

TECHNICAL DATA



Automated Guided Vehicle
L600-Li

TECHNICAL DATA | L600-Li



The Automated Guided Vehicle (AGV) Grenzebach L600-Li is primarily used in our „Goods-to-Person“ solution. It picks up goods carriers and transports them to a multifunctional workplace for order picking.

Due to the low construction height almost all types of load carriers can be combined with the vehicle. Storage space can be used to the maximum at the bottom. The maximum lifting weight of 600 kg leaves plenty of room for loading the carriers. With a speed of up to 1.5 m/s, the L600-Li is slightly faster than a person with average walking pace. With five hours travel time per 30 minutes charging time, the built-in lithium-ion battery technology allows for high availability.



Length	967 mm
Width	750 mm
Height (lifting plate down)	340 mm
Lifting height	60 mm (electrical)
Payload	600 kg
Speed (unloaded)	Up to 1.5 m/s
Speed (loaded)	Up to 1.5 m/s
Ascents	Up to 5 %
Turning radius	Pivot in stationary location or ≥ 1 m
Navigation	Grid based (optical localization of markers with Data Matrix Codes)
Drive mode	Forward and reverse
Positioning accuracy	± 15 mm
Safety	Wireless emergency stop Galvanic isolation as per DIN EN 1175 (VDE0117)
Operating voltage	48 V DC
Battery	Lithium Ion

Battery charging system	Fixed contacts, up to 40 A charging current
Charging time	15 - 80 % SOC approx. 30 min
Travel time	80 - 15 % SOC with 500 kg load approx. 5 h
Operating time	24 hours, 7 days
Total weight	260 kg
IP certification	IP21
Temperature range	+10 to +40 °C
Humidity	Max. 80 % non-condensing
Sound pressure level	< 69 dB (A)

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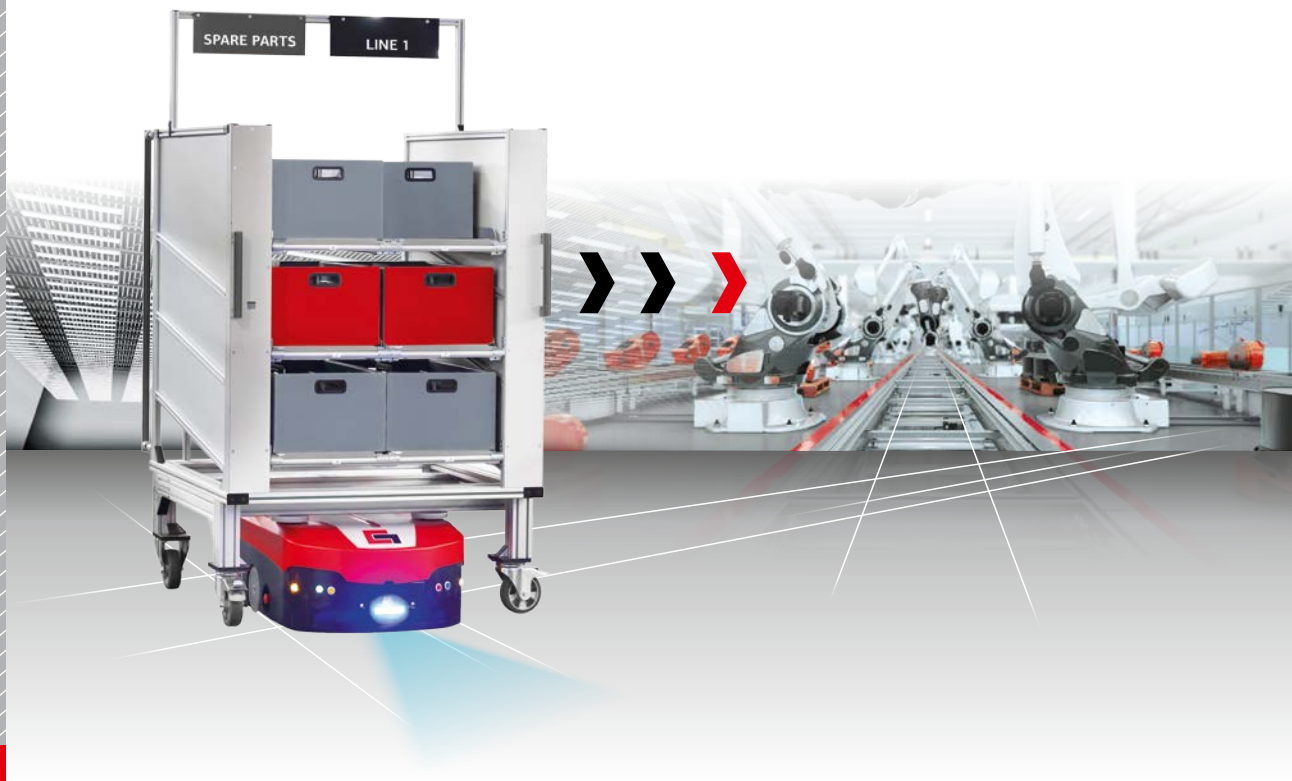


