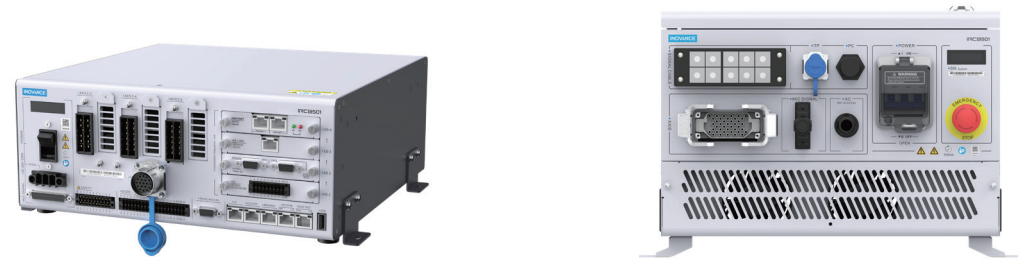


# Robot Controller



Controller Series	IRCB501 Series	IRCB501 High-protection Series	
Mounting mode	Vertical mounting, horizontal mounting, 19" rack mounting	Vertical mounting, horizontal mounting, rack mounting	
Standard I/Os	16 inputs and 16 NPN outputs (extendable)		
Communication interfaces	Ethernet interface: Used for TCP/IP, Modbus TCP, Ethernet/IP, MC communication		
	EtherCAT-IN interface: EtherCAT slave -IN interface		
	EtherCAT-OUT interface: EtherCAT master -OUT interface		
	EtherCAT interface: Used for extension of external axes		
	RS232/RS485 interface: Used for serial and Modbus RTU communication (RS485 only)		
	USB2.0 interface: Used for backup/upload programs and export robot status information		
	Optional interface: Profinet slave, CC-LINK slave		
Control mode	PC programming platform control, teach pendant control, remote I/O control, remote Modbus control, and API control		
Power supply	Input voltage: Single-phase 200 VAC to 240 VAC, 10A/20A, 50 Hz to 60 Hz Max. power consumption: 3.1 kW (depending on the robot model)	Input voltage: Single-phase 200 VAC to 250 VAC, 23A, 50 Hz to 60 Hz Max. power consumption: 4.5 kW (depending on the robot model)	
	IP rating	IP20	IP54 + anti metal dust
Operating conditions	Temperature: 5° C to 40° C ; Relative humidity: 20% to 95% RH@30° C (non-condensing)	Temperature: 0° C to 45° C ; Relative humidity: 20% to 95% RH@30° C (non-condensing)	
Dimensions	Standard 330mm×338.5mm×130mm	High- Power 330mm×400mm×130mm	445mm×575mm×276mm
	Weight	8kg / 10kg	30kg
Applicable Robots	SCARA: IR-S4/7/10 Series IR-TS4/5 Series 6-Axis: IR-R7H Series IR-R4/R4H Series	SCARA: IR-S25 Series IR-S35 Series IR-S60 Series 6-Axis: IR-R11 Series IR-R15H Series	6-Axis: IR-R10 Series, IR-R25 Series

