

NEURA

MAiRA[®]

Multi-Sensing Intelligent
Robotic Assistant

Enabling true human-machine
collaboration.



The first cognitive robot.

Smart

Integrated AI for multi-modal interaction.

Safe

Novel Touchless Safe Human Detection sensor technology.

Fast

High speed cycle rates combined with a 360° working range.

Accurate

Technology to enable the most advanced use cases.



MAiRA is the world's first commercially available cognitive robot. Integrated AI and novel Touchless Safe Human Detection sensor technology enable MAiRA to perceive its surroundings and easily adapt to all kinds of environments.

Strong and flexible.
Fast and accurate.

MAIRA® S/M/L



Payload

9 - 18 kg



Speed

Up to 360 °/s



Reach

1100 - 1600 mm



Weight

51 - 56 kg



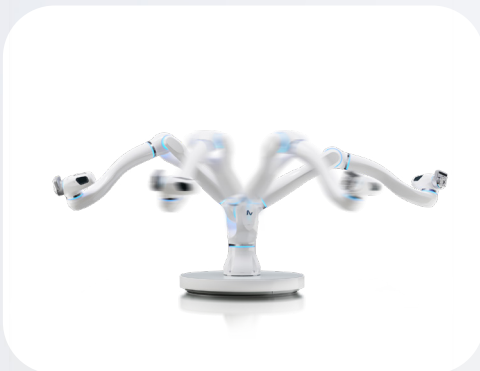
Safe human detection

MAiRA can perceive its environment, reliably detecting nearby humans through its unique Touchless Safe Human Detection Technology, enabling true human-robot collaboration.



Next-level interaction

Through its integrated AI, MAiRA understands and responds to voice commands, recognizes people, and can be guided by gesture control. This enables everyone to interact with the robot naturally and to program MAiRA with the teach pendant, no coding experience required.



Performance

With a speed of up to 4.5 m/s, a repeatability of 0.01 mm, and an absolute accuracy of less than 0.1 mm, MAiRA is suitable for a variety of tasks and industries while being the fastest and most accurate cognitive robot.



One device, built in-house

Achieving the highest level of precision and repeatability through in-house developed technologies and sensors is beneficial for all kinds of use cases.

Made for any industry.

Thanks to its cognitive skills, MAiRA can be used anywhere, from industrial settings to shared workspaces with humans.



Full cognition through artificial intelligence.

Multi-modal

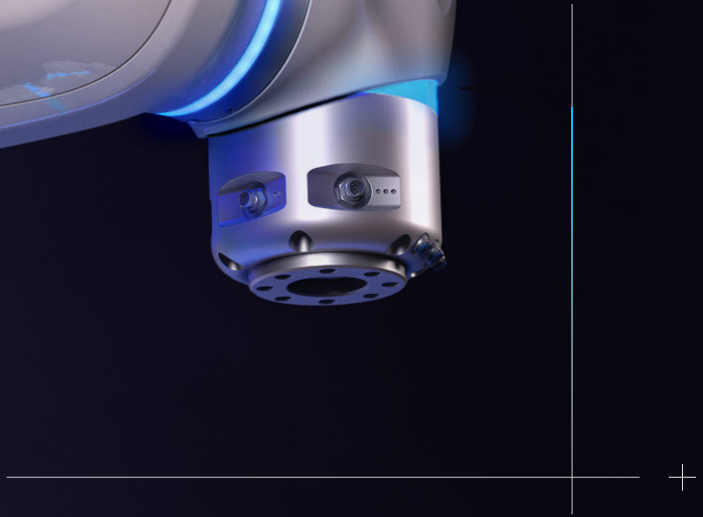
- Voice and gesture control
- Face detection
- Text commanding
- Remote operation

Integrated AI

- No internet connection required
- On-device training and deployment
- Generalized trained models

