

AC⁺ Scissor Lifts Product Manuals

 Electric



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DINGLI[®]
Exceed · New Height



Founded in 2005, [Zhejiang Dingli Machinery Co., Ltd.](#) is a leading manufacturer of intelligent aerial work platforms in the world, covering a total area of 710,000 square meters (175.4 acres), with a construction area of 590,000 square meters and an annual output value of more than 10 billion.

Dingli has been applying the core concepts of "Carbon Peak" and "Carbon Neutral", as well as energy saving and emission reduction throughout the whole process of corporate governance, which are mainly reflected in the green travel of employees, green park construction, green production and manufacturing, green product R&D, and green recycling re-manufacturing

Technological innovation is the core tenet of the company, Dingli has R&D centers in Italy, Germany and the USA, an Enterprise Research Institute in China, has been awarded more than 250 patents, of which more than 100 patents of invention, more than 60 foreign patents, 5 computer software copyright registration certificate, Dingli also participated in the formulation of 16 national standards and 9 industry standards, fully realizing technological globalization. Dingli's over 200 types of aerial work platforms by independent R&D that are the most in the industry, have all passed authoritative certifications such as CE in Europe and ANSI in the US, and are exported to over 80 countries and regions worldwide.

In line with the trend of electrification, greening and intelligence, Dingli has realized collaborative, green and safe manufacturing based on the "future factory" with the highest degree of automation in the industry. Electrification is the key for Dingli's energy-saving solutions to customers. Dingli is the first in the industry to electrify the entire range of products, among which the boom series with large load capacity and modular design is the first in the industry. By advocating the efficient use of recycling energy, the company has established re-manufacturing factories to provide customers with full life cycle services for products.

In order to better convey the global green development concept, Dingli has invested in MAGNI (Italy), CMEC (USA) and TEUPEN (Germany),

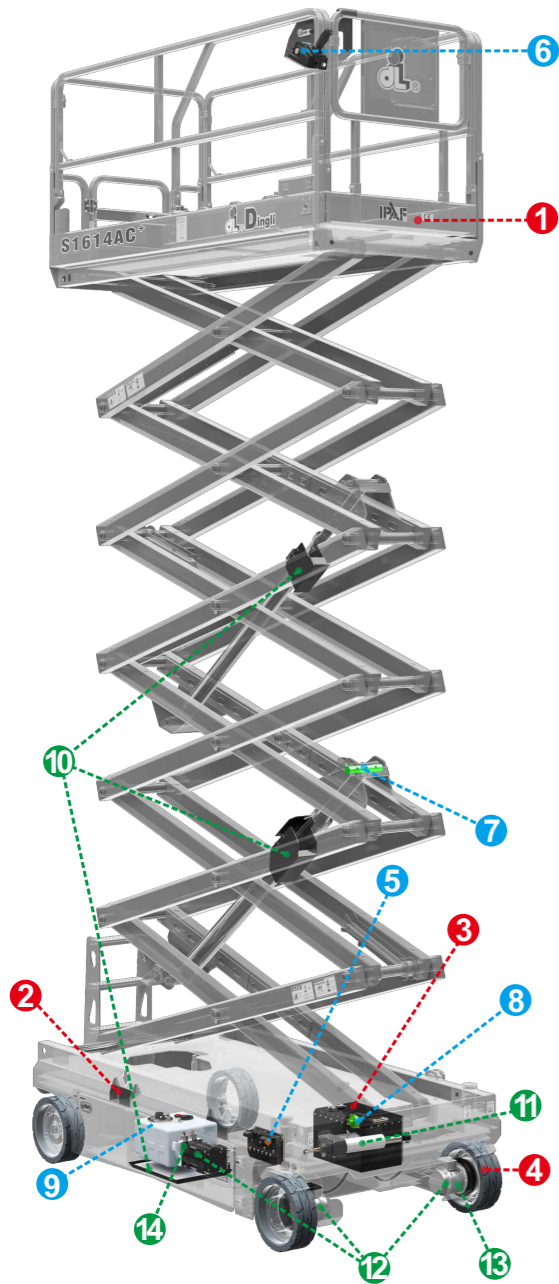
with innovative technology as the grip, green products as the entry point, Dingli set up more than ten overseas subsidiaries, serving global customers with electric aerial work platforms.

