

Antobot Protect™  
**U303**

## **Autonomous, Agile, Accurate**

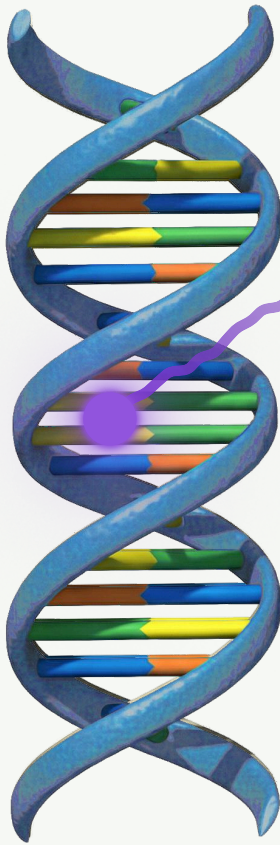
non-chemical solution for fungal diseases



In strawberry farms, the **UV-C treatment** is proved to help increase yield **by around 30%**.

- **Autonomous:** performs treatment **during the nights**, replacing human labor – safe and efficient.
- **Agile:** able to enter and move through tabletop rows smoothly, as narrow as **80cm**.
- **Accurate:** delivers the **exact dose** of UV-C, consistently and evenly.

## How Does UV-C Work?



Fungi may lead to many diseases of plants.

Incoming  
UV photon



Powdery mildew  
(fungi caused)  
on strawberry



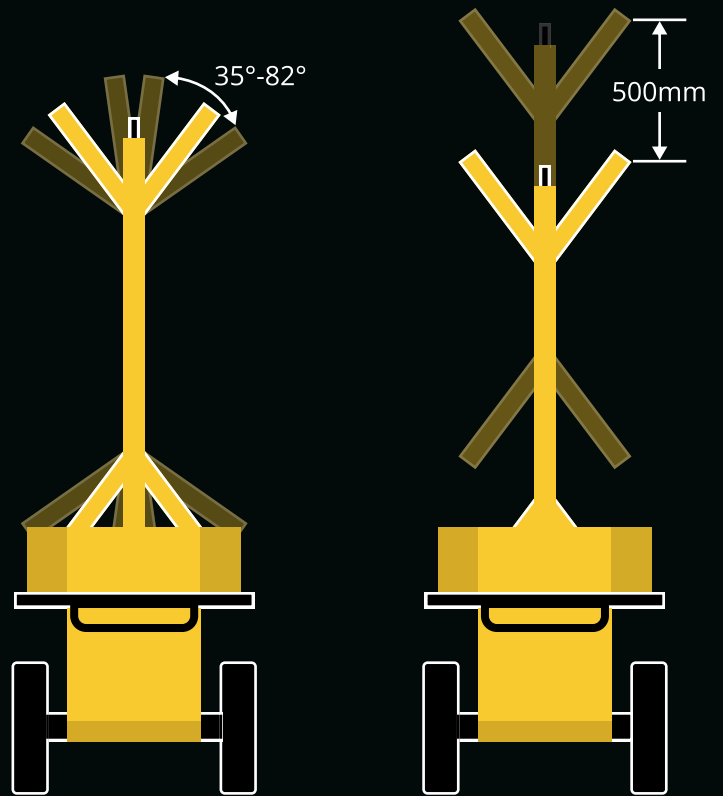
After UV-C treatment fungi  
will die or lose infectivity.

**UV-C** is a special UV band (200–280 nm).

Its high-energy photons penetrate cell membranes/nuclei and directly **damage the DNA structure**.

Many fungi can photorepair UV-C damage under visible light. **Night treatments** avoid this repair, so **fungi** cannot divide (spores don't germinate; hyphae don't extend), leading to **death** or **loss of infectivity**.