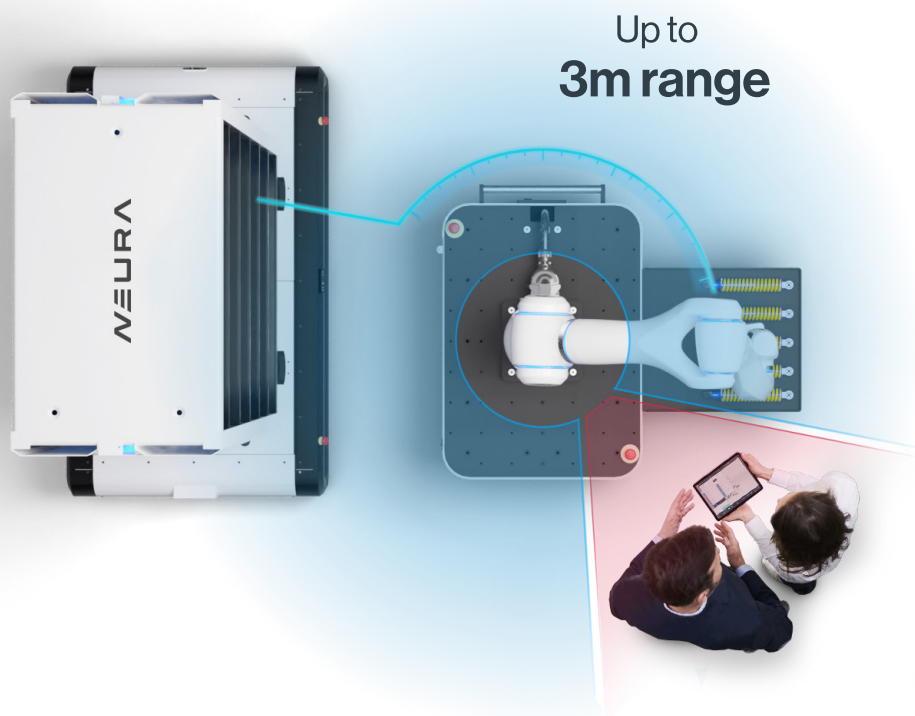
Fully cognitive

- Object detection
- Pose estimation
- Object tracking
- Environment mapping
- Simulated programming



A new way of safe human-machine collaboration.