Dingli has been recognized as a "National Manufacturing Single Item Champion Demonstration Enterprise" by the Ministry of Industry and Information Technology; been awarded the "IAPA 2024 Product of the Year Categories - Scissor Lifts & Vertical Masts", realizing the zero breakthrough of Chinese manufacturing in the industry's most authoritative international awards. Dingli has been honored with "2021 ACCESS M20 Global Aerial Work Platform Top 3 Manufacturers", "Top 40 Global Construction Machinery Manufacturers". Mr. Xu Shugen, president of the board, was the first Chinese selected as a member of the IAPA judging panel since the establishment of this international award.

Dingli is also committed to building an equal, diverse and inclusive corporate environment, by actively empowering women to realize gender diversity in all positions in the male-dominated machinery manufacturing industry, respecting different voices to keep team innovative and resilient for a long time, promoting the development of the industry and ushering in a new era of electrification of non-road mobile machinery to lead the green transformation. Meanwhile, Dingli has built a harmonious supply chain, connected upstream and downstream to create the world's only industrial park for aerial work platforms. Dingli has been fulfilling social responsibilities establish the "HongDing Fund", and actively carry out warm-hearted volunteer service activities such as poverty relief, fundraising and disaster relief, etc.

Through the entire life cycle of enterprise ecology, "green sustainability" is becoming the focus of Dingli's high-quality development. In the future, the company will continue to upgrade the "future factories", deepen the green and energy-saving strategy, lead the "new era of electrification of non-road mobile machinery", make aerial work platforms "Made in China" shine internationally.

Comprehensive Upgrade Fourteen Benefits Three-Year Comprehensive Warranty



Performance+

1 Industry Leading Platform Capacity



For load capacity, maximum increase up to 40% compared to the original model (load capacity varies by model height).

2 Side and Rear Forklift Pockets



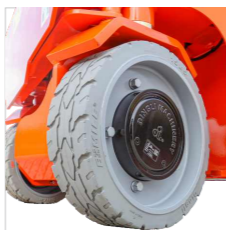
Through the optimization of load distribution and the improvement of the stability and safety for loading & unloading, the transition efficiency is greatly increased.

3 LFP Battery Pack



The Energy density of LFP battery pack is comprehensively improved, combined with energy-efficient power system, offering long endurance that exceeds the traditional high-capacity lithium batteries, at the same time, it effectively reduces battery capacity and saves the future battery replacement and maintenance costs. The modular replaceable design makes it free to switch lead-acid / lithium-ion power.

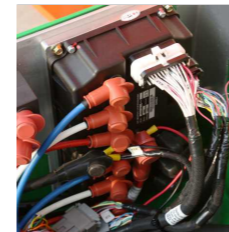
4 High Strength Damage Resistant Tyres Compound



Newly upgraded compound formulation with a 100% increase in tear and cut resistance. Innovative tread and profile, combined with upgraded compounds, increases the tire's grounding area, making the stress distribution in the contact surface more even, lowering the unit pressure in the grounding area and increasing the overall wear resistance by 30%. The rolling resistance is reduced by 6% to effectively control the energy loss during driving, better in energy-saving.

Reliability+

5 Four-in-One Controller



Integrated ECU / dual drive motor control / pump motor control / tilt control. 35% increase in power density: Optimized circuit layout and improved component performance result in a significant increase in output power for the same volume. 40% reduction in parts costs: Reducing the quantity of hardware such as discrete devices and supporting harnesses, connectors, etc.

6 New Platform Control Box



With advanced material technology, the service life of the silicone buttons is improved to 1 million times of trouble-free operations, and the anti-fouling performance of the silicone button panel is 50% higher. Equipped with a new high-resolution dot matrix display, 350% increase in the visual range, significantly widening the viewing angle coverage; the actual visual area of the display is increased by 270%.