# Teach Pendant



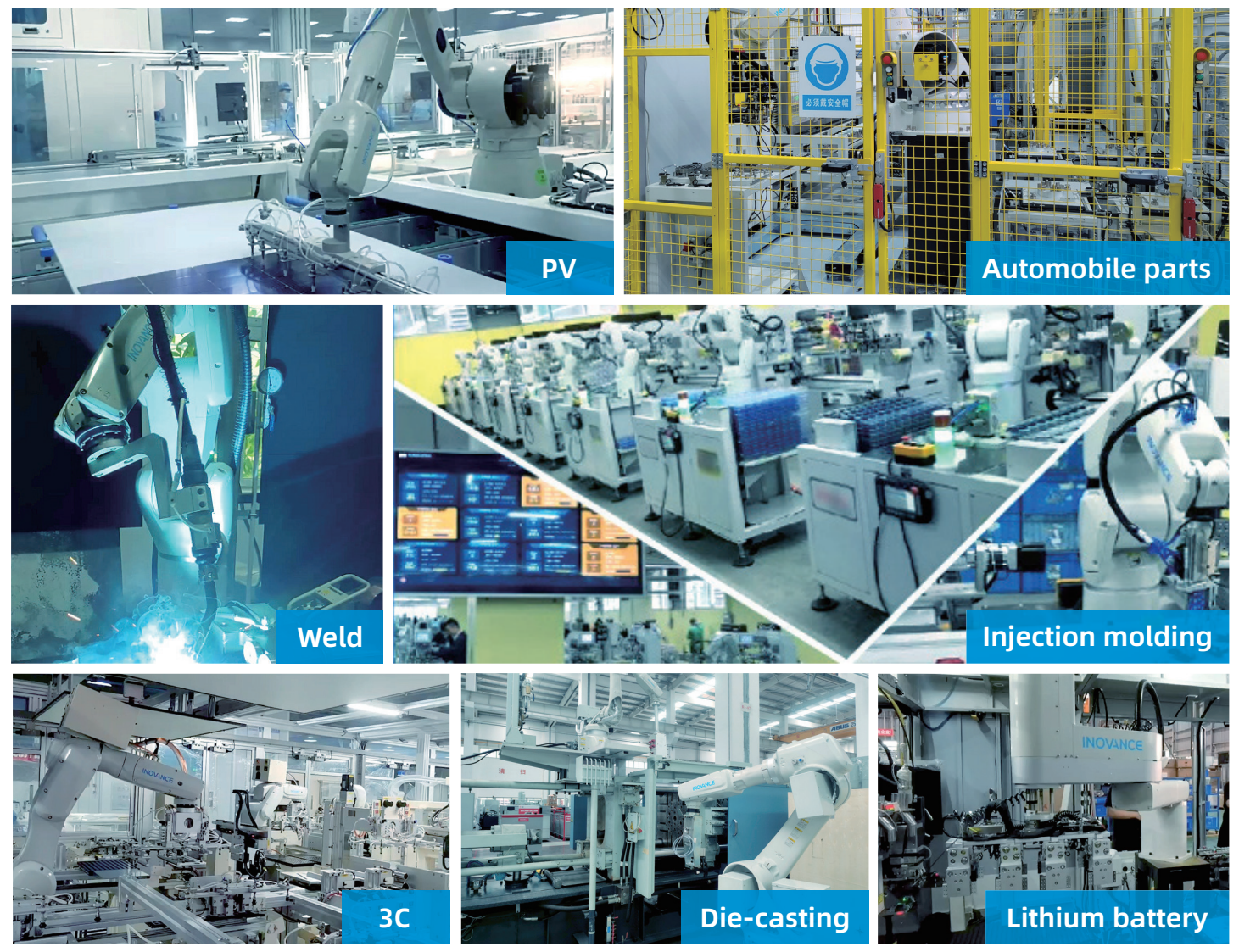
Teach Pendant Model	IR-TP200-L5-INT
cable length	5m
screen	Touch screen operation, function keys
IP rating	IP54

# Expansion Card



Expansion Card Model	IRCB501-0016END-BD	IRCB501-1600END-BD	IRCB501-2ENID-BD	IRCB501-2PN-BD	IRCB501-FS-01-BD	IR-EC-CCLINK
Description	General I/O expansion card with 16 NPN outputs	General I/O expansion card with 16 inputs	2-channel differential input incremental encoder expansion card	PROFINET expansion card	Safety function expansion card	CC-LINK expansion card
Matching controller	IRCB501 Series, IRCB501 High-protection Series					

# Robot application scenarios



# Advancing industrial technology, for a better world

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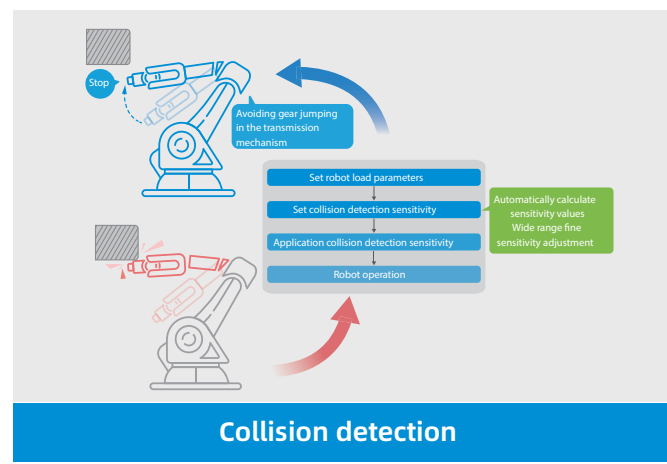
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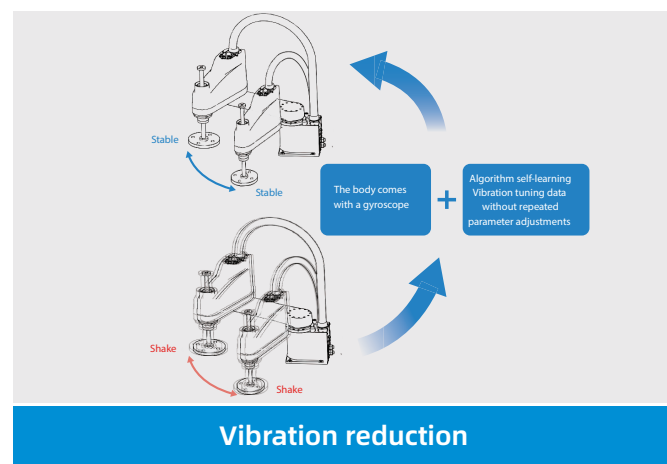
# INOVANCE ROBOT