Touchless Safe Human Detection Sensor

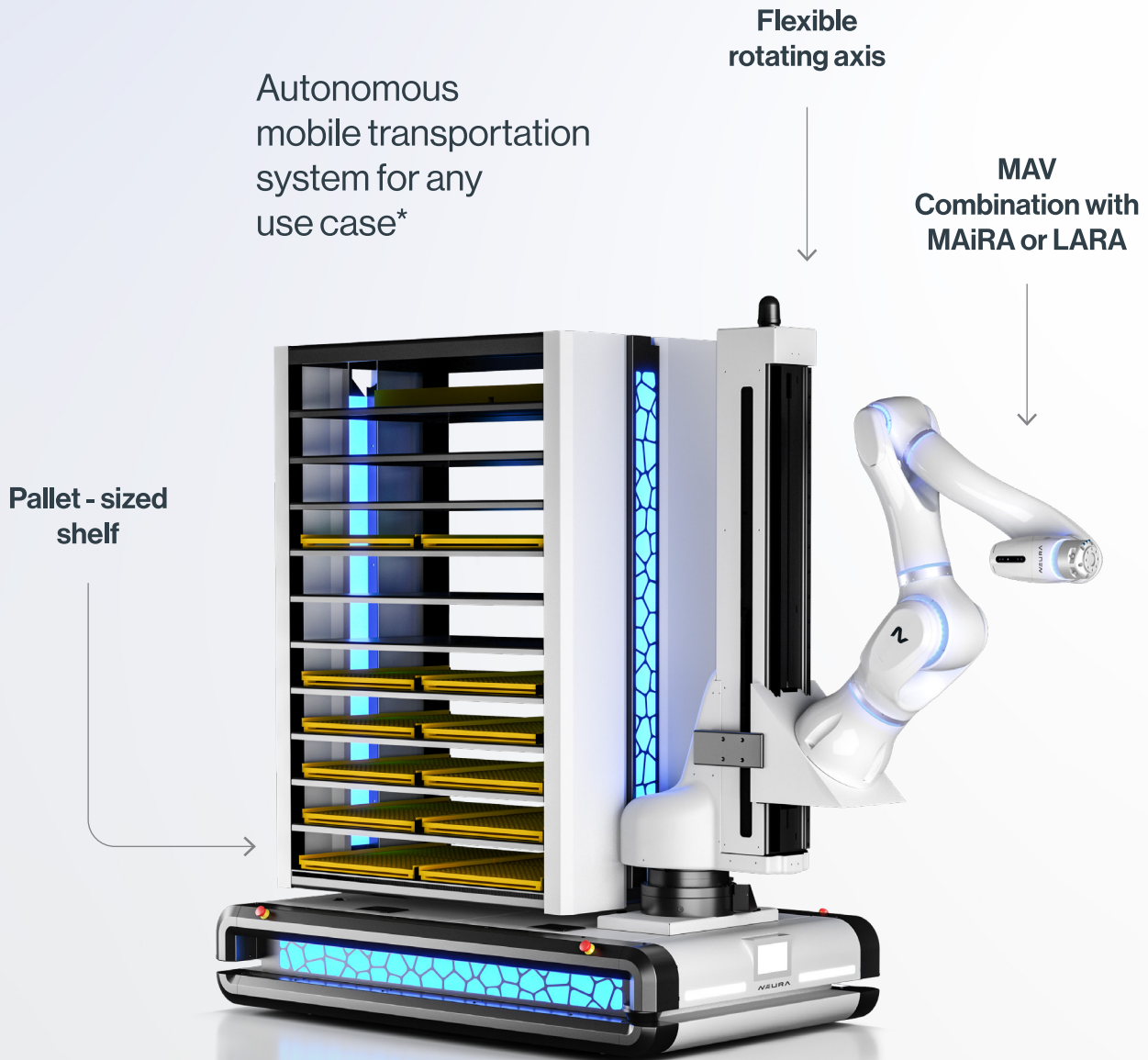


Safe recognition of humans and body parts, PLe Cat.3 / SIL3



Redundant and diverse technology

Mobile manipulator solutions for a maximum of flexibility



Combining MAV with a collaborative robot enables full process automation, which significantly reduces time for a single operation. Combining this system with a shelf allows handling of smaller production parts.

* One of many examples of MAV+ applications. Contact us to discuss your customized solution.

MAiRA[®] Jr.

For confined workplaces.

MAiRA Jr. is the compact version of MAiRA, designed to transfer cognitive functions to small and compact robots. This makes it flexible and suitable for all kinds of applications with smaller workspaces such as laboratories or machine tending systems.