7 High Precision Redundant Load Sensing System



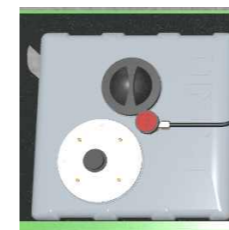
Direct and precise detection of loads with 20% higher overload accuracy. Precise control and safety: Real-time, accurate monitoring of load changes to prevent overloading and ensure that equipment will not be damaged or cause safety accidents due to excessive loads. High stability: Compared to traditional hydraulic weighing, it is more stable without the influence of ambient temperature.

8 Redundant Scissor Angle Sensing System



Safety is increased by 100% and limit switches are reduced by 60%. Real-time cross-validation of each sensor's data effectively prevents misoperation caused by erroneous signals, largely increasing the system's safety level.

9 Hydraulic Oil Heater (Optional)



Configuration of heater for heating the hydraulic oil in cold environments.

Environment+

10 Hydraulic Oil Leak Containment



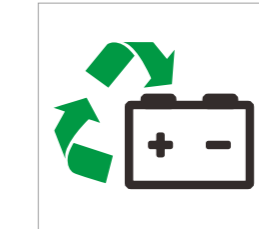
Standard option of leakage receiving device, greatly reducing hydraulic fluid contamination.

11 Electric Actuator Steering System



Integrated steering drive module with torque / speed / length / overload protection up to IP69K, millisecond response time, ±1mm positioning accuracy, 15% increase in steering speed and 66% reduction in energy consumption. Compared with traditional hydraulic steering, electric actuator steering is more efficient without influence by high and low temperatures.

12 Gravity Down Energy Recovery System



Storing self-weight potential energy through synchronous reluctance motors and re-supplying power support when the load rises or additional energy is needed, increasing the overall efficiency of the system by 20%. During self-weight descending, the hydraulic oil from cylinder will drive the gear pump, and then drive the motor, the motor will charge the battery, so that the overall energy utilization of the system is improved.

13 High Efficiency Drive System

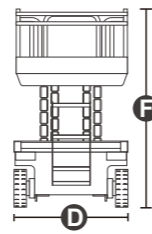
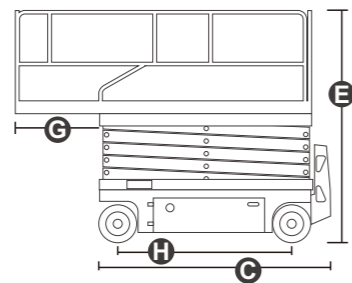
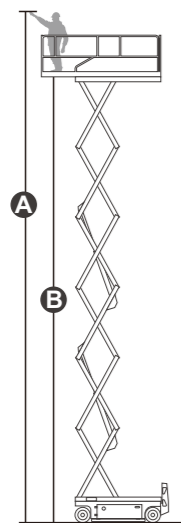


High efficiency: With a wide speed range, the motor keeps running in high performance zone. Environmentally friendly: Not rely on expensive and resource-limited rare earth materials, reducing the dependence on rare resources. The driving capacity is increased by 15%, the rated current is reduced by 25%, and the power density is increased by 45%.

