

Streamlined version

METALSELF.COM

YOUR TRUSTED SUPPLIER



Innovation tailored for your industry

YOUR INNOVATIVE LINE OF COLLABORATIVE ROBOTS FOR WELDING AND AUTOMATION

www.metalself.com

THE ADAPTABLE PARTNER FOR YOUR PRODUCTION

In the contemporary manufacturing landscape, sustaining elevated production rates necessitates prompt solutions. Metase's CI Series is engineered for adaptable manufacturing and intelligent industries, featuring models that encompass over 15 sectors, including automotive, 3C, metalworking, logistics, and packaging, along with more than 200 application scenarios.



THE METALSELF ADVANTAGE: SECURITY AND SWIFT INTEGRATION



Flexible and Swift Installation: Due to their compact design, our cobots can be integrated into diverse production lines and deployed in approximately one hour, all while maintaining the continuity of existing line operations.

Certification and Absolute Safety: The system operates in close proximity to operators without the necessity for perimeter fencing, featuring collision detection sensors and five safety configurations that adhere to the EN ISO 13849-1:2008 PLd standard, along with CE and CNAS certifications.

"Plug & Play" engineering: We ensure complete compliance with both European and American markets. The module is delivered to your workshop fully prepared for integration.

ADVANCED PROGRAMMING, IMMEDIATE CONFIGURATION

Complete Range (from 2 to 30 kg): A collection of 7 models designed to seamlessly adapt to any requirement, from micro-assemblies to the transportation of heavy loads.

Multiple Programming Languages: In addition to graphical programming through the Teaching Pendant and Handheld PAD, the system is accessible to developers by supporting LUA, C/C++, Python scripts, SDK libraries, and ROS systems.

Intuitive Learning: The Drag to Teach feature and automatic trajectory playback significantly reduce programming time, enabling even novice personnel to train the robot in a matter of minutes.

Total Industrial Connectivity:

Controller featuring 100Mbit TCP/IP interfaces, Modbus TCP, and RS-485 communication, along with an extensive integrated I/O panel comprising 16 digital inputs, 16 digital outputs, 4 analog inputs, 4 analog outputs to interface with any PLC or line sensor.



B2B INDUSTRIAL APPLICATIONS

Automated Laser Welding: Addresses the shortage of welders while guaranteeing uniform, consistent joints across various shifts.

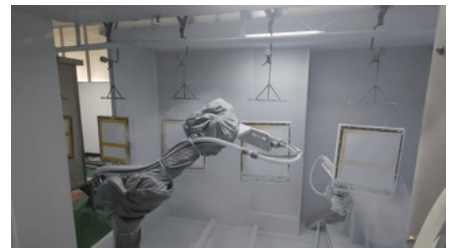
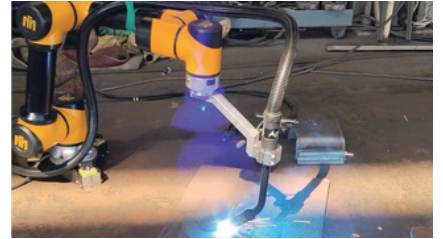
CNC Machine Tending: Automates the loading and unloading of metal or plastic components on numerically controlled machines, presses, and lathes.

