



AFORMIC

FP27

HEAVY-DUTY UNDERRIDE AMR

ENGINEERED TO HANDLE LOADS
UP TO 13,200 LB

OMNIDIRECTIONAL DRIVE

The FP27 is equipped with an advanced omnidirectional drive system, enabling it to move in any direction — forward, sideways, diagonally — and rotate around its own axis. This high degree of mobility allows the robot to operate smoothly in tight spaces and navigate complex layouts with precision, ensuring seamless integration into space-constrained production areas.

HIGH PAYLOAD CAPACITY

With a maximum payload of 6000 kg (13,200 lb), FP27 is ideal for transporting large, bulky materials and non-standard carriers. Its robust mechanical structure ensures stable and reliable performance even under full load, making it a versatile solution for demanding production environments.



ADVANCED SLAM NAVIGATION

Equipped with SLAM technology, the FP27 enables real-time mapping and accurate localization. This supports efficient route planning, dynamic obstacle avoidance, and adaptability to changing environments, ensuring reliable operation in dynamic and complex intralogistics settings.

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COMPREHENSIVE SAFETY SYSTEM

FP27 is equipped with a safety package, including four SICK Micro safety scanners, fourteen emergency stop buttons, 360° laser coverage, and blue spot warning lights.

Its onboard IMU module ensures stability and precise motion control even in complex environments, making it safe for operation alongside people and machinery.

GENERAL SPECIFICATIONS

- Payload capacity: 6000 kg (13,200 lb)
- Dimensions (L x W x H):
5500 x 2000 x 750 mm (216.5 x 78.7 x 29.5 in)
- Lifting height: 60 mm (2.4 in)
- Weight: 4000 kg (8,800 lb)
- Maximum speed: 1.5 m/s (4.9 ft/s)
- Drive type: omnidirectional
- Drive power: 4 x 2.5 kW

POWER SYSTEM

- Battery type: Lithium-ion (Li-ion)
- Battery capacity: 560 Ah
- Battery voltage: 48 V

TERRAIN CAPABILITIES

- Maximum longitudinal inclination: 1.0°
- Maximum lateral inclination: 2.5°
- Positioning accuracy (+/-): 1.0 cm (0.4 in)

SAFETY FEATURES

- Laser scanner field of view: 360°
- Sick Micro Scanners: 4 units
- Emergency push buttons: 14 units
- Blue spot lamp: 2 units
- Four bumpers, one on each side of the vehicle

NAVIGATION SYSTEMS

- SLAM Technology: yes
- Odometry: yes
- IMU (Inertial Measurement Unit): yes

ENVIRONMENTAL CONDITIONS

- Operating temperature: 15°C – 40°C (59–104 °F)
- Relative humidity: >70%

DIMENSIONS [MM]