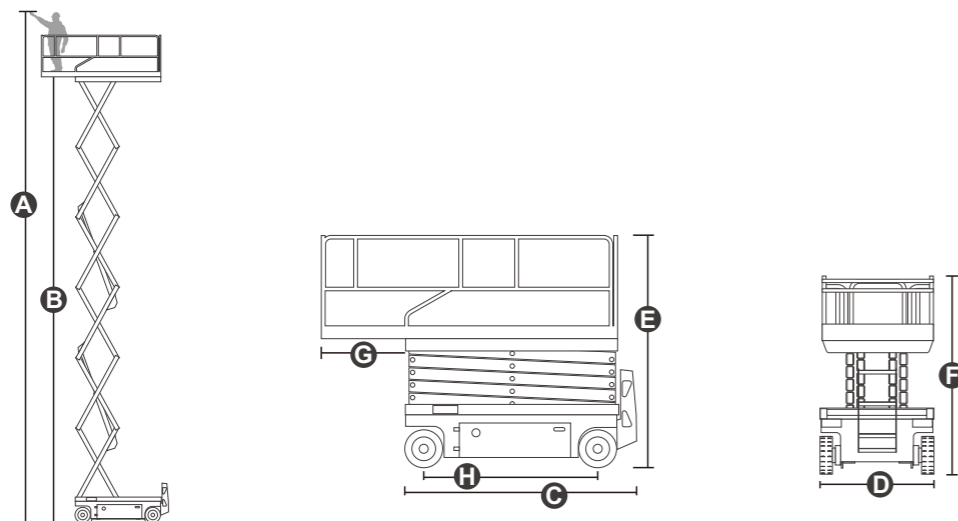
14 High Efficiency Pump System



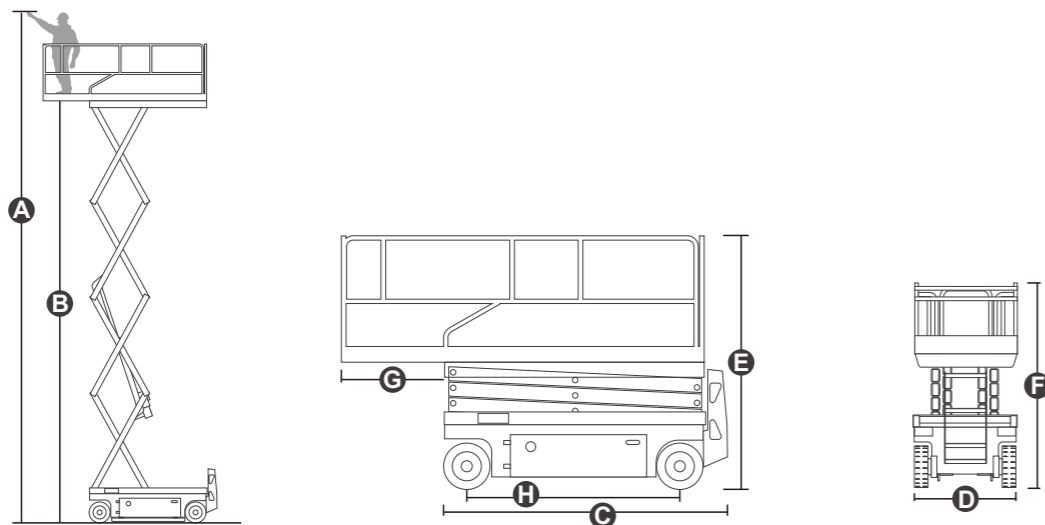
Integrated pump station integrates motor, pump body, valve group, oil tank, etc., hydraulic pipe is reduced by 90%, only one hydraulic outlet pipe is needed, which greatly reduces the problem of hydraulic oil seepage; through precise matching and intelligent control, the reliability and lifting capacity of the whole system is further improved. The lifting capacity is increased by 25%, the starting current is decreased by 20%, and the power density is increased by 32%.