Available for pre-order now



Payload

6-8 kg



DoF

6-7



Reach

900 mm

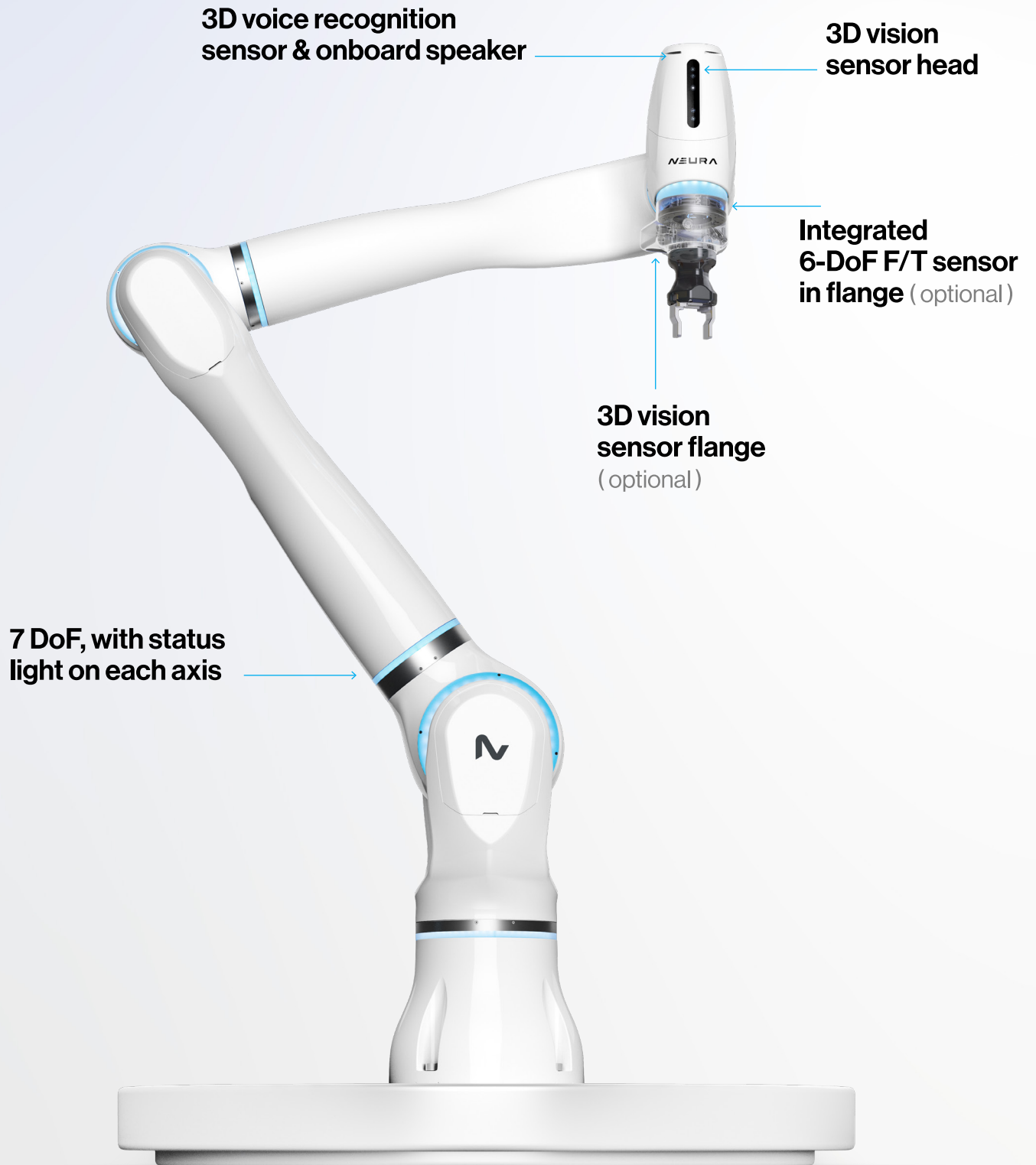


Weight

33 kg

MAiRA[®]

Pro feature sets



Full performance for any variant

MAiRA®		Basic S/M/L	Pro S/M/L	XL *	Jr. *
Artificial Intelligence		—	●	●	●
Connector flange	Compressed air	○	○	○	—
Feature options	6-DoF F/T-sensor in flange	○	○	○	○
	Touchless Safe Human Detection technology	○	○	○	○
	Custom color	○	○	○	○
Vision	3D vision sensor (head)	—	●	●	—
	3D vision sensor (flange)	—	○ Replaces serial 3D vision sensor (head)	●	●
	3D vision sensor gesture control	—	○	○	—
Interaction	3D voice recognition sensor & on-board speaker	—	●	●	●
	Visual feedback Laser RGB	—	—	●	—

