



# AUTONOMOUS MOBILE INDUSTRIAL ROBOT



INFRASTRUCTURE  
FREE NATURAL NAVIGATION



MODULAR DESIGN FOR  
EXECUTING MULTIPLE APPLICATIONS



FLEXIBLE & SAFE FOR  
COLLABORATIVE OPERATION



MACHINE LEARNING ENABLED FOR  
TRULY AUTONOMOUS OPERATIONS



CLOUD BASED ANALYTICS FOR  
REAL-TIME INSIGHTS



QUICK RETURN ON  
INVESTMENT

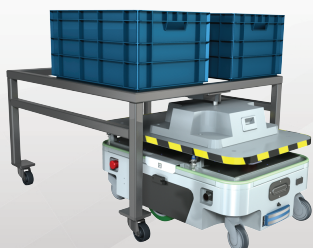


HANDLE LOADS IN ALL SHAPES & SIZES  
(PALLETS/RACKS/TOTES/TROLLEYS)



APPLICABLE FOR GREENFIELD SITE  
AND BROWNFIELD SITE

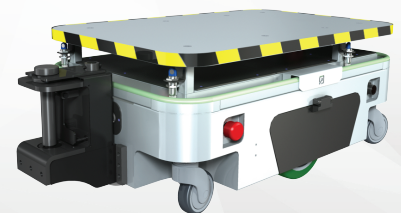
## OPTIMIZING YOUR INTRALOGISTICS OPERATIONS



TROLLEY TUNNELING



UNIT LOAD



TROLLEY TOWING



SCISSOR LIFT



CONVEYOR BED



# PRODUCT SPECIFICATIONS

DESCRIPTION	AMIR 100	AMIR 500	AMIR 1500
<b>Dimensions</b>			
<b>Length</b>	850 mm	1100 mm	1740 mm
<b>Width</b>	550 mm	750 mm	1140 mm
<b>Height</b>	368 mm	410 mm	380mm
<b>Height with Lifter</b>	500mm	610 mm	550 mm
<b>Ground clearance</b>	55 mm	35 mm	25 mm
<b>Weight (without load)</b>	100 kg	250 kg	410 kg
<b>Load surface</b>	600 x 800 mm	600 x 830 mm	1270 mm x 770 mm
<b>Wheel diameter</b>	Drive wheel: 200 mm Castor wheel: 100 mm	Drive wheel: 210 mm Castor wheel: 100 mm	Drive wheel: 200 mm. Castor wheel: 150 mm
<b>Payload</b>			
<b>Robot payload</b>	100 KG	500 KG	1500 KG
<b>Towing capacity</b>	300 kg	750 kg	2000 Kg
<b>Speed and Performance</b>			
<b>Battery Running time</b>		8 Hours	
<b>Maximum speed</b>	forwards: 1.1 m/s (4 km/h) backwards: 1.1 m/s (4 km/h)	forwards: 1.25 m/s (4.5 km/h) backwards: 1.25 m/s (4.5 km/h)	forwards: 1.5 m/s (5.4 km/h) backwards: 1.5 m/s (5.4 km/h)
<b>Acceleration</b>		0.2 m/s <sup>2</sup> (full payload, flat surface)	
<b>De-Acceleration</b>		0.2 m/s <sup>2</sup> (full payload, flat surface)	
<b>Maximum incline</b>		5% Incline (with payload)	
<b>Turning circle Dia ( On the spot Turn )</b>	1020 mm	1400 mm	2050 mm
<b>Minimum width, door</b>	1000 mm	1450 mm	1850 mm
<b>Minimum width, passage</b>	1000 mm	1450 mm	1850 mm
<b>Minimum width, two robots passing</b>	2200 mm	2500 mm	3500 mm
<b>Precision docking</b>	+/-20 mm	+/-30 mm	+/-30 mm
<b>Stopping accuracy</b>	+/-50 mm of position, +/-20 mm to docking marker	+/-50 mm of position, +/-30 mm to docking marker	+/-50 mm of position, +/-30 mm to docking marker
<b>Power</b>			
<b>Battery</b>	Li-ion 24 V , 54 Ah	LiFPo 24 V, 80 Ah	Li-ion, 48 V, 76.5 Ah
<b>Charging Time</b>	up to 3.5 hours (0-80%: 2.5 hours)	up to 4 hours (0-80%: 3 hours)	upto 5.5 hours, (0-80%: 4 hours)
<b>External charger</b>	Input: 200-240 V ac, 50-60 Hz / Output: 24 V, max 18 A	Input: 200-240 V ac, 50-60 Hz / Output: 24 V	Input: 100-230 V ac, 50-60 Hz / Output: 48 V
<b>Battery Charging Cycle</b>	Minimum 1200 cycles	Minimum 1500 cycles	Minimum 1200 cycles
<b>Environment</b>			
<b>Ambient temperature range</b>	+5°C to 50°C (humidity 10-95% non-condensing)		
<b>IP class</b>	IP 21		
<b>Communication</b>			
<b>WiFi</b>	Dual-band wireless AC/G/N/B		
<b>I/Os</b>	Ethernet and USB		
<b>Safety</b>			
<b>Safety System</b>	2D Laser Scanner, Ultrasonic Sensor, Optional Contact Type Safety sensor, 2 Emergency Stop Buttons	2D safety Laser Scanners, Contact Type Safety Bumper, Safety PLC, 2 Emergency Stop Buttons	2D Safety Laser Scanners, Contact Type Safety Bumper, Safety PLC ,4 Emergency Stop Buttons
<b>Navigation</b>			
<b>Navigation Sensor</b>	2D LiDAR (Natural Navigation)		

With Adaptable Design of Novus Carry any specific application requirement can be easily met by using different Auxiliary Attachments