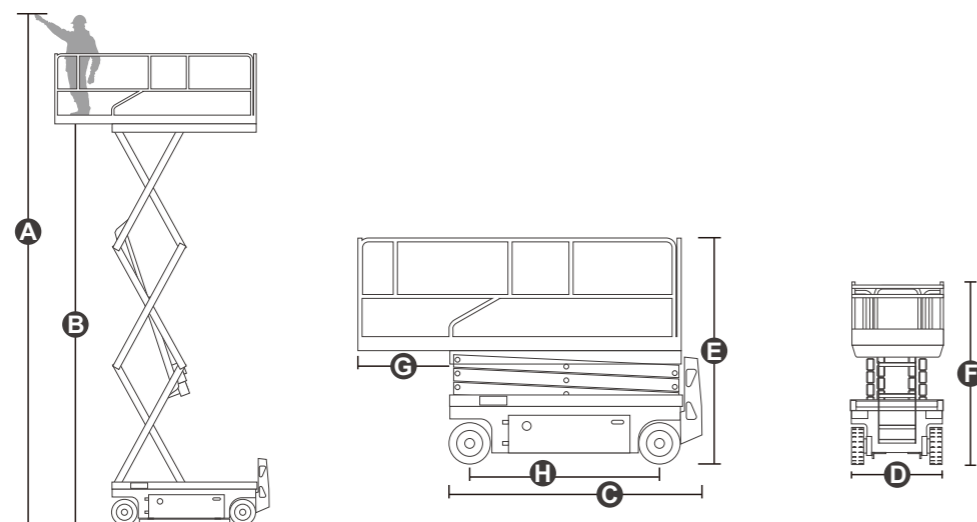
Model	S1614AC ⁺	S1612AC ⁺
Dimension		
Max. Working Height (Indoor) A	15.70m 51ft 6in	15.70m 51ft 6in
Max. Platform Height (Indoor) B	13.70m 44ft 11in	13.70m 44ft 11in
Overall Length C	2.84m 9ft 4in	2.84m 9ft 4in
Overall Width D	1.39m 4ft 7in	1.25m 4ft 1in
Overall Height (Rails Up) E	2.62m 8ft 7in	2.62m 8ft 7in
Overall Height (Rails Down) F	2.09m 6ft 10in	2.09m 6ft 10in
Platform Size (Length xWidth)	2.64m×1.12m 8ft 8in×3ft 8in	2.64m×1.12m 8ft 8in×3ft 8in
Platform Extension Size G	0.90m 2ft 11in	0.90m 2ft 11in
Ground Clearance (Stowed/Raised)	0.10m/0.019m 4in/1in	0.10m/0.019m 4in/1in
Wheelbase H	2.24m 7ft 4in	2.24m 7ft 4in
Turning Radius (Inside/Outside)	0m/2.70m 0in/8ft 10in	0m/2.65m 0in/8ft 8in
Tyres	Φ381×127mm	Φ381×127mm
Performance		
S.W.L	350kg 772lb	350kg 772lb
S.W.L on Extension	136kg 300lb	136kg 299lb
Max. Occupants (Indoor/Outdoor)	2/0	2/0
Gradeability	25%	25%
Travel Speed (Stowed)	6.0km/h 3.73mph	6.0km/h 3.73mph
Travel Speed (Raised)	0.8km/h 0.50mph	0.8km/h 0.50mph
Max. Working Slope	1.5°/3°	1.5°/3°
Up/Down Speed	65/66sec	68/68sec
Weight		
Overall Weight	3500kg 7716lb	3390kg 7474lb
Power		
Hydraulic Tank	20L 5.3gal	20L 5.3gal
Lithium Battery	28.8V/150AH	28.8V/150AH
Charger	28V/30A	28V/30A
Driving Motor	2×15VAC/0.87kW	2×15VAC/0.87kW
Lifting Motor	15VAC/3.42kW	15VAC/3.42kW
Optional Items		
Max. Working Height (Outdoor)	11.00m 36ft 1in	9.00m 29ft 6in
Max. Platform Height (Outdoor)	9.00m 29ft 6in	7.00m 23ft
Max. Occupants (Indoor/Outdoor)	2/1	2/1