## Adjustable UV-C Panels

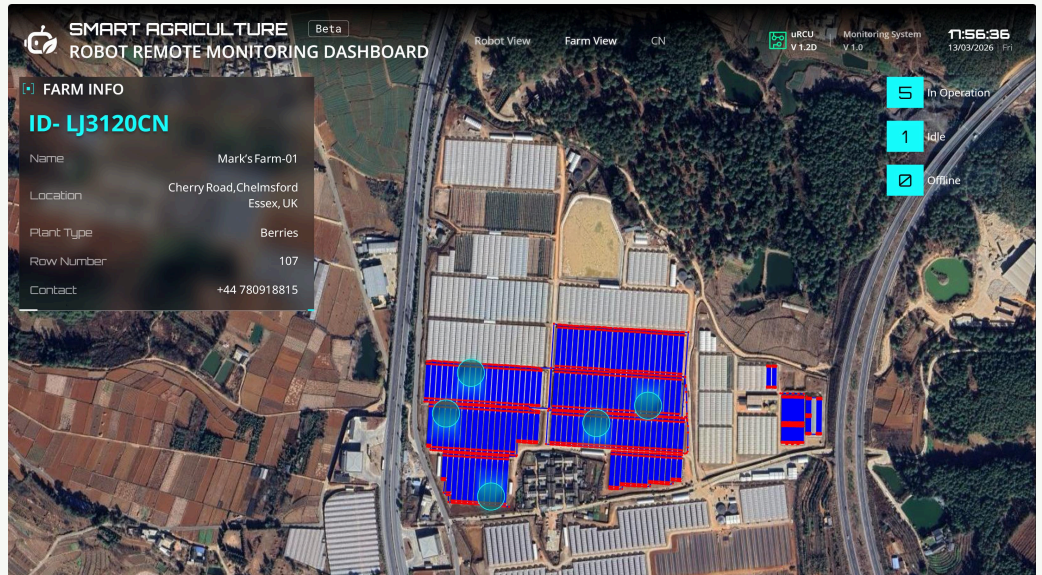


The **angle** and **position** of the upper and lower UV-C panels are adjustable, ensuring **sufficient irradiation** for crops of varying sizes and shapes.

# Smart Operation

## Large Display

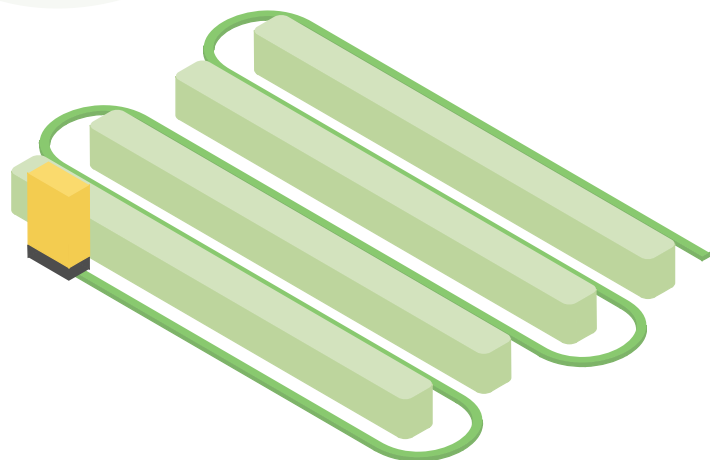
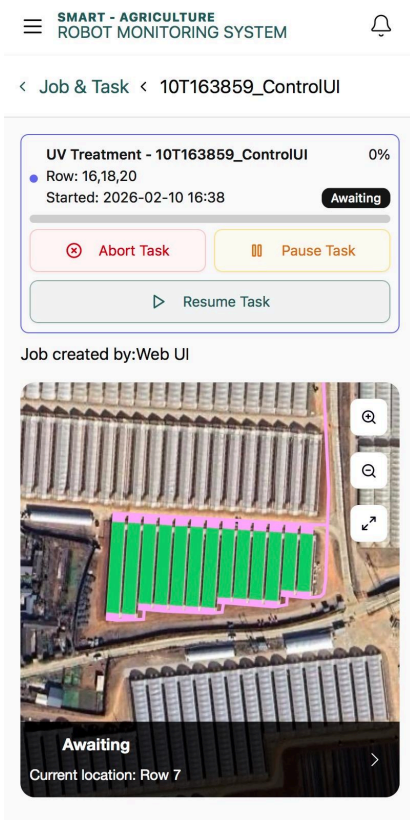
Gain vivid visibility into the robot fleet.



