



PRODUCT DATASHEET / STORAGE AND RACKING

ST-1016-OMNI

omnidirectional AGV stacker

ST-1016-OMNI combines omnidirectional transport with open-pallet storage. It is designed for processes that require manoeuvring in limited space.



Rated load capacity

1000 kg

Lifting height

1600 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.



ST-1016-OMNI / PRODUCT DATASHEET

Technical specifications

Load and operation

Specification	Value
Product name	ST-1016-OMNI
Operating mode	Automatic navigation
Pallet type	Open pallet
Rated load capacity	1000 kg
Load centre distance	600 mm
Standard lifting height	1600 mm
Travel speed (laden / unladen)	1.0 / 1.5 m/s
Cage storage	Optional
Pallet storage	Optional
Safety bumper	Standard

Dimensions and site conditions

Specification	Value
Weight (including battery)	800 kg
Truck dimensions (L x W x H)	1705 x 1000 x 1995 mm
Fork dimensions (L x W x H)	1220 x 210 x 60 mm
Outer fork width	620 / 680 mm
Minimum turning radius	1415 mm
Temperature and humidity range	TEMP: 0°C to 50°C / RH: 10% to 90%, non-condensing
Floor conditions (gradient / step / gap)	<5% / 10 mm / 30 mm
Right-angle stacking aisle width, 1000 x 1200 pallet (1200 along forks)	1994 + 200 mm
Right-angle stacking aisle width, 800 x 1200 pallet (1200 along forks)	1910 + 200 mm
Right-angle stacking aisle width, 1000 x 1000 pallet (1000 along forks)	1924 + 200 mm



ST-1016-OMNI / PRODUCT DATASHEET

Technical specifications

Navigation and safety

Specification	Value
Navigation type	Laser SLAM
Navigation positioning accuracy	±10 mm
Navigation angle accuracy	±1°
Number of lidars	1 (FREE H1 / P+F R2000) + 3 (FREE C2)
Wi-Fi roaming	Standard
3D obstacle avoidance	Optional
Pallet recognition	Standard
HMI display	Standard
Emergency stop button (E-stop)	Standard
Audible and visual signals	Standard
Braking distance (1 m/s / 1.5 m/s)	≤30 cm / ≤50 cm
360° laser protection	Standard
Fork height protection	Standard
ISO 3691-4	Standard
EMC	Standard
UN38.3	Standard
High-bay pallet recognition	Optional

Battery and charging

Specification	Value
Battery specification	48 V / 106 Ah (lithium iron phosphate)
Battery runtime	10 to 12 h
Charging time (10% to 80%)	1 h
Charging method	Manual / Automatic

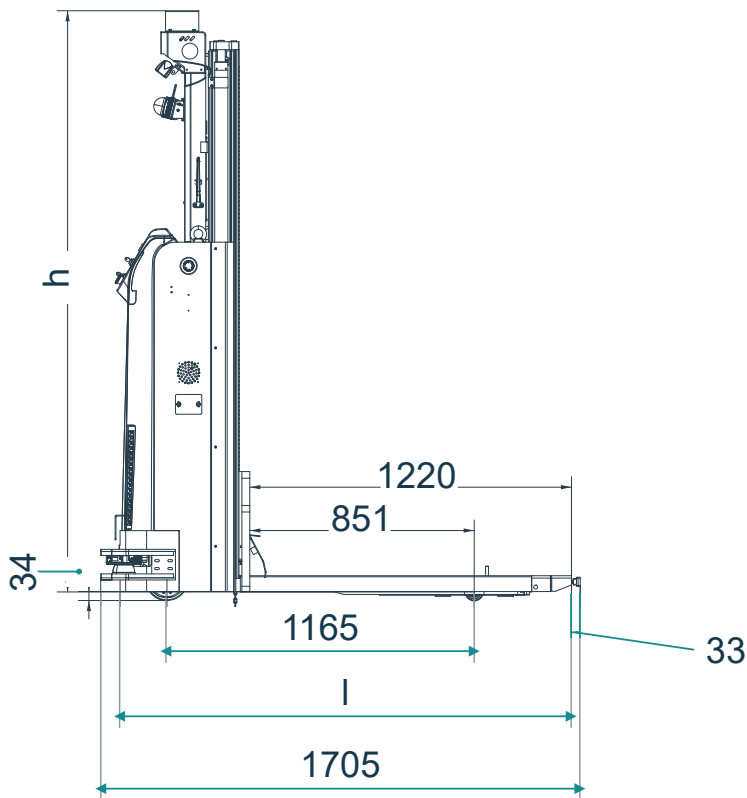
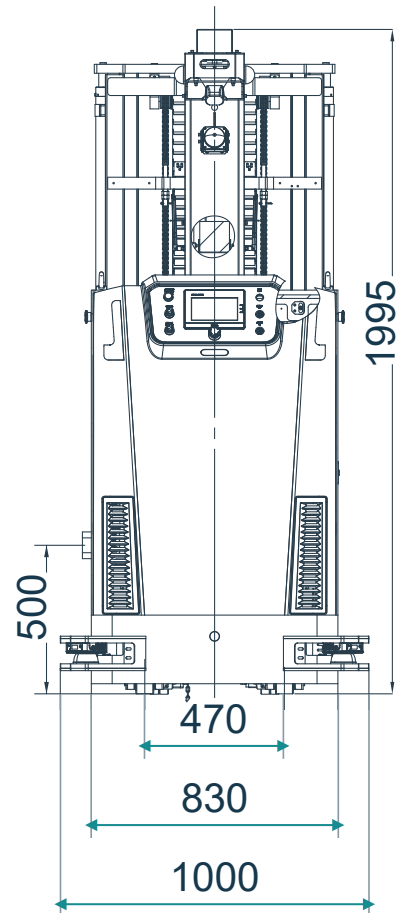