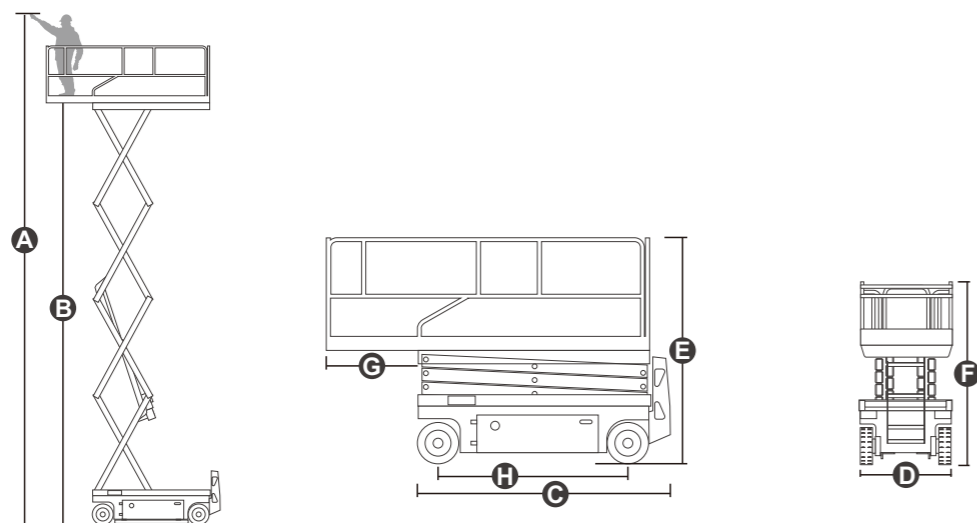
Model	S1412AC ⁺	S1212AC ⁺
Dimension		
Max. Working Height (Indoor) A	13.80m 45ft 3in	12.00m 39ft 4in
Max. Platform Height (Indoor) B	11.80m 38ft 9in	10.00m 32ft 10in
Overall Length C	2.48m 8ft 2in	2.48m 8ft 2in
Overall Width D	1.19m 3ft 11in	1.15m 3ft 9in
Overall Height (Rails Up) E	2.62m 8ft 7in	2.49m 8ft 2in
Overall Height (Rails Down) F	2.09m 6ft 10in	1.96m 6ft 5in
Platform Size (Length xWidth)	2.27m×1.12m 7ft 5in×3ft 8in	2.27m×1.12m 7ft 5in×3ft 8in
Platform Extension Size G	0.90m 2ft 11in	0.90m 2ft 11in
Ground Clearance (Stowed/Raised)	0.10m/0.019m 4in/1in	0.10m/0.019m 4in/1in
Wheelbase H	1.87m 6ft 2in	1.87m 6ft 2in
Turning Radius (Inside/Outside)	0m/2.10m 0in/6ft 11in	0m/2.10m 0in/6ft 11in
Tyres	Φ381×127mm	Φ381×127mm
Performance		
S.W.L	350kg 772lb	350kg 772lb
S.W.L on Extension	113kg 249lb	113kg 249lb
Max. Occupants (Indoor/Outdoor)	3/0	2/1
Gradeability	25%	25%
Travel Speed (Stowed)	6.0km/h 3.73mph	6.0km/h 3.73mph
Travel Speed (Raised)	0.8km/h 0.50mph	0.8km/h 0.50mph
Max. Working Slope	1.5°/3°	1.5°/3°
Up/Down Speed	52/52sec	54/51sec
Weight		
Overall Weight	3210kg 7077lb	3060kg 6746lb
Power		
Hydraulic Tank	20L 5.3gal	20L 5.3gal
Lithium Battery	28.8V/150AH	28.8V/150AH
Charger	28V/30A	28V/30A
Driving Motor	2×15VAC/0.87kW	2×15VAC/0.87kW
Lifting Motor	15VAC/3.42kW	15VAC/3.42kW
Optional Items		
Max. Working Height (Outdoor)	11.20m 36ft 9in	/
Max. Platform Height (Outdoor)	9.20m 30ft 2in	/
Max. Occupants (Indoor/Outdoor)	3/1	/



