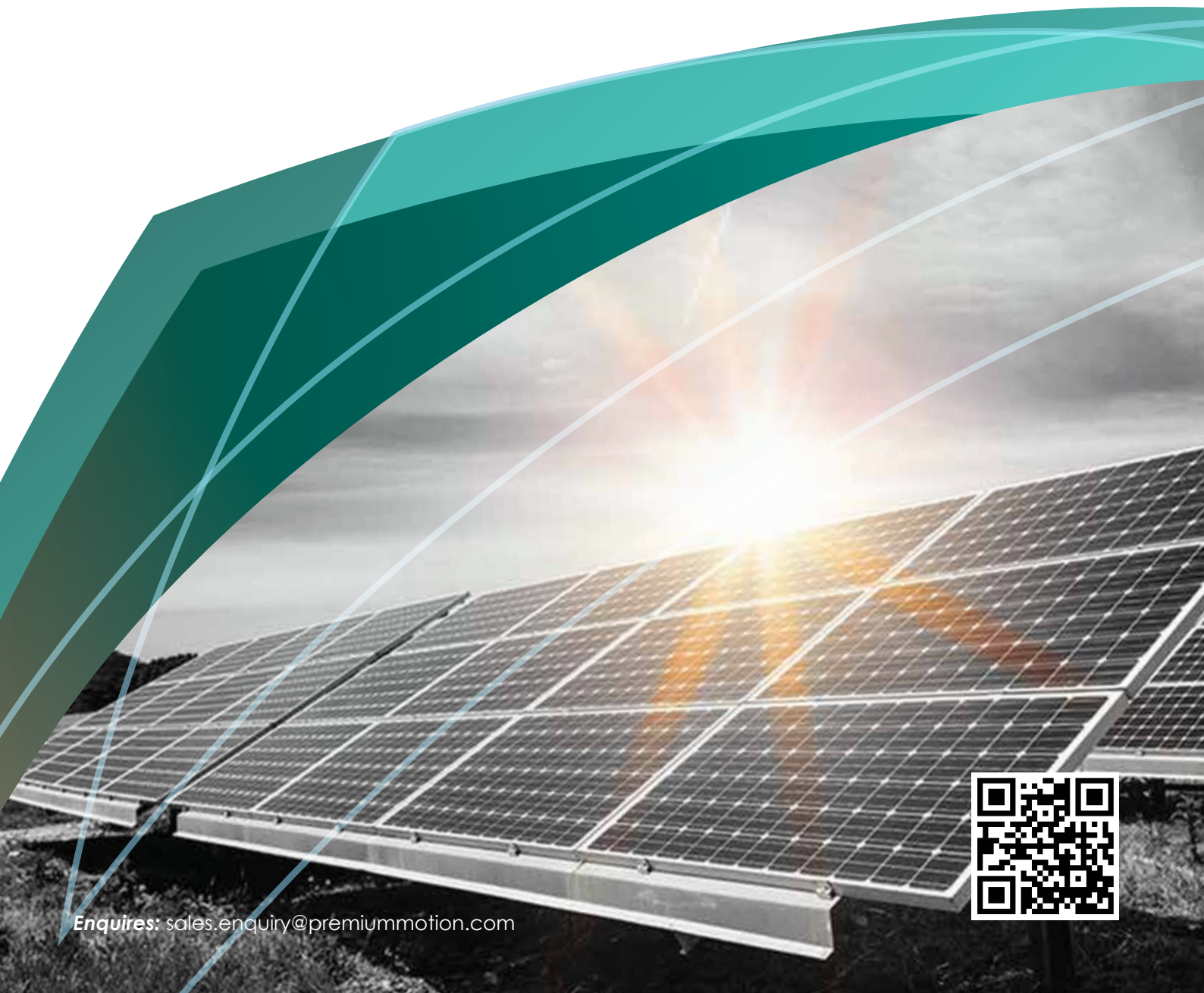


A Premium Group Company



PREMIUM BOT - SOLAR PANEL CLEANING ROBOT



Enquires: sales.enquiry@premiummotion.com

WHO WE ARE

Established in 2021, Premium Motion Private Limited is a fully owned subsidiary of Premium Transmission Limited lead by an experienced Board of Directors and a competent and experienced management team. Premium Motion is a wholly-owned subsidiary of Premium Transmission which is a pioneer in the gearbox industry and has been in business for more than six decades now.

Following in the footsteps of its parent company Premium Transmission, Premium Motion is all set to revolutionize and recharge the renewable energy sector.

Premium Motion delivers customised value-added solutions for the Renewable Energy industry that integrate all the latest technologies for optimum results. Our engineers have experience in designing solutions that meet and exceed global standards.

With our best quality products, Premium Motion believes in delivering sustainable solutions. We strive to make the most of our resources to create a greener and sustainable future. We believe in adapting to the changing times and transforming for the better. Our aim is to deliver value for our global customer base with best-in-class solutions.

