

**BUILDING  
A SMARTER  
BETTER  
FUTURE**



# FIR // // //

## ROBOTIC INSTALLATION SOLUTION FOR RAISED ACCESS FLOORING

Panque specializes in the design, development and production of advanced construction robots. These robots are designed to collaborate with construction workers, alleviating their physical workload in tasks such as transporting and installing tiles.

Panque innovative solutions aim to create a safer and healthier work environment, shorten construction timelines, and reduce overall project costs. By enhancing efficiency and safety on construction sites, we help owners achieve a higher return on investment.



**INTELLIGENT**



**SAFE & RELIABLE**



**PRECISE**



**ULTRA-COMPACT**



**EFFICIENT**

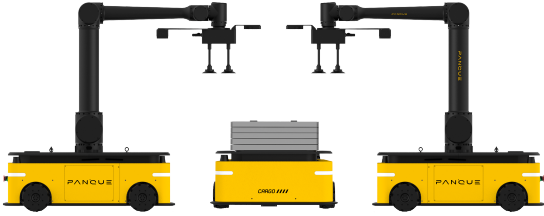


**USER-FRIENDLY**

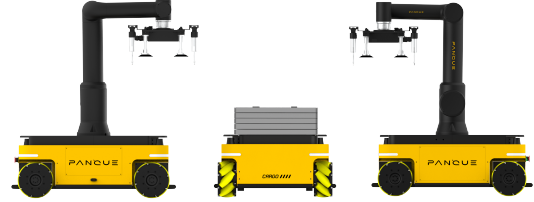


## “ FIR Pro1 Human-machine Collaboration Solution

## “ FIR MAX1 Automated solution



FIR Pro1 + STACKER Pro1 + CARGO1\* (1-n)



FIR MAX1 + STACKER MAX1 + CARGO1\* (1-n)

\*Compatible with a variety of flooring types.

## Product Technical Data



[www.penduline.ai](http://www.penduline.ai)

Model	FIR Pro1/STACKER Pro1
Dimensions	L:914mm, W:655mm, H:1100mm
Weight	175kg
Arm	Six-DOF Robot Arm, Reach1100mm, Max. 20kg
Mobility	Max. speed : 0.95m/s
Motion Ability	Climbing gradient ≤ 7° Ridges ≤ 80mm, Gap ≤ 80mm
Power Supply	Voltage 48V, Battery duration 8 hours, Charging time ≤ 3 hours
Control Mode	Manual remote control Autonomous movement
Navigation	SLAM
Obstacle Avoidance	Dual LiDAR obstacle avoidance

Model	CARGO1
Dimensions	L:914mm, W:655mm, H:295mm
Weight	130kg
Load Capacity	350kg
Mobility	Max. speed : 0.95m/s
Motion Ability	Climbing gradient ≤ 7° Ridges ≤ 80mm, Gap ≤ 80mm
Power Supply	Voltage 48V, Battery duration 8 hours, Charging time ≤ 3 hours
Control Mode	Manual remote control Autonomous movement
Navigation	SLAM
Obstacle Avoidance	Dual LiDAR obstacle avoidance

Model	FIR MAX1/ STACKER1 MAX1
Dimensions	L:914mm, W:655mm, H:1100mm
Weight	175kg
Arm	Six-DOF Robot Arm, Reach1100mm, Max. 20kg, Automatic Installing
Mobility	Max. speed : 0.95m/s
Motion Ability	Climbing gradient ≤ 7° Ridges ≤ 80mm, Gap ≤ 80mm
Power Supply	Voltage 48V, Battery duration 8 hours; Charging time ≤ 3 hours
Control Mode	Manual remote control Autonomous movement
Navigation	SLAM
Obstacle Avoidance	Dual LiDAR obstacle avoidance

\*Note: The Installation Efficiency is **60 m<sup>2</sup> / 8 hours**  
(The FIR is **three times** faster than manual installation (500\*500\*28mm GRC raised floor)).