ST-1016-OMNI / PRODUCT DATASHEET

Robot dimensions

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

Version with 1600 mm lift: nominal dimensions 1705 × 1000 × 1995 mm, fork length 1220 mm. Symbols h and l indicate partial dimensions that depend on configuration; confirm them when selecting the workstation layout.

Side**Front**

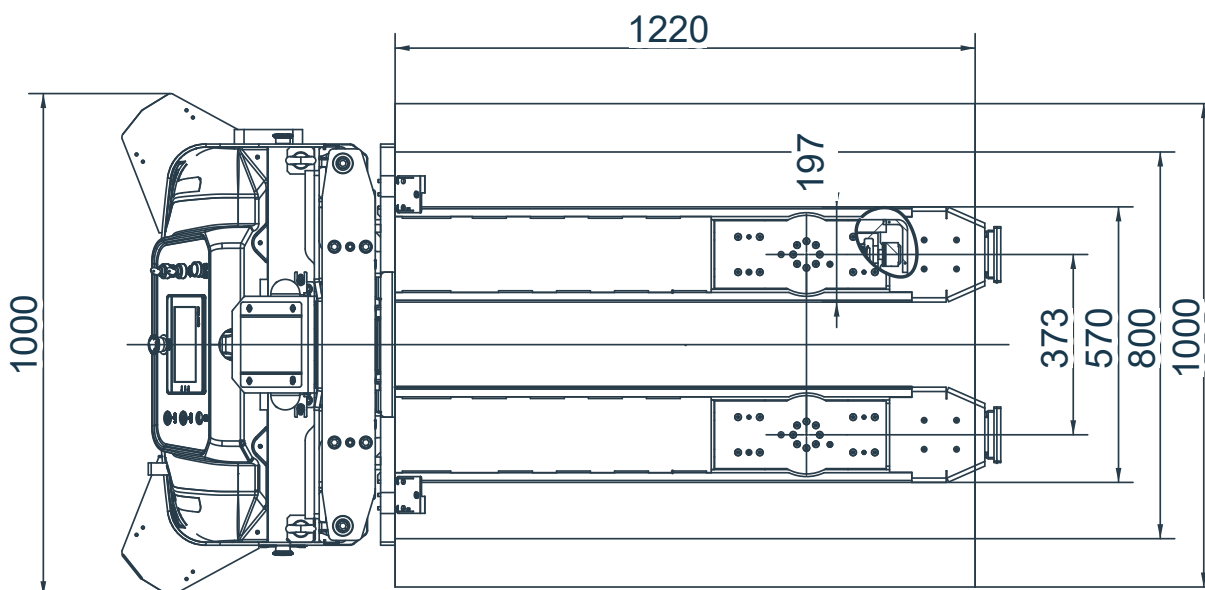


ST-1016-OMNI / PRODUCT DATASHEET

Robot dimensions

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

Top



Front



Side

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

ST-1016-OMNI | Product datasheet

5 / 5