic panel.



- Battery life:
Can be used continuously for 4-5 hours.



MULR-C Double Head Brush



Brush Head with Motor:

24V DC high-power drive motor, rated power 80W*2, rated voltage 24V, speed 350rpm

Weight: brush head assembly with brush discs (4kg)

Diameter of the Brush Disc: (280mm*2)

Material: PP

Number of bristle circles: 8

Outer casing color (optional): ① Green ② Yellow ③ Blue

Telescopic Rod:

Telescopic material:

Glass Fiber/Carbon Fiber/Aluminum Alloy

Wall thickness: 1-1.2mm

Diameter: $\phi 39$, $\phi 43$, $\phi 47$ (Optional)

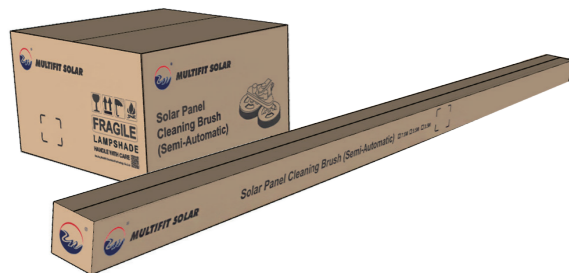
Length: 1.5-3.5m / 1.7-5.5m / 1.9-7.5m (Optional)



Accessories:

1/2 Inch Brass Valve, 1/2 Inch Internal Thread Connector, 1/2 Inch PCF

Quick Connector ($\phi 10$), 1/2 PVC Water Pipe Plastic Joint, Spanner



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Power Supply:

MULR-C01

Mains Supply Accessories:



AC Supply (100V-240V)

1. Adapter
2. Power cable(8M)

MULR-C02

Battery Supply Accessories



Lithium Battery DC Supply

1. Lithium battery (Working hours: 4-5h)
2. Spring wire with switch button
3. lithium battery charger (24V10AH)

MULR-C03

Dual DC and AC Supply



1. Adapter
2. Power cable(8M)
3. Lithium battery
4. lithium battery charger (24V10AH)
5. Spring wire with switch button

Large-capacity and portable backpack
Battery Supply Accessories

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Solar Panel Cleaning Brush

Technical Data :

MODEL	Power Supply		Accessory			Water Supply	
MULR-C01	Be connected to 110-240V power source		Water pipe and accessories*1 Cable extension line*1(8m) Adapter*1 Brush head assembly * 1 set (including 1 pair of brush discs) Telescopic rod*1 (3.5/5.5/7.5m Optional)			Standard water pressure 0.3-0.4mpa Water pipe contains water control valve, can be connected to user's water source	
MULR-C02	Be connected to lithium battery (battery can be put in backpack and carried by operator)		Lithium Battery *1 Backpack*1 Water pipe and accessories*1 Battery cable with button*1 Battery charger*1 Brush head assembly * 1 set (including 1 pair of brush discs) Telescopic rod*1 (3.5/5.5/7.5m Optional)				
MULR-C03	Connect to 110-240V power source, or to lithium battery (user can choose suitable type for different cleaning environment)		Lithium Battery *1 Backpack*1 Battery cable with button*1 Battery charger*1 Adapter*1 Cable extension line*1(8m) Water pipes and accessories*1 Brush head assembly * 1 set (including 1 pair of brush discs) Telescopic rod*1 (3.5/5.5/7.5m Optional)				
Multiple National Plugs (Optional)	European Standard	National Standard	American Standard	UK Standard	Australian Standard	Other (adapter plug)	



Solar Panel Cleaning Brush



Outer Casing Color (Optional):

- ① Green ② Yellow ③ Blue

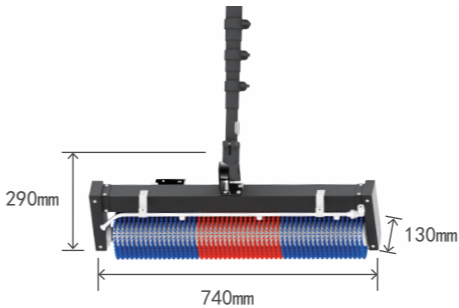
MULR-D Rolling Brush

Product Characteristics:

- The Spinning Velocity of our Roller Brush is 400rpm. It has two cleaning models and even the dry cleaning model without the water has the prominent efficiency. It can effectively clean every corner of solar panels and it can be widely adapted to clean all sizes and models of solar panels.
- The angle of the brush head can be adjusted and perfectly attached on the surface of the solar panel.
- The material of Telescope Rod can be chosen according to the Customers choose.
- The Maximum length of Telescope Rod is 7.5 Meters and the Telescope Rod can be extended or shrink. The clap can be easily locked to prevent the length of Telescope Rod to be shrinked. The length of Telescope Rod can be easily adjusted.
- The lithium battery pack can last about 5-6 hours, and you won't be tired. it is more convenient to clean.
- The weight of the machine is reduced by 35%, and the lightest is only 5.7KG. The cleaning is easier, the labor intensity is reduced, and the day is not tired.



MULR-D Rolling Brush



Brush Head with Motor:

24V DC high-power drive Brushless motor
Speed 400rpm

Brush Head Size: 740x130x290mm

Telescopic Rod:

Telescopic material:
Glass Fiber/Carbon Fiber/Aluminum Alloy
Wall thickness: 1-1.2mm
Diameter: φ39, φ43, φ47 (Optional)
Length: 1.5-3.5m / 1.7-5.5m / 1.9-7.5m (Optional)



Water Pump (Option): Site bucket water collection

Solar array length less than 300M	Power supply 220VAC	12VDC, Suction lift 1.5m lift 50m, flow 5L/min Adapter (220VAC-12VDC)
Solar array length less than 300M	Without power supply	12VDC, suction lift2m, lift 55m, Flow 8L/min, power display, Lithium battery (12V10AH)
Solar array length less than 800M	Power supply 220VAC	220V5.5kW, Suction lift 8m, Lift 100m, Flow 10m³/h

Power Supply:

MULR-D01

Mains Supply Accessories:



- AC Supply (100V-240V)
1. Adapter
 2. Power cable(8M)

MULR-D02

Battery Supply Accessories



- Lithium Battery DC Supply
1. Lithium battery
 2. Spring wire with switch button
 3. lithium battery charger (24V20AH)

MULR-D03

Dual DC and AC Supply



1. Adapter
2. Power cable(8M)
3. Lithium battery
4. Lithium battery charger (24V20AH)
5. Spring wire with switch button

Large-capacity
and portable backpack
Battery Supply Accessories



Technical Data

Name	Solar panel cleaning rolling brush			Model		MULR-D	
Application	Apply to small rooftop PV arrays and irregular PV arrays						
Technical Specification	Rated Voltage			24V			
	Hair Brush Size			Φ130mm*650mm			
	Rotating Speed			400rpm			
	Function			Washing/dry cleaning			
	Telescopic Rod			Glass fiber,option length 3.5m,5.5m,7.5m			
	Accessory			1/2 inch PVC water pipe （15 Meters Length） 1/2 Inch Brass Valve ,1/2 Inch Internal Thread Connector,1/2 Inch PCF Quick Connector （φ10） ,1/2 PVC Water Pipe Plastic Joint , Spanner			
				Single head open stamping wrench （16mm、 24mm）			
	AC（MULR-D01）			Cable extension line(8m), adapter(110-120VAC/220-240VAC optional)			
	DC（MULR-D02）			Spring wire, lithium battery(24V20AH) with charger,backpack, adapter			
	Dual（MULR-D03）			Cable extension line(8m), adapter(110-120VAC/220-240VAC option),Spring wire, lithium battery(24V20AH) with charger,backpack			
Multiple National Plugs (Optional)	European Standard	National Standard	American Standard	UK Standard	Australian Standard	Other (adapter plug)	