Our slew drive gearboxes and linear actuators are powering the solar energy sector effeciently. These products not only set the wheels in motion for the solar industry but also ensure that we are moving towards a more sustainable future. We have a state-of-the-art manufacturing facility at Pune equipped with the latest machines and technologies. Our team of competent engineers and technicians works tirelessly to ensure that all the products are precision-engineered. The team takes pride in manufacturing products that are contributing to move the renewable energy sector forward.

We are on a journey of delivering sustainable solutions and every step that we take is a small effort in making our world a better place.

We Innovate
We Dream
We Achieve

Join us in this mission of delivering sustainable solutions.

Premium Motion is delivering sustainable solutions and our engineering and manufacturing capabilities set up apart from the rest.

ENGINEERING AND MANUFACTURING CAPABILITIES

To keep up with the changing market trends we have a dedicated in-house Research and Development facility where we develop high-end products as required by the market and applications. The products are developed with a well-defined product development process starting from concept development to product validation testing including DFMEA, PFMEA, PPAP, Virtual simulation, etc.. At our R&D center, we strive for continuous research, innovation, and implementation of the latest technologies.

Our manufacturing unit in Pune, India is equipped with the latest equipment and machines. We have a highly-skilled workforce to cater to the demands of the international market. With adherence to strict quality guidelines, we ensure that all our products are at par with global standards.

Our highly qualified and experienced engineers leverage an in-house 3D printing facility to develop rapid prototypes of the products to check the form and fit of the product. Our fully equipped full load testing facility supports the design validation and implementation of innovations. The test lab is equipped with high-end measuring equipment like VIB scanner, Spectrometer, Gear Tester, and many more. We also perform durability testing and product verification for simulation as per application requirements.

Our engineering set-up has high-end workstations with industrial leading CAD/CAE packages, including CREO, Autodesk Inventor, Kiss-soft, MSC Nastran, Pro-Mechanica, ANSYS, Fluent etc. This high-end software ensures smooth design and execution of all the projects.

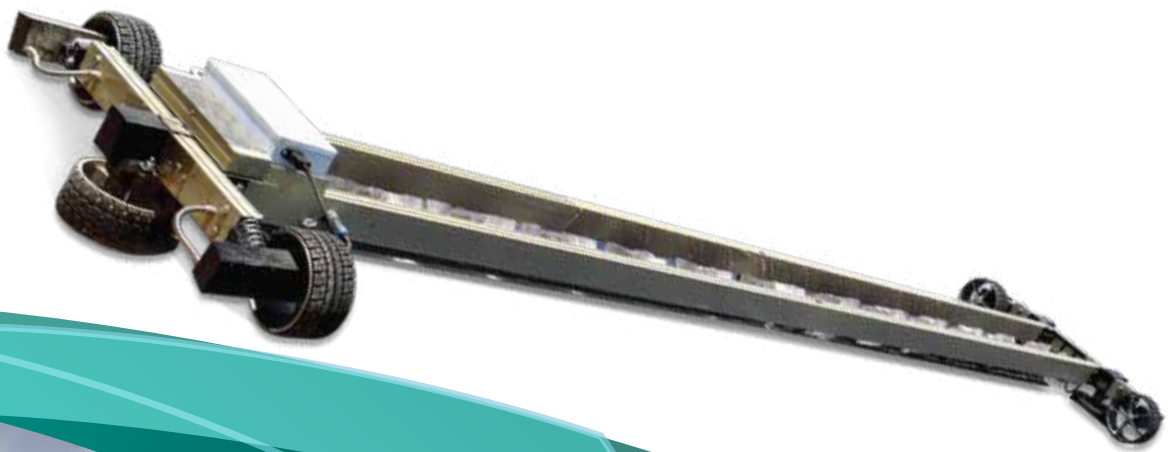
Premium Motion is all about building a quality culture that fosters innovation and growth. All our products are certified with the ISO standards. We use various testing equipment to check the product quality at different stages of manufacturing. Delivering products that are superior in quality is a part of our DNA and we take pride in our culture.

We strive for greater heights with rigorous research and innovation. Our talented engineering team puts forward their best work to develop products to optimize working efficiency. They strongly believe in creating products for a sustainable future. The core ethos at Premium Motion is delivering sustainable solutions and our engineering and manufacturing capabilities set us apart from the rest.

