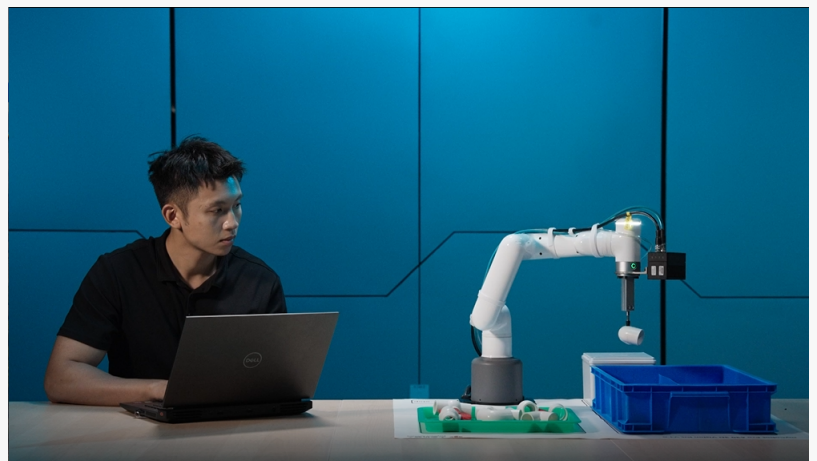
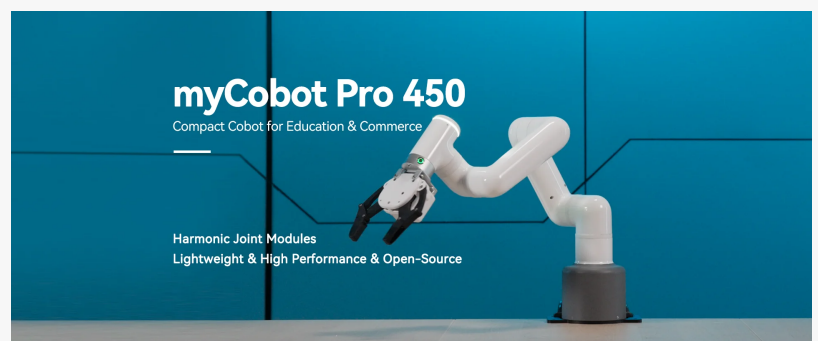


# Elephant Robotics Expands myCobot Series with the Launch of the Compact Robotic Arm myCobot Pro 450 with Harmonic Joints

*Elephant Robotics expands its myCobot series with the compact 6 DOF collaborative robot arm myCobot Pro 450, featuring harmonic joints for education & commerce.*

SHENZHEN, GUANGDONG, CHINA, August 5, 2025 /EINPresswire.com/ -- In response to the surging global demand for compact collaborative robots driven by advances in robotics and AI, [Elephant Robotics](#) is excited to introduce a new member to its best-selling myCobot series: the [myCobot Pro 450](#). With a 1 kg payload, a 450 mm working radius, and a repeated positioning accuracy of  $\pm 0.1$  mm, this compact 6 DOF collaborative robotic arm is designed to meet the increasingly industrial-level expectations of educational, scientific and academic research, and commercial users alike.

The myCobot Pro 450 is equipped with harmonic reducers, servo motors, joint brakes, and integrated controllers, all packed into a robot arm body weighing under 5 kg. Its compact and durable structure enables rapid deployment for applications ranging from data collection and fine object manipulation to intelligent human-robot interaction (HRI). Equipped with a range of end effectors—including



cameras, suction pumps, grippers, pen holders, and phone holders—the myCobot Pro 450 offers flexible configuration for various scenarios. This versatility enables reliable handling of different objects, significantly reduces adaptation costs when switching application environments, and provides strong support for educational, research, and lightweight automation application scenarios.

