



PRODUCT DATASHEET / HIGH-BAY AGVS

VNA-1590

high-bay AGV

VNA-1590 automates rack handling in warehouses with very narrow aisles. Selection takes account of aisle geometry, the load carrier and the required pallet pickup and deposit levels.



Rated load capacity

1500 kg

Lifting height

9000 mm

Navigation

Laser SLAM

Matched to your process

We select the robot for the load carrier, load weight, route geometry and operating schedule. Nominal specifications, working capacity and equipment are confirmed for the selected configuration.



VNA-1590 / PRODUCT DATASHEET

Technical specifications

Load and operation

Specification	Value
Product name	VNA-1590 AGV VNA
Pallet type	Open pallet / closed pallet
Rated load capacity	1500 kg
Load centre distance	600 mm
Standard lifting height	9000 mm
Travel speed (laden / unladen)	1.6 / 1.8 m/s
Cage storage	Optional
Pallet storage	Optional

Dimensions and site conditions

Specification	Value
Weight (including battery)	7100 kg
Truck dimensions (L × W × H)	3400 × 1550 × 4290 mm
Fork dimensions (L × W × H)	1220 × 125 × 50 mm
Outer fork width	600 / 650 mm
Minimum turning radius	2240 mm
Floor conditions (gradient / step / gap)	<5% / 10 mm / 30 mm



Technical specifications

Navigation and safety

Specification	Value
Navigation type	Laser SLAM
Navigation positioning accuracy	±10 mm
Navigation angle accuracy	±1°
Number of lidars	1 (P+F R2000) + 4 (C2) + 1 Mid360
Wi-Fi roaming	Standard
3D obstacle avoidance	Optional
Pallet recognition	Standard
HMI display	Standard
Braking distance (1 m/s / 1.5 m/s)	≤30 cm / ≤50 cm
Fork height protection	Standard
High-bay pallet recognition	Optional

Battery and charging

Specification	Value
Battery specification	48 V / 300 Ah (lithium iron phosphate)
Battery runtime	8 h to 10 h
Charging time (10% to 80%)	3 h to 4 h



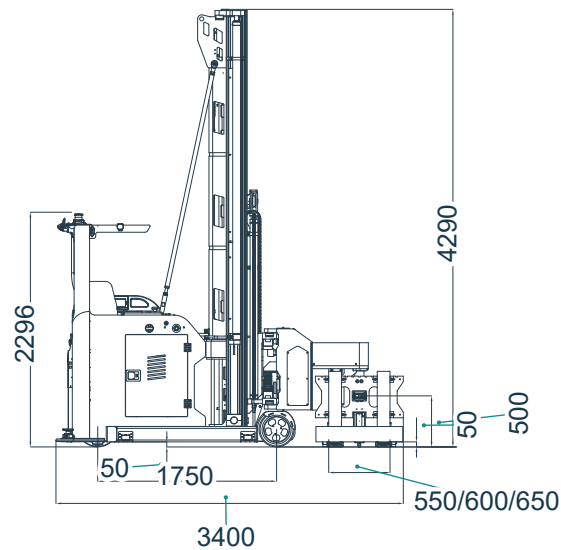
VNA-1590 / PRODUCT DATASHEET

Robot dimensions

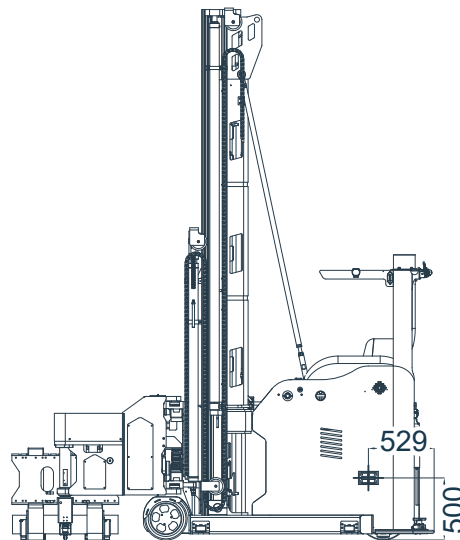
Dimensions in mm. Read the drawings according to their numerical labels.

Fork spacing: 600 or 650 mm. The drawing also includes 550 mm; confirm availability of this configuration during selection.

Left side



Right side



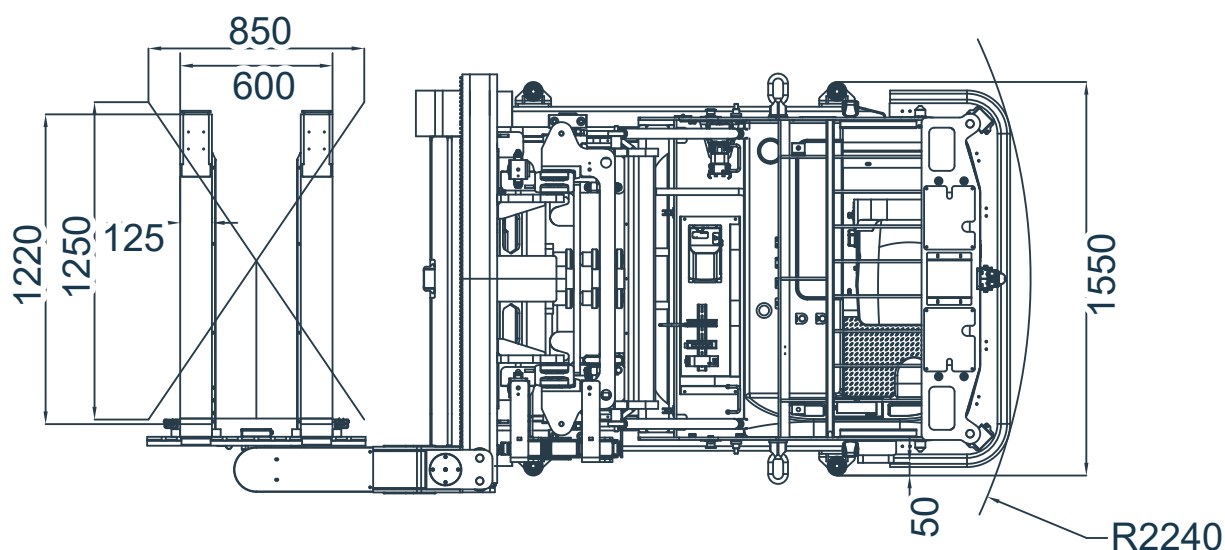


VNA-1590 / PRODUCT DATASHEET

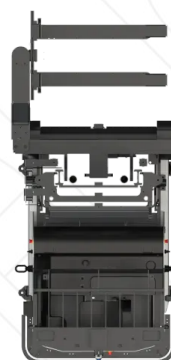
Robot dimensions

Dimensions in mm. Read the drawings according to their numerical labels.

Top - horizontal layout



Front



Top

View the model and available materials at agv.inovatica.com.

VNA-1590 | Product datasheet

5 / 5