

ZKBot-D1

Smart and Reliable Food Delivery Robot



ZKTeco presented ZKBot-D1, an intelligent food delivery robot that can navigate autonomously and accurately deliver food to the dining table.

ZKBot-D1 equips with laser SLAM (Simultaneous Localisation and Mapping) and Visual SLAM, which offers precise positioning and enhances obstacle-sensing capabilities. Also, a multi-sensor fusion algorithm lets the ZKBot-D1 cruise efficiently in an aisle as narrow as 80 cm.

ZKBot-D1 can optimize its battery use and save energy by automatic charging. As a result, ZKBot-D1 returns to its charging station without manual operation. Users can set the charging station freely.

Features



Precise Positioning



Autonomous Navigation



Various Delivery Modes



Automatic Charging

Specifications

Model	ZKBot-D1
Operating System	Android 5.1.1
CPU	RK3128
Overall Size Dimension	Diameter: 500mm ; Height: 1300mm
Screen Size	7 inch LCD TFT Touchscreen (resolution 1024*600)
Tray Size (L*W)	320*400mm
Number of Tray	3
Single Tray Loading Capacity	10kg
Machine Total Loading Capacity	30kg
Move Parameters	Moving Speed: 0.1~0.8m/s
	Narrowest Aisle Moving (width): 80cm
	Climbing:≤5°
	Rotation Radius: 360° (Avoiding Obstacle)
	Swing Radius: 254mm
Navigation Method	Laser Navigation + Visual Positioning + Visual Obstacle Avoidance
Lidar	Laser Wavelength 905 nm, Working area 270°
Infrared Camera	Two-dimensional Code Positioning (the height of the two-dimensional code from the camera is 1-3m or 1-5m); 5 million pixels
3D Camera	Recognition Range: 45 degrees up and down, 58 degrees left and right
Communication	Wi-Fi (Support dual frequency 2.4 & 5 GHz Wi-Fi IEEE 802.11b/g/n); 4G LTE (Card Slot)
Memory	1G (LPDDR3)
FLASH	8G (Built-in NAND)
USB Communication Interface	Micro USB interface
Battery Capacity	24V 20AH
Battery Life	About 10 hours
Charging Time	4A (About 8 hours), 7A (About 5 hours)
Software	Embedded Mobile Application (Delivery) Robot Management Software: (B/S Basic Server)
Chassis Material	ABS Plastic
Environmental Requirements	Operating Temperature: 5°C to 40°C
	Operating Humidity: 5% to 85% RH
	Storage Temperature: 0°C to 50°C
Certifications	CE; ISO9001

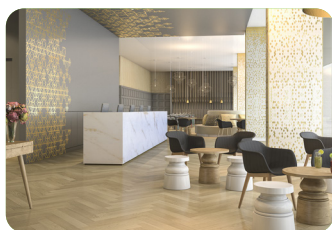
Product Description



Applications



Restaurant



Hotel



Office Building



Shopping Mall

