

Solmaks SE / Solmaks E – Custom-designed for specific PV array sizes



Cleaning Method

- Single or dual brush / Dry or wet cleaning

Drive Wheel

- An aluminum core and a polyurethane tread
- Drive Wheel Position Adjustable
- Extended service life and easy replacement

Control System

- Remote control (RC) operation(Off-the-shelf controller) - Solmaks SE
- Sensor-based operation with control via a WiFi-enabled mobile interface(Android)
+ Built-in button control(In-house developed controller) - Solmaks E
- Movement : Forward / Reverse
- Brush control : Forward / Reverse rotation



Brush

- Nylon bristle + PE core + Stainless steel shaft
- Selectable from 3 filament types(Thin Medium,Thick)
- Height adjustable
- Max. customizable brush length : 2,500 mm
- Brush Diameter: Ø160–180 mm

Water Supply

- One-touch coupling / Water nozzles

Safety

- RC based Solmaks SE - Dual Fail Safe Structure (Transmitter + Motor Driver)
Remote emergency stop
- WiFi based Solmaks E – Limit sensors

Ingress Protection

- Up to IP45

Available Length Range

- Approx. 1,300–18,000 mm

Dimension(overall) : approx. 4,750(L) with handle extended x 700(W) x 350(W) with lower stabilizer * Solmaks SE dimension for a 4 m-wide PV array

Weight : approx. 40kg – 200Kg, depending on the array length

- Solmaks SE : Approx. 60-65 kg for a 4 m-wide PV array (including a battery)
- Solmaks E : Approx. 65-70 kg for a 4 m-wide PV array (including a battery)

Power Supply

- Lithium-ion or Lithium Iron Phosphate (LiFePO₄), detachable & rechargeable
- 25.2V,34Ah (Battery Cell Manufacturer : Samsung SDI)
- Self-charging battery system with an independent solar panel(s) (Solmaks E only)
- Battery Level Indicator

Operating Time (on a fully charged battery)

- Approx. < 2.5–3 hours (Depending on operating conditions)



Operating Speed

- < 0.25 m/s

Thermal management

- Built-in ventilation fan
- Partial sunshades on the outer cover(Internal thermal insulation)

Main Structures & Components

- Aluminum and stainless steel, CNC- and laser-machined parts(no additional surface treatment)

Cover Finish

- White anodized

Solmaks FSB – Track-based crawler, Free-moving



Cleaning Method

- Dual brush / Dry or wet cleaning

Brush Head Connection

- Guide & Clamp

Drive Wheel

- Rubber track with tread pattern
- Panel curved-surface-tracking mobile mechanism with articulated idler wheels
- Customized commercial product (China)
- Easy replacement



Control System

- Remote control (RC) operation(Off-the-shelf controller)
- Movement : Forward / Reverse / Pivot turn
- Brush control : Forward / Reverse rotation

Brush head

- Brush : Nylon bristle + PE core + Stainless steel shaft
- Selectable from 3 filament types(Thin Medium,Thick)
- Brush head : Detachable & Adjustable horizontally and vertically
- Brush head length(overall) : Approx.1,100 mm(Brush coverage : 750mm)
- Brush Diameter: Approx.Ø170 mm

Water Supply

- Detachable 360° rotating water supply unit
- One-touch coupling / Water nozzles

Safety

- Dual Fail Safe Structure (Transmitter + Motor Driver)
- Remote emergency stop

Weight : Main body : Approx. 35kg(including a single batter)

Brush heads : Approx.10Kg x 2

Dimension(overall) : approx.1,550(L) with 2 brush head x 1,050(W) with functional structure x 190(H) excluding the detachable water supply arm

Power Supply

- Lithium-ion detachable & rechargeable
- 25.2V, 19.6AH (Battery Cell Manufacturer : Samsung SDI)
- Battery Level Indicator



Operating Time (on a fully charged battery)

- Approx. < 2–2.5 hours (Depending on operating conditions)

Operating Speed

- < 0.2 m/s

Operating Inclination(Recommended)

- Dry: < 24° / Wet: < 16° (without surfactants)