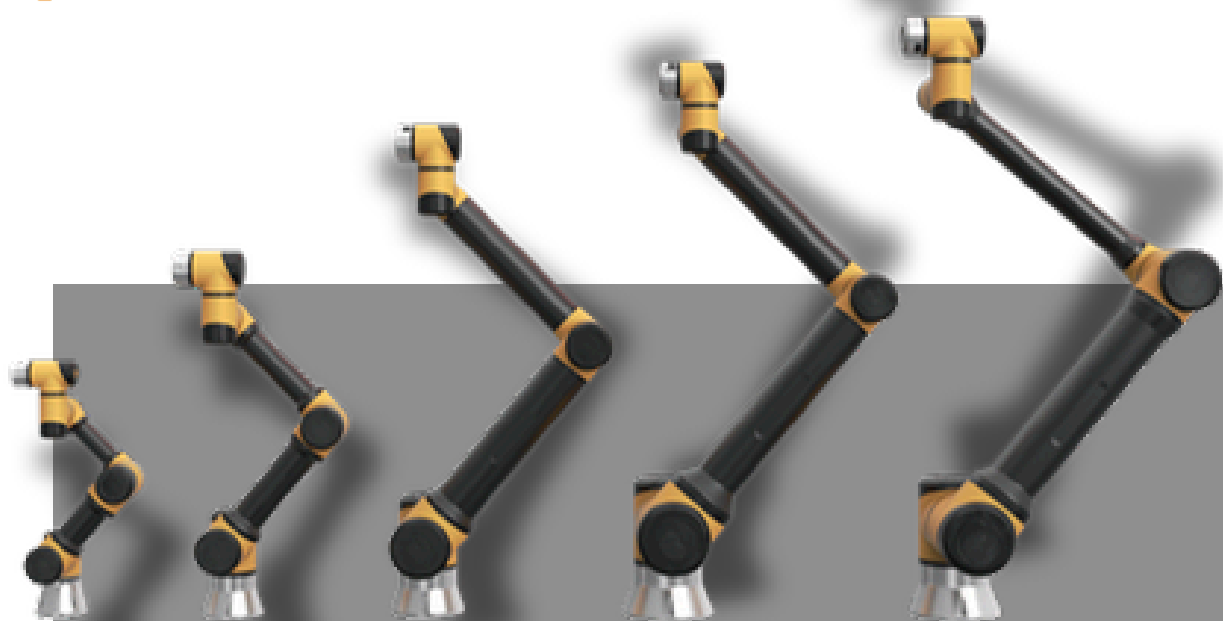
Screwdriving and Visual Assembly: Robotic systems designed for screw tightening and precision assembly in 3C (electronics) and automotive component production lines, enhanced by artificial vision technologies.

Painting and Material Spraying: Oversight of painting processes on workpieces, guaranteeing uniform coverage while minimizing operator exposure to hazardous fumes.

Inspection and Quality: Automated verification of electronic or mechanical products to ensure compliance at the end of the production line.

Palletizing and Packaging: The CI-20 and CI-30 models facilitate continuous 24/7 processes for packaging management, material transfer, and end-of-line box stacking.





	CI-03	CI-05	CI-10	CI-16	CI-20
--	-------	-------	-------	-------	-------

Raggio di lavoro	600 mm	900 mm	1300	1000	1650
Carico utile max	3 kg	5 kg	10 kg	16 k	20 kg
Precisione	+/- 0.02 mm	+/- 0.02 mm	+/- 0.05mm	+/- 0.05 mm	+/- 0.05 mm
Peso braccio	13 kg	21 kg	38 kg	37 kg	63 kg