Built with an all-metal housing using thermoformed die-casting craftsmanship, the myCobot Pro 450 ensures consistent structural strength and long-term durability. Its integrated controller eliminates external electrical boxes and exposed wiring, improving operational safety and reducing cable entanglement. Additionally, the cobot is further enhanced by collision detection, power-off self-locking, and a hardware braking system that ensures emergency locking within 0.1 seconds for safe and stable collaboration. For connectivity and system integration, the myCobot Pro 450 offers 4 industrial-grade interfaces including WLAN, Ethernet, RS485, and CAN, and supports standard protocols like Modbus, Socket-TCP, and CANOpen. This enables seamless interaction with PLCs and other industrial systems, allowing educators and researchers to replicate real-world robotic logic and workflows in classroom and laboratory environments. Enterprises can also simulate the operation of industrial robot arms at a cost-effective price, reducing the time and expense of early-stage solution validation.

The myCobot Pro 450 is compatible with a wide range of Large Language Models (LLMs), including DeepSeek, ChatGPT, and embodied intelligence models like LeRobot. Users can control the robot through natural voice commands, enabling intuitive and seamless HRI. When paired with camera flanges and an AI image recognition system, the robot arm excels at precise object detection and grasping. Elephant Robotics also provides comprehensive secondary development resources and tutorials are available, simplifying the process from LLM integration to visual recognition setup—dramatically lowering the technical barrier and empowering users to accelerate the journey from concept to execution. By integrating embodied intelligence capabilities, the myCobot Pro 450 gains the ability to autonomously learn and execute motion strategies. Whether used in educational demonstrations or scientific and academic research, users can leverage ready-to-use examples to accelerate deployment—transforming innovative ideas into real-world applications with greater speed and efficiency.

The robotic arm comes with the all-in-one control software system myStudio Pro, featuring an intuitive graphical programming tool, myBlockly. Users can operate the cobot instantly by simply entering an IP address—no software installation required. Even beginners can quickly progress from basic operation to mastering complex programming and control logic. This integrated software streamlines maintenance and simplifies development, enabling users to effortlessly operate the collaborative robotic arm and explore robotics with ease. In educational settings, instructors can design courses aligned with learning objectives, helping students enhance their creativity and develop practical skills by applying theoretical knowledge to real-world challenges.

The myCobot Pro 450 fully supports open-source development from both hardware and

software perspectives, empowering advanced customization and secondary development. It provides low-level access to joint motor interfaces, enabling real-time acquisition of key operational parameters such as position and velocity—offering a solid data foundation for precise control strategy design and algorithm optimization. Additionally, it comes with a complete URDF model and is compatible with mainstream simulation platforms like ROS2, Isaac Sim, and MuJoCo, allowing developers to easily create virtual testing environments. With support for both Python and C++, and over 90 built-in standard control interface libraries covering status queries, joint space motion control and Cartesian space motion control, it significantly boosts development efficiency.

Whether in classrooms demanding ease of use and reliable performance, research labs requiring high repeatability and open extensibility, or commercial showcases focused on smooth motion, rapid response, and safe HRI, the myCobot Pro 450 meets near-industrial-grade standards of performance, durability, and adaptability. It supports three key personalized application scenarios: 3D visual random sorting, robotic writing and painting, and compound mobile inspections. With integration support for a wide range of peripherals—including 3D cameras, recognition software and algorithms, actuators, industrial PCs, and mobile platforms like [myAGV Pro](#)—it offers scalable solutions tailored to diverse user needs.

As the global robotics landscape rapidly evolves, Elephant Robotics' launch of myCobot Pro 450 underscores the company's commitment to bringing robots into everyone's life and delivering innovative robotics solutions that empower educators, developers, and enterprises alike. With its modular design, intelligent features, and robust capabilities, the myCobot Pro 450 stands out as the ideal compact collaborative robot for education and commerce. Whether you're building cutting-edge applications, training the next generation of engineers, or prototyping real-world automation solutions, it enables you to seamlessly turn innovative ideas into practical, deployable results. The myCobot Pro 450 is now available in limited quantities at an exclusive early-bird price. If you're interested, please contact at [sales@elephantrobotics.com](mailto:sales@elephantrobotics.com).

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