● = Standard feature

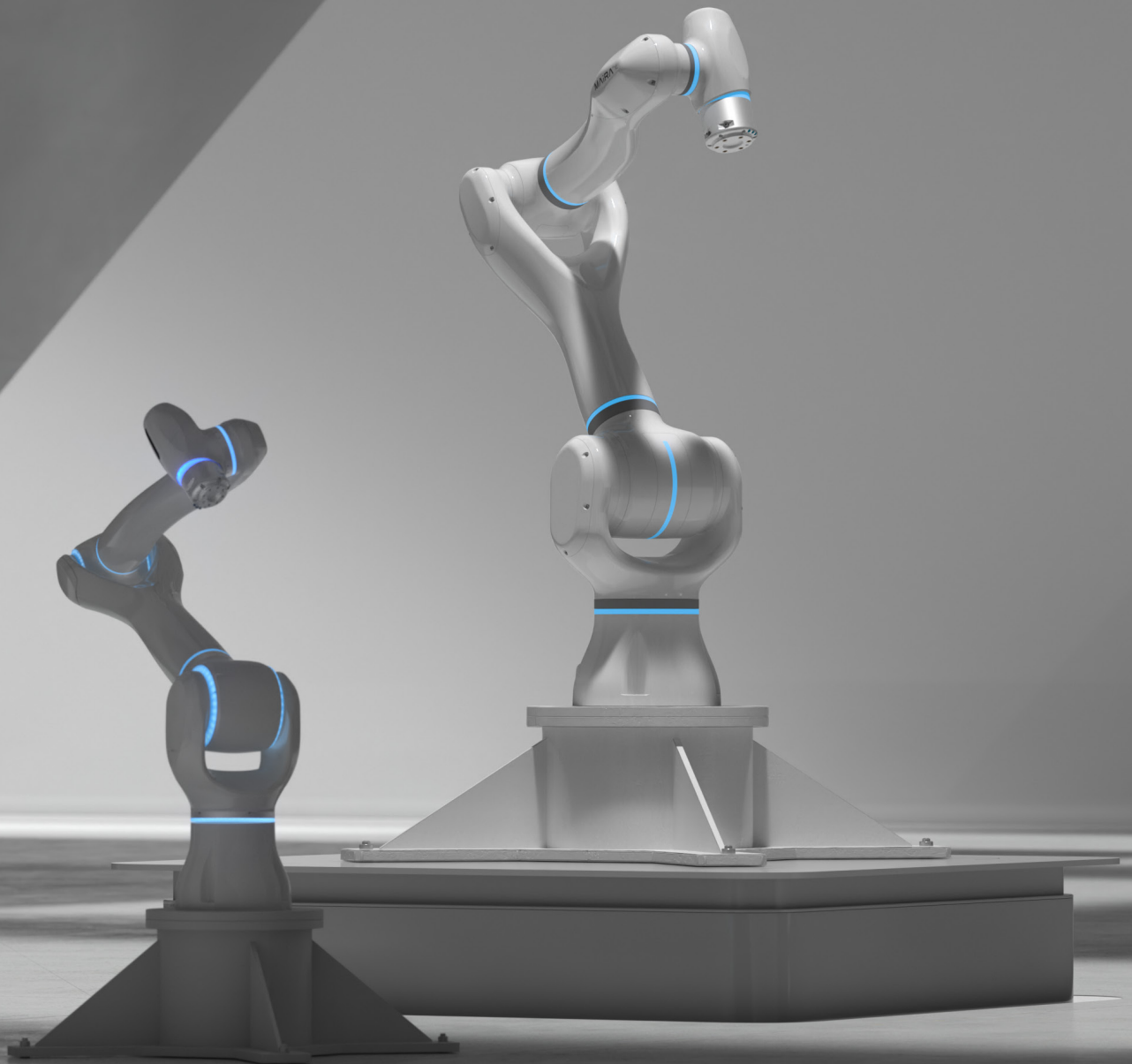
○ = Optional feature

— = Not available

* Available for pre-order.

NEURA

MAiRA[®] XL
Cognitive robot



Available for pre-order now

MAiRA[®] XL

For heavy payloads.

MAiRA XL is a significantly more powerful generation of MAiRA with 25 - 35 kg payload and 180 - 240 cm reach. MAiRA XL offers flexible automation possibilities for large, heavy loads with 7 degrees of freedom and can adapt to all environments thanks to integrated AI and sensor technology.



Payload

25-35 kg



DoF

7



Reach

1800-2400 mm



Weight

187 kg

MAiRA[®]

a new era
of robotics



MAiRA[®]

Multi-Sensing Intelligent
Robotic Assistant



UX
DESIGN
AWARDS
nominated
2021



NEURA Robotics GmbH
Gutenbergstraße 44
72555 Metzingen, Germany

+49 (0) 7123 87970 0
info@neura-robotics.com
neura-robotics.com