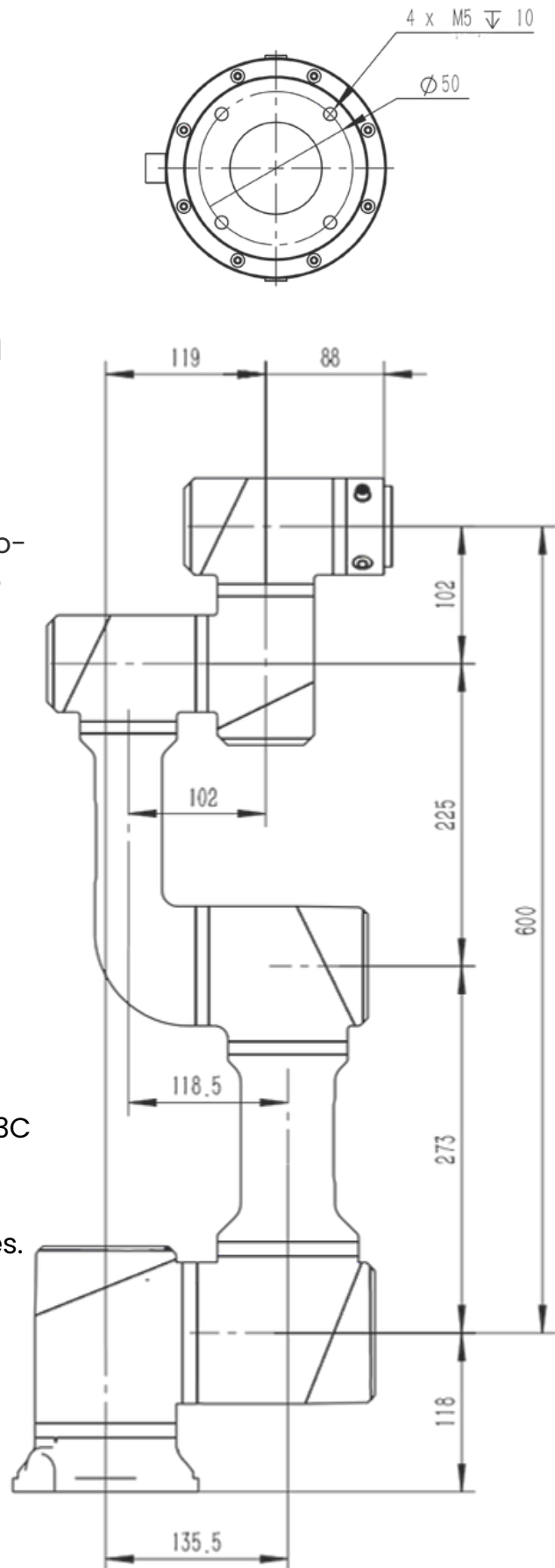
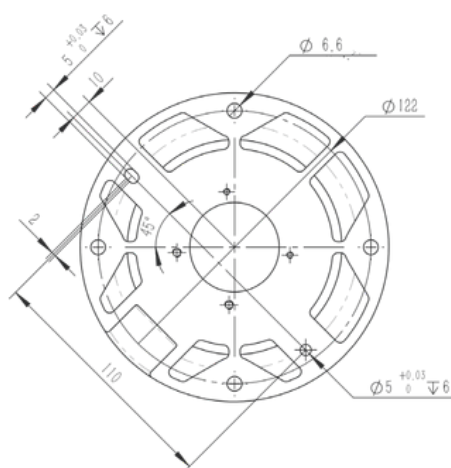
MetalSelf provides an extensive array of collaborative robots, meticulously engineered to seamlessly align with your unique requirements and diverse processes. With us, you will discover the perfect partner to facilitate optimal integration into your production.

CI-03

The Ultra-Compact for Micro-Precision Applications

The Metalself CI-03 module is meticulously engineered for industrial applications in confined spaces that demand precise accuracy. Merging a lightweight design with exceptional motion sensitivity, it serves as the optimal "Plug & Play" solution for micro-welding and the assembly of intricate components, functioning safely in close proximity to personnel.

- **Elective Industrial Applications:**
- Precision assembly and management
- Visual quality assessment of small components and 3C products.
- Welding of micro-components with precise tolerances.

