Analysis of competitive food delivery robot

Competing robots / Parameters	Doggy2	Doggy1	Note
Product picture			
Product size	500mm(L)x500mm(W)x1460mm(H)	565mm(L)x537mm(W)x1290mm(H)	
Net weight	64KG	57KG	
Main material	ABS, aluminum alloy, sheet metal	ABS engineering plastics/aviation grade aluminum alloy	
Load bearing capacity	20KG/ layer, the maximum total load is about 60KG	10KG/ layer, total load about 40KG	
Remote navigation deployment	Support	not support	
Automatic charging	Support	Not support	
Battery material	Lithium iron phosphate battery	Ternary lithium battery	Lithium iron phosphate battery is used for electric vehicles with high safety performance: the p-O bond in lithium iron phosphate crystal is stable and difficult to decompose. Even at high temperature or overcharge, it will not collapse and heat or form strong oxidizing substances. The decomposition temperature of lithium iron phosphate is about 600℃, so it has good safety. It does not burn and explode, though, when overcharged.
Battery life	Fully charged/fully used cycle 2000-2500 times	Fully charged/fully used cycle 300-500 times	

inimum passing distanc	65CM	65CM	
Running speed	0.1m/s-1.0m/s	0.5m/s-1.2m/s	
Navigation way	Autonomous navigation, no need to paste code	Post code positioning: supports a maximum height of 8 meters Laser positioning: no need to paste, height is unlimited	
Laser radar	25 meters	40 meters	
The navigation accuracy	<7CM	<18.5CM	Measurement of navigation accuracy without labeling: the accuracy error of the test line 50 meters from point A to point B
Algorithm mainboard	Intel i5 processor industrial computer	ARM board	
Autonomous scheduling system	support	support	
Obstacle avoidance way	3D cameras, lidar	3D cameras, lidar	
Screen size	Front screen: 10.2 inches	Front operation screen 10.2 inches	
	Back AD screen: 15.6 inches	/	
Battery capacity	25.6V/25Ah	25.55V/25.6Ah	
Charging time	3-4 hours (automatic back for charge)	4.5H	
Working time	about 15 hours	12 hours (replaceable battery)	
Intelligent contral	Manual control	APP call support	
Obstacle ability	10MM	10MM	
Tilt Angle	≤5°	≤5°	