

PREMIUM BOT

SOLAR PANEL CLEANING BOT

Advanced Intelligence for Uninterrupted Performance

- Self-locking anti-slide safety in high winds
- Al health scan, tilt handling & predictive maintenance
- 3km cloud SCADA with smart scheduling & alerts
- Saves 1000L/MW waterless, zero human effort



SPECIFICATIONS

Sr No.	Parameter	Specification	Specification
1	Model	AUTOMATIC	SEMI-AUTOMATIC
2	Weight in Kg (for 4 Meter Robot)	49kg (Without Solar Module)	49kg
3	Width/Length/Height in mm (Length is customizable)	1000/L/200	1000/L/200
4	Wheels Material	Nylon with PU rubber tyre (UV resistance)	Nylon with PU rubber tyre (UV resistance)
5	Structure Material	Aluminium, MS & SS304	Aluminium, MS & SS304
6	Sensor	2 Proximity Sensors	2 Proximity Sensors
7	Active Shock Absorbing Mechanism	Available in in all 7 wheels	Available in in all 7 wheels
8	IP Protection Grade Control Unit	IP65/IP67	IP65/IP67
9	4WD System	Yes	Yes
10	Brush Type	Quad Helical PBT	Quad Helical PBT
11	Short Circuit Protection	Yes	Yes
12	Black Box Data Communication	Yes	Yes
13	Robot Health Monitoring AI Cloud	Yes	Yes
14	Electrical System in Volt	24v	24v
15	Battery Type	LiFePO4	LiFePO4
16	Battery Capacity	18Ah/24Ah	18Ah
17	Availability of BMS	Yes	Yes
18	Battery Pack Type: PVC Soft Pack/Plastic Box/Metal Box	Metal Box with PCM cooler	Metal Box with PCM cooler
19	Al Driven Battery Charge Management & Monitoring System	Yes	Yes
20	Dedicated Diagnostic Port for Quick Fault Inspection (OBD)	Yes	Yes
21	Compatibility for MMS Type	2P/4L	2P/4L
22	Compatibility for Tracker	Yes	Yes
23	Compatibility for Seasonal Tilt	Yes	Yes
24	Avg. Cleaning Speed	1200 m/hr	1200 m/hr
25	Max Run Length	3500 m	3500 m
26	Radar Surface Detection Technology	Yes	Yes
27	Auto Tilt Detection	Yes	Yes
28	Vertical Tolerance From Adjacent Panel Edges	25 mm	25 mm
29	Horizontal tolerance from adjacent panel edges	40 mm	40 mm
30	Module to Module Gap	70 mm	70 mm
31	Allowable max panel tilt in degree	45	45
32	Climbing Ability	20 Degree	20 Degree
33	Cleaning Type	Dry	Dry
34	Remote operation	Yes	Yes
35	Communication type	Encrypted LORA	Optional
36	Communication with gateway to SCADA	TCP Modbus/ RS485 Modbus	Optional
37	Integration with Plant SCADA	Yes	Optional
38	Cleaning logs	Yes	Yes
39	Scheduling possibility	Yes	NA
40	WMS based cleaning	Yes	NA
41	Manual over ride for testing	Yes	NA
42	Standard operating Temperature	-5 to 85 Celcius	-5 to 85 Celcius
43	Maximum operating humidity level in %	90	90

Passion to Propel