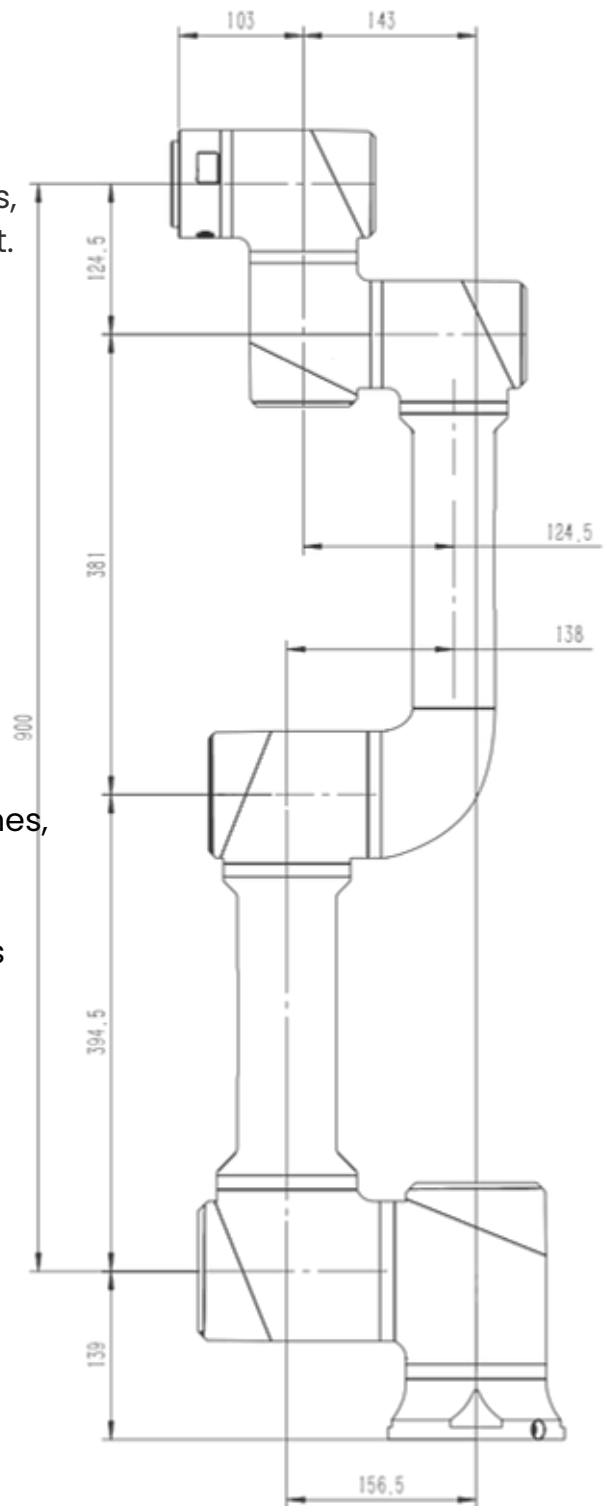
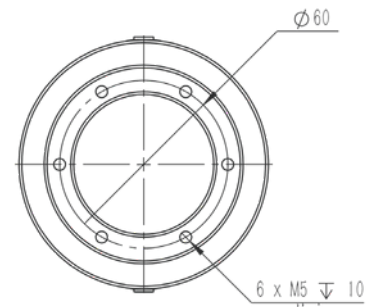
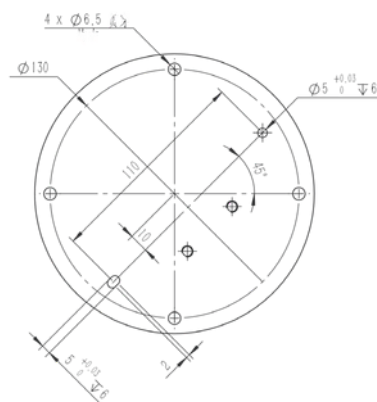


CI-05

Flexibility and Agility in Service Delivery

The Metasef CI-05 exemplifies the ideal equilibrium between compactness and dynamic functionality for contemporary workshops. Engineered to eliminate manual intervention in repetitive tasks, it ensures a swift return on investment. Its seamless integration with existing systems is facilitated by TCP/IP and Modbus communication.

- **Elective Industrial Applications:**
- Servo control of numerically controlled (CNC) machines, presses, and finishing equipment.
- Automated application of paint and spray on casings and metal components.
- Accelerated welding of lightweight carpentry.