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TECHNICAL DATA | L1200S-Li



Automated Guided Vehicle

L1200S-Li

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The Automated Guided Vehicle (AGV) Grenzebach L1200S is mainly used in our Automated Goods Transport solution. It transports goods carriers to their specified destination.

Due to its low construction height, the L1200S can tunnel under a variety of different load carriers (tables, trolleys, racks, shelves). The AGV can transport up to 1.2 tons lengthwise or crosswise - and can turn on the spot which saves space. The integrated people safety sensor technology makes it possible to use the L1200S in all in-house environments. Due to the free contour navigation, there is no need to set up protected areas. This saves space and facilitates integration into existing environments - including lifts, robot cells, conveyor systems or strapping systems.



Length	1,238 mm
Width	693 mm
Height (lifting plate down)	340 mm
Lifting height	60 mm (electrical)
Payload	1,200 kg
Speed (unloaded)	Up to 1 m/s
Speed (loaded)	Up to 1 m/s
Turning radius	Pivot in stationary location or ≤1m
Navigation	Contour navigation (safety scanner detects surrounding and compares with internal map)
Drive mode	Forward and reverse
Positioning accuracy	± 15 mm
Safety	2 certified safety laser scanners (front + back) Galvanic isolation as per DIN EN 1175 (VDE0117)
Operating voltage	48 V DC

Battery	Lithium iron phosphate
Battery charging system	Fixed contact, up to 80 A charge rate
Charging time	15 - 80 % SOC approx. 30 min.
Travel time	80 - 15 % SOC with 1,000 kg load approx. 6 h
Operating time	24 hours, 7 days
Total weight	300 kg
IP certification	IP32
Temperature range	+10 to +40 °C
Humidity	Max. 80 %
Sound pressure level	< 69 dB (A)

Options:

Area monitoring	✓
Blue Light	✓

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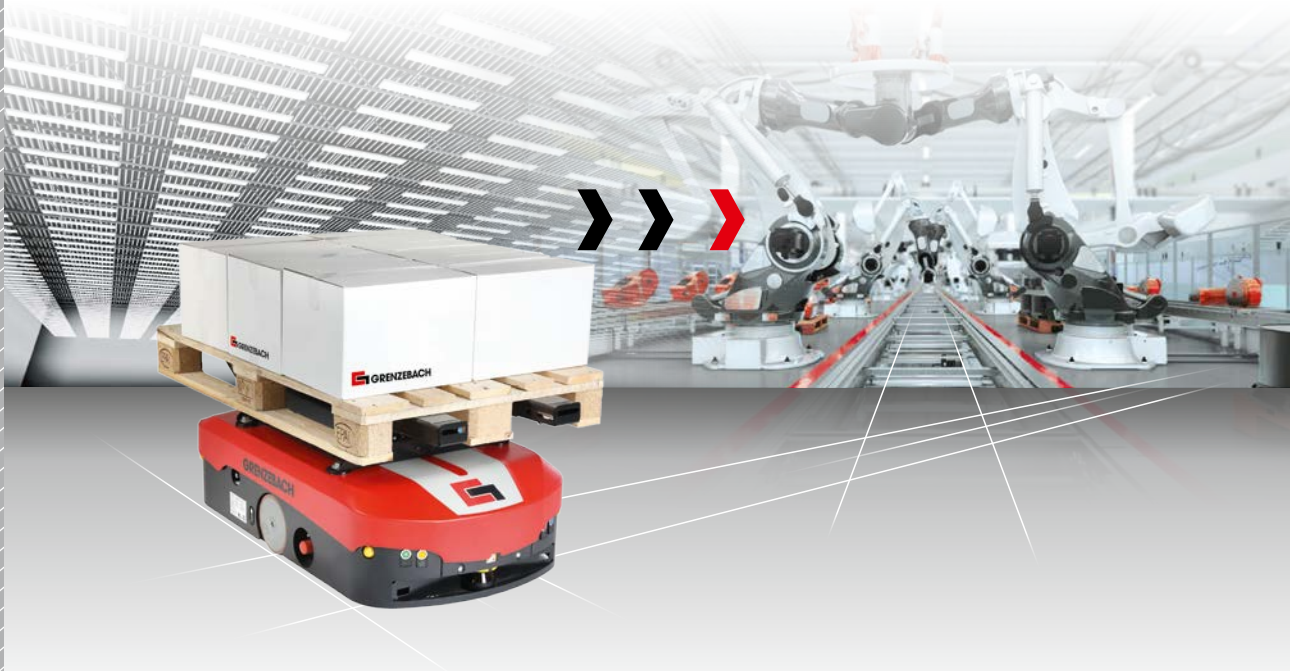