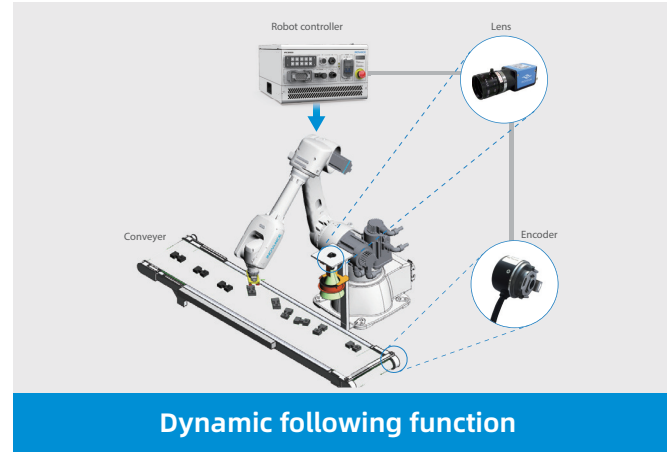
# Robot controller functions



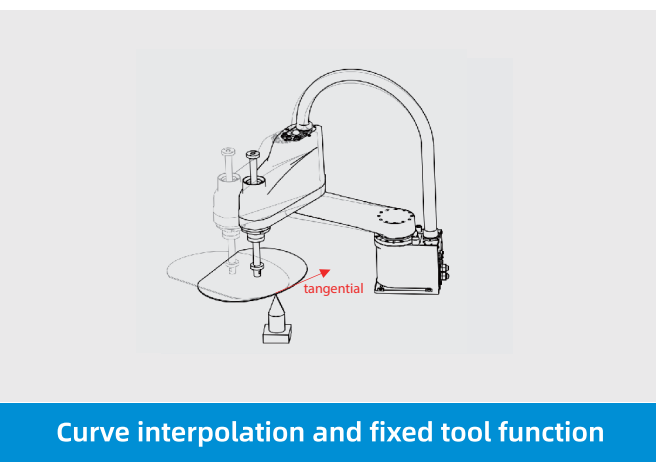
Real time detection of the robot's operating status can effectively avoid gear jumping caused by robot collisions at low speeds, and achieve rapid stopping at high speeds, reducing damage to the robot and equipment caused by collisions.



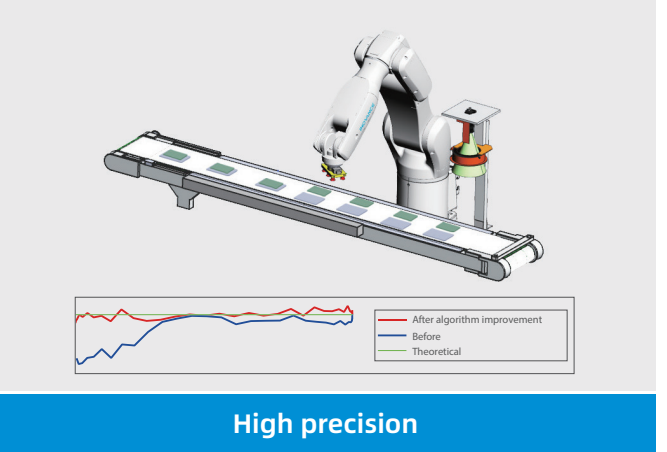
It can effectively reduce the shaking caused by resonance, eccentric load, and large load during the robot's movement process, making the robot's movement more stable and still ensuring excellent production performance during high-speed and high-precision operations.



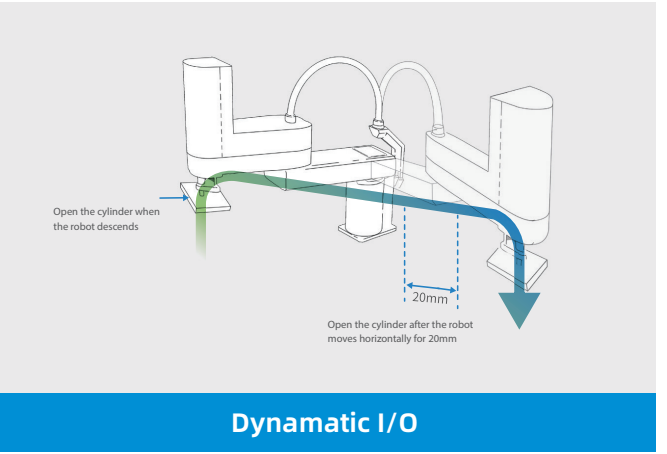
Whether it's a single product or multiple products of different types, colors, and sizes, it's easy to handle, switching between assembly line products with just one click. In situations where multiple machines are sorting at the same time, a set of vision can drive multiple robots, reducing the overall cost of the line.



Even in situations where tools are fixed and robots hold workpieces for work, they can perform arbitrary curve interpolation according to requirements, and are widely used in processes such as gluing, polishing, and sewing. On the assembly line, interpolation of the trajectory in the following state can also be completed.



Fully considering the influence of the robot's body structure, external factors, and visual system on the robot's motion accuracy, high-precision control algorithms are adopted to meet the high-precision applications of loading, unloading, and fitting. This algorithm is also applicable to continuous motion trajectories.



In the robot motion path, precise control of IO opening and closing actions can be carried out based on actual conditions, which is widely used in detection, high-speed transportation, dispensing, laser and other occasions. IO control can be specified based on the position, time, and distance of the movement.