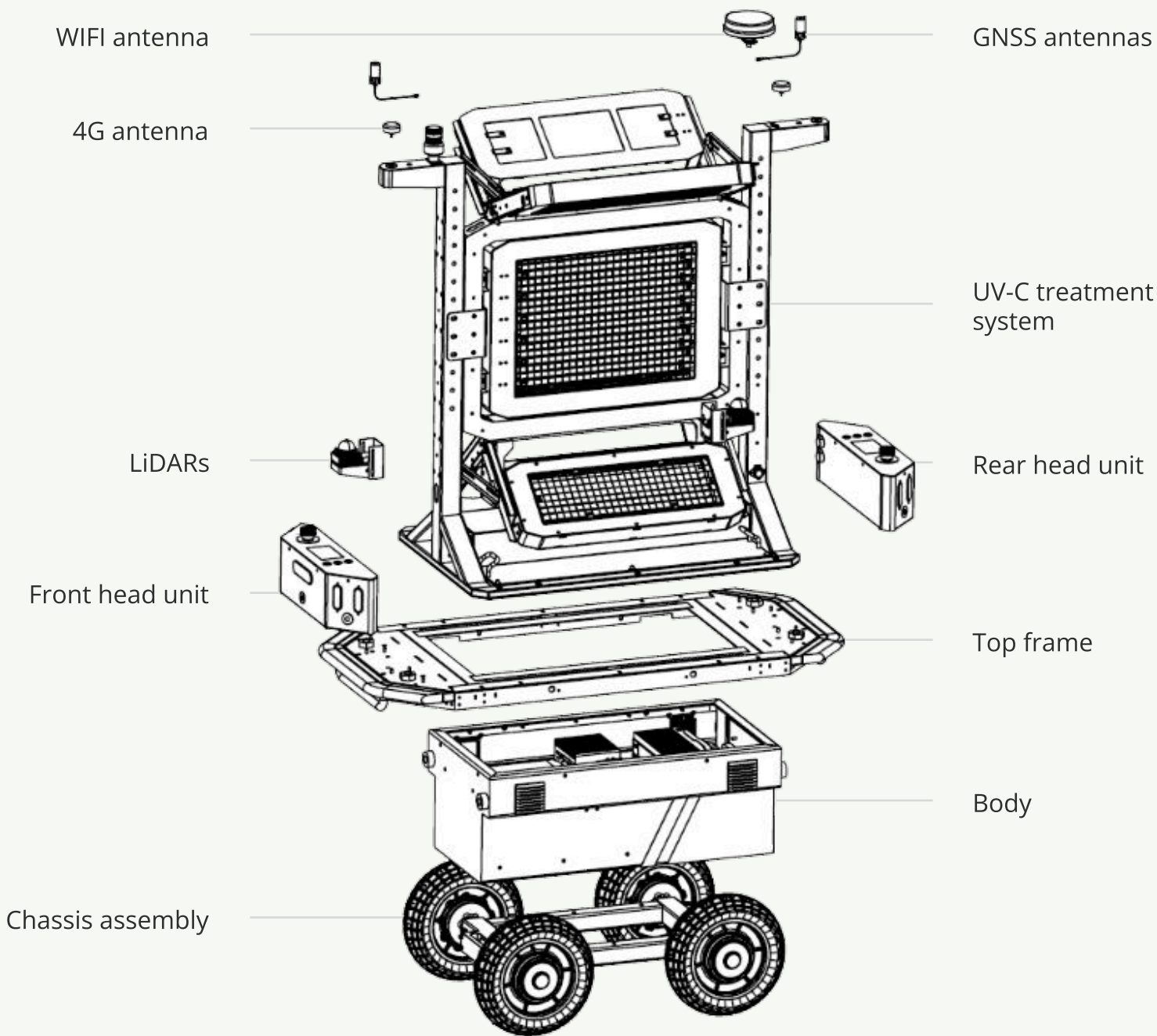
## Mobile Device

Easy control anytime and anywhere through the portal.

Automatically generates daily task reports, offering smart way of management.



Robot can navigate automatically, powered by universal Robot Control Unit



Parameter	Value	Parameter	Value
Power	3,000W	Tyres	13 x 4.30 - 8 (tubeless)
Dimensions (H×W×L)	(1,300-1,800) ×633×1350mm	Operation time (Full battery)	2.5h
Weight	170kg	Connectivity	Wi-Fi, 4G, GNSS
Battery	48V-80Ah (54.5V charge cut-off)	Navigation modes	Manual/Semi-autonomous/ Fully autonomous
Steering type	Skid steering	Angle of approach/ departure	25°

## Align with UN Sustainable Development Goals



source: <https://sdgs.un.org/goals>

Enabling safer, data-driven and resource-efficient agriculture at scale.

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