Thermal management

- Built-in ventilation fan
- Partial sunshades on the outer cover(Internal thermal insulation)

Ingress Protection

- Up to IP45

Main Structures & Components

- Aluminum and stainless steel, CNC- and laser-machined parts(no additional surface treatment)

Cover Finish

- White anodized

Modular Solmaks M – Detachable & Configurable for Various PV Array Sizes (Standard 4-Section Configuration)



Cleaning Method

- Dual brush / Dry or wet cleaning

Section-to-Section connection

- Guide & Clamp

Drive Wheel

- An aluminum core and a polyurethane tread
- Drive Wheel Position Adjustable
- Extended service life and easy replacement

Control System

- Remote control (RC) operation(Off-the-shelf controller)
- Movement : Forward / Reverse
- Brush control : Forward / Reverse rotation



Brush

- Nylon bristle + PE core + Stainless steel shaft
- Selectable from 3 filament types(Thin Medium,Thick)
- Height adjustable
- Max. customizable brush length : 2,000 mm
- Brush Diameter: Ø160–180 mm

Water Supply

- One-touch coupling / Water nozzles

Safety

- Dual Fail Safe Structure (Transmitter + Motor Driver)
- Remote emergency stop

Ingress Protection

- Up to IP45

Available Length Range

- Approx. 1,300–7,500 mm

Weight : Main Section : Approx. 40–45 kg

Sub Section : Approx. 20–35 kg per section, depending on the array length

Dimension(overall) : approx. 4,900(L) with handle extended x 760(W) x 300(W) with lower stabilizer * Solmaks M dimension for a 4m wide PV array

Power Supply

- Lithium-ion detachable & rechargeable
- 25.2V,34Ah (Battery Cell Manufacturer : Samsung SDI)
- Battery Level Indicator



Operating Time (on a fully charged battery)

- Approx. < 2–2.5 hours (Depending on operating conditions)

Operating Speed

- < 0.25 m/s

Thermal management

- Built-in ventilation fan
- Partial sunshades on the outer cover(Internal thermal insulation)

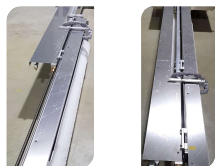
Main Structures & Components

- Aluminum and stainless steel, CNC- and laser-machined parts(no additional surface treatment)

Cover Finish

- White anodized

Solmaks P – Adjustable Length



Cleaning Method

- Single brush / Dry or wet cleaning

Adjustable length

- Variable-length : Continuously adjustable within a 1.2 m range (e.g., 4.0 m to 2.8 m)

Drive Wheel

- An aluminum core and a polyurethane tread
- Extended service life and easy replacement

Control System

- Remote control (RC) operation(Off-the-shelf controller)
- Movement : Forward / Reverse
- Brush control : Forward / Reverse rotation)



Brush

- Nylon bristle + PE core + Stainless steel shaft
- Selectable from 3 filament types(Thin Medium,Thick)
- Height adjustable
- Max. brush length : 2,000 mm
- Brush Diameter: Ø160–180 mm

Water Supply

- One-touch coupling / Water nozzles

Safety

- Dual Fail Safe Structure (Transmitter + Motor Driver)
- Remote emergency stop

Ingress Protection

- Up to IP45

Available Length Range

- Approx. 4,200mm

Weight : Main Section : Approx. 85-90 kg

Dimension(overall) : approx. 4,800(L) with handle extended x 730(W) x 350(W) with lower stabilizer * Solmaks P dimension for a 4.2 m-wide PV array

Power Supply

- Lithium-ion detachable & rechargeable
- 25.2V,34Ah (Battery Cell Manufacturer : Samsung SDI)
- Battery Level Indicator



Operating Time (on a fully charged battery)

- Approx. < 2.5- hours (Depending on operating conditions)

Operating Speed

- < 0.25 m/s

Thermal management

- Built-in ventilation fan
- Partial sunshades on the outer cover(Internal thermal insulation)

Main Structures & Components

- Aluminum and stainless steel, CNC- and laser-machined parts(no additional surface treatment)

Cover Finish

- White anodized