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TECHNICAL DATA | FL1200S-Li



Automated Guided Vehicle

FL1200S-Li

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The Automated Guided Vehicle (AGV) Grenzebach FL1200S is mainly used in our Automated Goods Transport solution and is specialized in handling euro pallets. It directly moves the pallets without additional load carriers or intermediate levels.

Grid boxes, steel boxes and other transport containers with basic dimensions of 1,200 x 800 mm can also be transported. Due to the integrated people safety sensor technology, the vehicle can be used in all production environments interacting with lifting trucks and forklifts. The FL1200S transports loads with a total weight of 1.2 tons - and is capable of turning on the spot which saves space. Due to the free contour navigation there is no need to establish safe zones. This saves space and facilitates the integration into existing environments.



Length	1,336 mm
Width	693 mm
Height (lifting plate down)	533 mm
Lifting height	60 mm (electrical)
Payload	1,200 kg
Speed (unloaded)	Up to 1 m/s
Speed (loaded)	Up to 1 m/s
Turning radius	Pivot in stationary location or ≤1m
Navigation	Contour navigation (safety scanner detects surrounding and compares with internal map)
Drive mode	Forward and reverse
Positioning accuracy	± 15 mm
Safety	2 certified safety laser scanners (front + back) Galvanic isolation as per DIN EN 1175 (VDE0117)
Operating voltage	48 V DC
Battery	Lithium iron phosphate

Battery charging system	Fixed contact, up to 80 A charge rate
Charging time	15 - 80 % SOC approx. 30 min.
Travel time	80 - 15 % SOC with 1,000 kg load approx. 6 h
Operating time	24 hours, 7 days
Total weight	340 kg
IP certification	IP32
Temperature range	+10 to +40 °C
Humidity	Max. 80 %
Sound pressure level	< 69 dB (A)

Options:

Area monitoring	✓
Blue Light	✓

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TECHNICAL DATA | FF1200S-Li



Automated Guided Vehicle

FF1200S-Li

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The Automated Guided Vehicle (AGV) Grenzebach FF1200S is mainly used in our Automated Goods Transport solution. The FF1200S fulfills the tasks of a forklift truck - without a driver, yet safe for working environments, and with reliable navigation. It has a fork for lifting the pallet from the open side (for example, euro pallets) and from the floor. The supports are located directly under the fork. The maximum lifting weight is 1.2 tons. Thanks to the compact size of the FF1200S the AGV requires a minimum aisle width of 2.80 meters only.



Length	1,992 mm
Width	942 mm
Height (lifting plate down)	2,636 mm
Lifting height	Up to 3,000 mm (hydraulic)
Payload	Up to 1,200 kg with 600 mm load centre
Speed (unloaded)	Up to 1.5 m/s
Speed (loaded)	Up to 1.5 m/s
Turning radius	Stationary Point, optimal radius R = approx. 1.2 m
Navigation	Inductive track guidance, optional Laser navigation
Drive mode	Forward and reverse
Positioning accuracy	± 15 mm
Safety	2 certified safety laser scanners (front + back) Galvanic isolation as per DIN EN 1175 (VDE0117)
Operating voltage	48 V DC
Battery	Lithium iron phosphate

Battery charging system	Fixed contact, up to 165 A charge rate
Charging time	15 - 80 % SOC approx. 40 min.
Travel time	80 - 15 % SOC with 1,000 kg load approx. 8 h
Operating time	24 hours, 7 days
Total weight	1,500 kg
IP certification	-
Temperature range	+5 to +40 °C
Humidity	Max. 70 %
Sound pressure level	< 70 dB(A)

Options:

Blue Light



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