

AI+ Stair Climbing Robot CT500

xsto

AI INTELLIGENT CONTROL

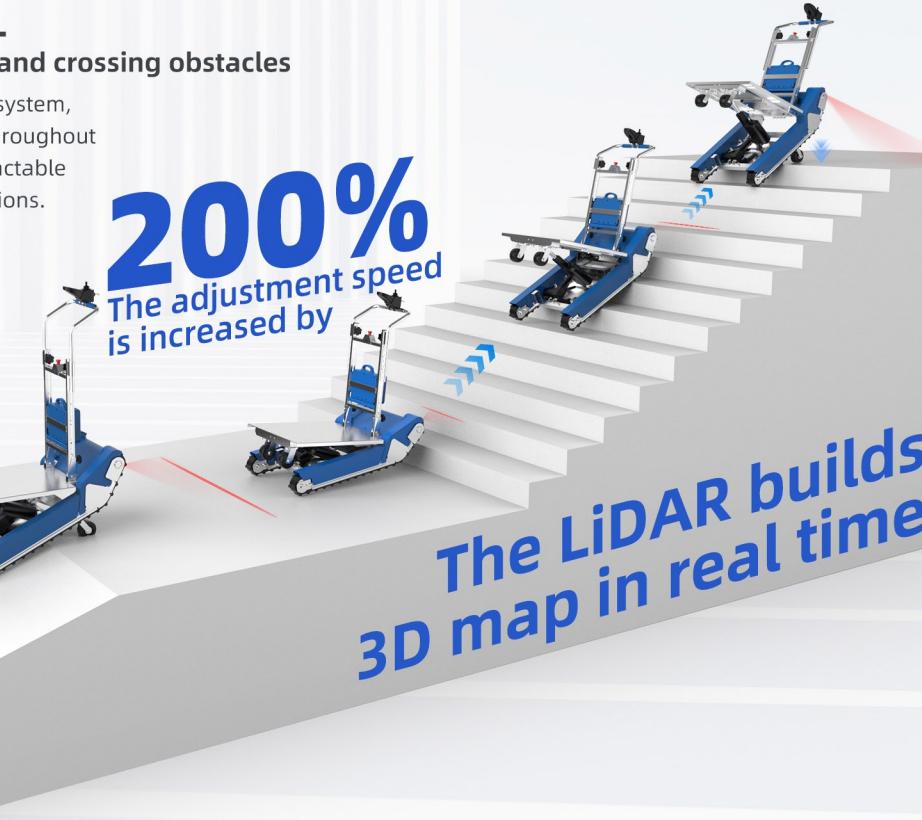
for going upstairs and downstairs and crossing obstacles

XSTO-developed Mengchong technological system, Automatically detects and balances cargo throughout the entire process. Automatic final-step retractable wheels ensure safe, smooth platform transitions.