Model	S1012AC ⁺	S1008AC ⁺
Dimension		
Max. Working Height (Indoor) A	10.00m 32ft 10in	10.00m 32ft 10in
Max. Platform Height (Indoor) B	8.00m 26ft 3in	8.00m 26ft 3in
Overall Length C	2.48m 8ft 2in	2.48m 8ft 2in
Overall Width D	1.15m 3ft 9in	0.83m 2ft 9in
Overall Height (Rails Up) E	2.36m 7ft 9in	2.36m 7ft 9in
Overall Height (Rails Down) F	1.83m 6ft	1.90m 6ft 3in
Platform Size (Length xWidth)	2.27m×1.12m 7ft 5in×3ft 8in	2.27m×0.81m 7ft 5in×2ft 8in
Platform Extension Size G	0.90m 2ft 11in	0.90m 2ft 11in
Ground Clearance (Stowed/Raised)	0.10m/0.019m 4in/1in	0.10m/0.019m 4in/1in
Wheelbase H	1.87m 6ft 2in	1.87m 6ft 2in
Turning Radius (Inside/Outside)	0m/2.10m 0in/6ft 11in	0m/2.10m 0in/6ft 11in
Tyres	Φ381×127mm	Φ381×127mm
Performance		
S.W.L	450kg 992lb	250kg 551lb
S.W.L on Extension	113kg 249lb	113kg 249lb
Max. Occupants (Indoor/Outdoor)	2/2	2/0
Gradeability	25%	25%
Travel Speed (Stowed)	6.0km/h 3.73mph	6.0km/h 3.73mph
Travel Speed (Raised)	0.8km/h 0.50mph	0.8km/h 0.50mph
Max. Working Slope	1.5°/3°	1.5°/3°
Up/Down Speed	33/35sec	32/34sec
Weight		
Overall Weight	2750kg 6063lb	2230kg 4916lb
Power		
Hydraulic Tank	20L 5.3gal	20L 5.3gal
Lithium Battery	28.8V/150AH	28.8V/125AH
Charger	28V/30A	28V/30A
Driving Motor	2×15VAC/0.87kW	2×15VAC/0.87kW
Lifting Motor	15VAC/3.42kW	15VAC/3.42kW
Optional Items		
Max. Working Height (Outdoor)	/	8.10m 26ft 7in
Max. Platform Height (Outdoor)	/	6.10m 20ft
Max. Occupants (Indoor/Outdoor)	/	2/1



Model		S0808AC+
Dimension		
Max. Working Height A		8.00m 26ft 3in
Max. Platform Height B		6.00m 19ft 8in
Overall Length C		2.48m 8ft 2in
Overall Width D		0.83m 2ft 9in
Overall Height (Rails Up) E		2.23m 7ft 4in
Overall Height (Rails Down) F		1.77m 5ft 10in
Platform Size (Length xWidth)		2.27m×0.81m 7ft 5in×2ft 8in
Platform Extension Size G		0.90m 2ft 11in
Ground Clearance (Stowed/Raised)		0.10m/0.019m 4in/1in
Wheelbase H		1.87m 6ft 2in
Turning Radius (Inside/Outside)		0m/2.10m 0in/6ft 11in
Tyres		Φ381×127mm
Performance		
S.W.L		408kg 900lb
S.W.L on Extension		113kg 249lb
Max. Occupants		2/1
Gradeability		25%
Travel Speed (Stowed)		6.0km/h 3.73mph
Travel Speed (Raised)		0.8km/h 0.50mph
Max. Working Slope		1.5°/3°
Up/Down Speed		30/43sec
Weight		
Overall Weight		2160kg 4762lb
Power		
Hydraulic Tank		20L 5.3gal
Lithium Battery		28.8V/125AH
Charger		28V/30A
Driving Motor		2×15VAC/0.87kW
Lifting Motor		15VAC/3.42kW



Model		S0807AC+
Dimension		
Max. Working Height A		7.80m 25ft 7in
Max. Platform Height B		5.80m 19ft
Overall Length C		1.86m 6ft 1in
Overall Width D		0.76m 2ft 6in
Overall Height (Rails Up) E		2.15m 7ft 1in
Overall Height (Rails Down) F		1.83m 6ft
Platform Size (Length xWidth)		1.67m×0.74m 5ft 6in×2ft 5in
Platform Extension Size G		0.90m 2ft 11in
Ground Clearance (Stowed/Raised)		0.09m/0.016m 3in/1in
Wheelbase H		1.36m 4ft 5in
Turning Radius (Inside/Outside)		0m/1.64m 0in/5ft 5in
Tyres		Φ323×100mm
Performance		
S.W.L		250kg 551lb
S.W.L on Extension		113kg 249lb
Max. Occupants		2/1
Gradeability		25%
Travel Speed (Stowed)		5.5km/h 3.41mph
Travel Speed (Raised)		0.6km/h 0.37mph
Max. Working Slope		1.5°/3°
Up/Down Speed		22/22sec
Weight		
Overall Weight		1630kg 3594lb
Power		
Hydraulic Tank		7L 1.7gal
Lithium Battery		28.8V/125AH
Charger		28V/30A
Driving Motor		2×15VAC/0.5kW
Lifting Motor		15VAC/3kW