Maximum Power, Minimal Size

CI-20

Extension and Exhaustive Search for Logistics

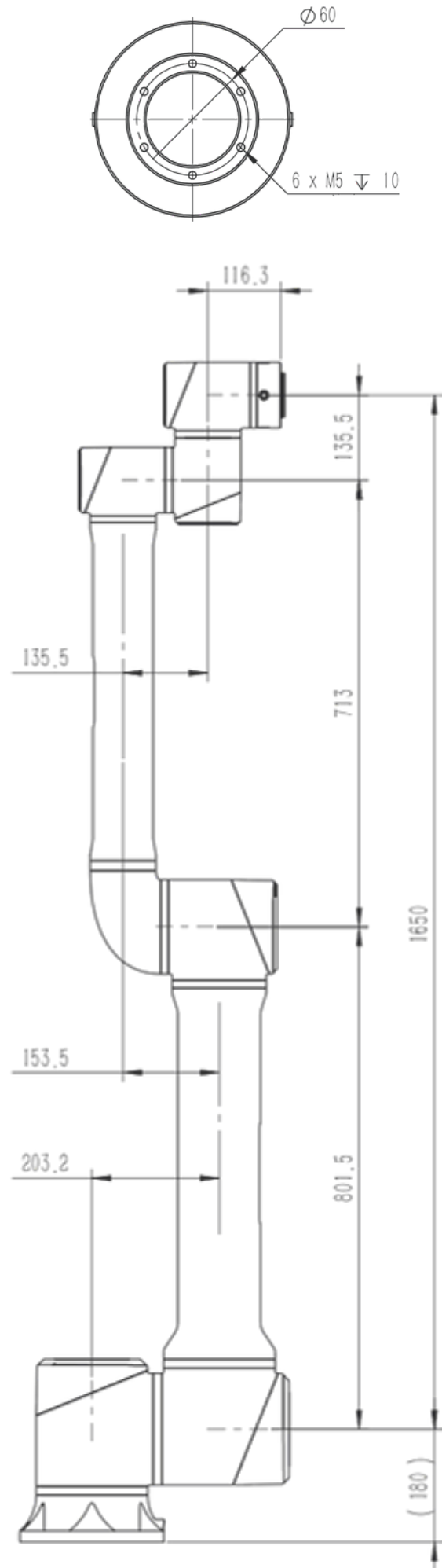
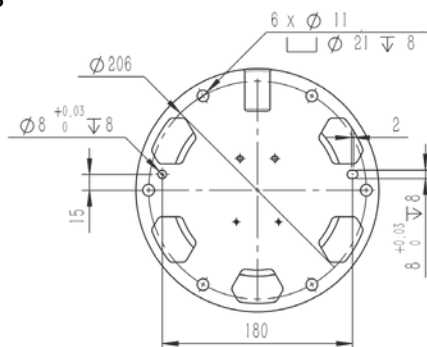
The Metasef CI-20 excels in the production environment, boasting the longest operating range in its category and a high-performance payload. It is specifically engineered to minimize costs and enhance efficiency in logistics and end-of-line operations, enabling operation across extensive work areas without compromising precision or collaborative safety.

- **Elective Industrial Applications:**

Continuous heavy palletizing and end-of-line packaging, available 24/7.

Logistical transfer of raw materials or finished products utilizing conveyor belts and pallets.

- Welding on substantial jigs necessitating extended operational ranges





Technical Parameter	CI-03	CI-05	CI-10	CI-16	CI-20
Payload	3 kg	5 kg	10 kg	16 kg	20 kg
Reach	600 mm	900 mm	1300 mm	1000 mm	1650 mm
Precision	± 0.02 mm	± 0.02 mm	± 0.05 mm	± 0.05 mm	± 0.05 mm
Max Speed	2 m/s	2.5 m/s	3 m/s	2.5 m/s	4 m/s
Weight	13 kg	21 kg	38 kg	37 kg	63 kg
Degrees of mobility	6 Assi (± 360°)	6 Assi (± 360°)	6 Assi (± 360°)	6 Assi (± 360°)	6 Assi (± 360°)
Protection	IP54	IP54	IP54	IP54	IP54
Power supply	100-240VAC 50/60Hz	100-240VAC 50/60Hz	100-240VAC 50/60Hz	100-240VAC 50/60Hz	100-240VAC 50/60Hz
Power	200W	300W	500W	500W	Med 1200W - Max 3000W
Controller Dimension (mm)	420x260x215. 7	420x260x215. 7	420x260x215. 7	440x290x282. 7	440x290x282. 7
I/O Controller Interface	16 DI/DO - 4 AI/AO	16 DI/DO - 4 AI/AO	16 DI/DO - 4 AI/AO	16 DI/DO - 4 AI/AO	16 DI/DO - 4 AI/AO
Safety and Certification	CE / EN ISO13849-1 PLd	CE / EN ISO13849-1 PLd	CE / EN ISO13849-1 PLd	CE / EN ISO13849-1 PLd	CE / EN ISO13849-1 PLd

MetalSelf S.r.l.

Info@metalself.com
info.metalself@gmail.com VAT
No.: 13261560018

www.metalself.com



Together, let us
cultivate innovation!