200%

The adjustment speed
is increased by

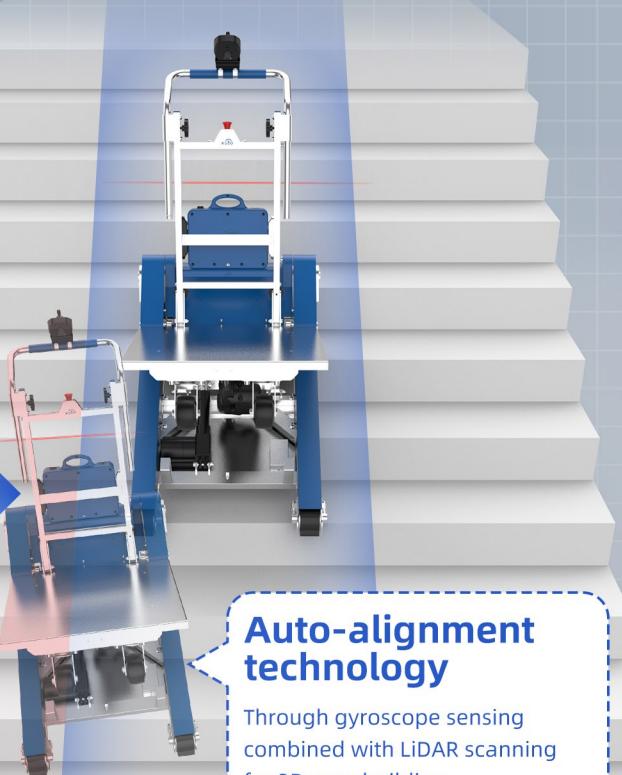
The LiDAR builds
3D map in real time



Powerful and Efficient

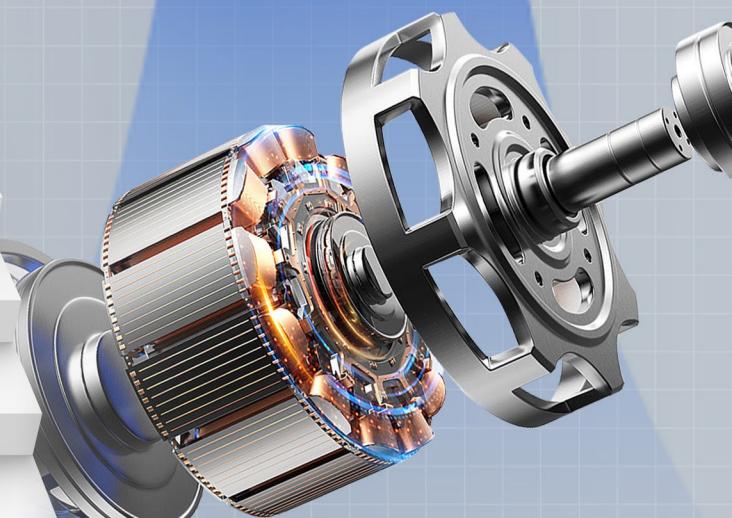
500kg industrial-grade load capacity,
18 stair steps per minute

Speed is increased **30%**



Auto-alignment technology

Through gyroscope sensing combined with LiDAR scanning for 3D map building, Auto-alignment technology of the machine is achieved when climbing stair direction deviates



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Flat Ground Mode



Upstairs Mode



Downstairs Mode



Intelligent Mode

One-button quick adjustment of operation mode,
simple operation, saving time and effort



All-terrain Adaptability

The chassis wheel and crawler track crawling system are agile in all directions in narrow spaces, realizing seamless switching among stairs, slopes and flat ground

A multifunctional Bluetooth controller enables
remote control within a range of 6 meters

Wireless remote control



OPEN FOR SECONDARY DEVELOPMENT, UNLEASHING UNLIMITED POTENTIAL

Open-source peripheral interface, supports sensors, cameras robotic arms, gas detectors, thermal imaging, cleaning modules, satellite communication etc. Applicable to mapping, inspection, agriculture, photography, environmental protection, firefighting, emergency power, and other professional applications—perfect for customized development.



AI Large Model



Target Tracking



Path Planning



Dynamic Obstacle Avoidance



Multi-point Navigation



LiDAR



Secondary Programming



Multiple Controls

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 Load capacity	500kg	 Product weight	100kg	 Chassis powertrain	4 Units
 Speed	18 Steps/Minute	 Range for going upstairs	61-66 Floors (800-864 Steps)	 Range for going downstairs	120-128 Floors (1700-1800 Steps)
 Landing	U-shaped:2000×1300mm L-shaped:1100×1200mm Width:732mm	 Step height and slope	Height≤210mm Slope≤35°	 Minimum turning radius	Crawler track mode:850mm Flat ground mode:905mm
 Width of crossing ditches	Crawler track mode ≤350mm	 Climbing slope	≤40°	 Sensor types	LiDAR Gyroscope
 Lithium battery	48V 10Ah	 Charger	AC100-220V DC54.6V 4A	 Adjustable straps	6000x55mm