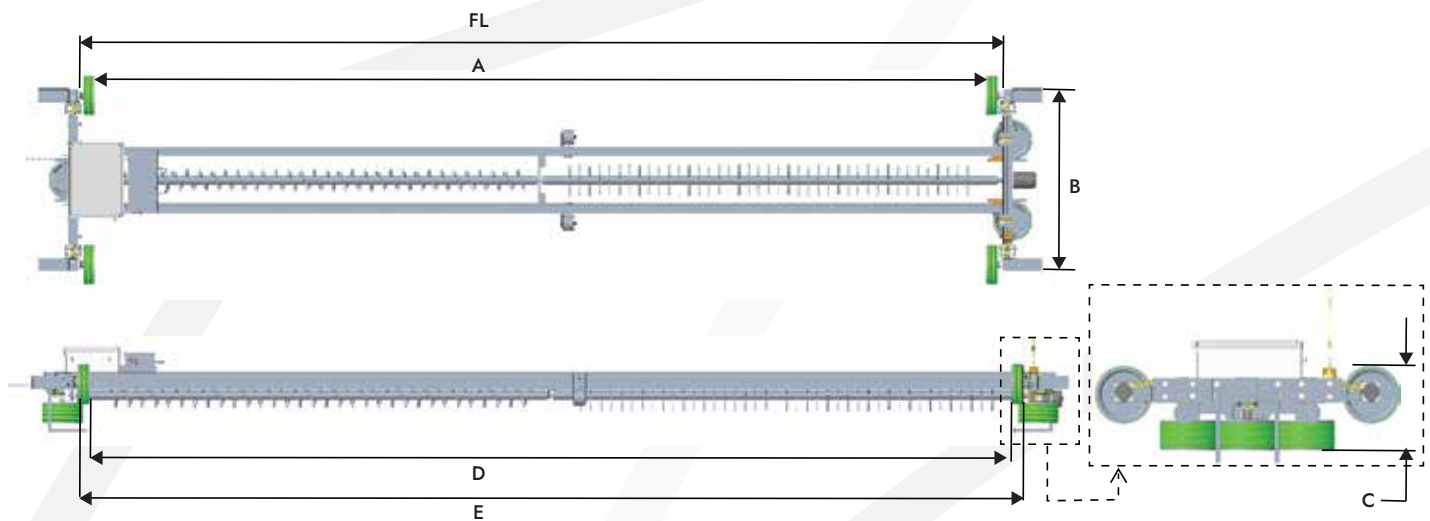
PREMIUM BOT - SOLAR PANEL CLEANING ROBOT

Premium Bot - Solar Panel Cleaning Robot is now firmly established as a core element of the Operations & Maintenance (O&M) of a solar power plant. All kinds of accumulates settle on solar panels from sand to traffic film, which reduces the output of the solar power plant and depending on soiling type, can create hotspots on the modules. Hotspots are to be avoided as they not only reduce output but can also cause permanent cell failure within modules.

The Premium Bot - Solar Panel Cleaning Robot consists of a Nylon based material brush which ensures no damage to the solar panel. The Aluminium Frame carrying the brush moves along the length of Solar Panel in the horizontal direction. The Cleaning robot consists of a DC Motor which rotates the wheels and moves the frame in a linear direction. Multiple robots can be installed in each row of the solar panel.



1. Designed for installation on customisable length in solar panels
2. The cleaning robot length is adjustable up to +/- 250 mm
3. Lightweight and durable product
4. Operates at a speed of 1 Km/hr with two DC motors of 12V and 100 rpm with rated torque of 30 Kg-cm
5. Can continuously work up to 90 mins after a single charge
6. Nylon brush is used to clean the panel which works with a DC Motor of 12V and 300rpm with rated torque of 11 Kg-cm
7. A 12V power supply adapter is provided in the system for the power supply
8. Poly urethane wheels are used which are more durable and do not damage the solar panel
9. Side support wheels are provided to guide the frame and help to move along the solar panel in the linear direction



MODEL NO	A	FL	B	C
RB01PD050000000	2M1-54	2M1+112	911	270

PRODUCT FEATURES:

Zero Water

Complete Water Free Cleaning Solution
It eliminates water supply fittings and saves water up-to quarter million liters per megawatt annually

Robust

Built to Withstand Harsh Weather Conditions.
Will work under all weather conditions including desert sand storms and heavy rainfall. All metal body makes and aluminium components makes it Robust and Lightweight at the same time

Self Powered

Solar Powered, No External Power Required
It has independent solar panels at the docking station which power the whole system

Smart Weather Sense and Centrally Controlled Adjust According to Weather

Automation technology and cloud/ IoT connectivity allows Robot to sense weather and works accordingly and also allows the team to control robot from remote location

NOTES

NOTES

A series of horizontal lines for writing notes. The lines are evenly spaced and extend across the width of the page. On the right side, there is a decorative gray geometric pattern consisting of several overlapping, slanted rectangular shapes that create a modern, architectural look.

Passion to Propel



PREMIUM

Group of Companies

Passion To Propel

Premium Motion Pvt. Ltd.

Corporate & Head Office: 'Premium House',
Mumbai - Pune Road, Chinchwad, Pune - 411 019, India.

Tel.: (91-20) 66314155 | info@premiummotion.com

www.premiummotion.com | www.premiumgroupcompanies.com



PREMIUM
TRANSMISSION



PREMIUM
CARE