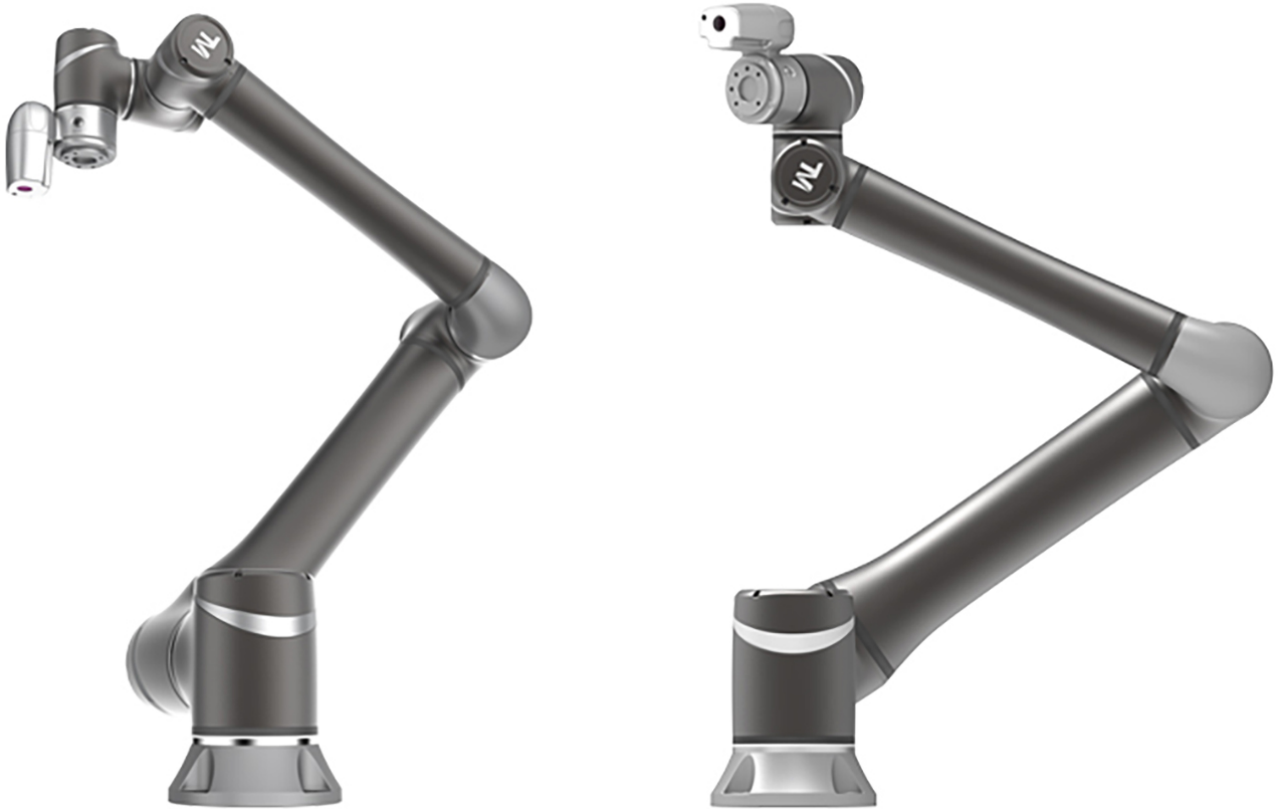# TM12-1300 AI, TM-6-axis robot incl. controller, 1300 mm, payload 12kg

A high loading capacity and an extensive working area are the features that distinguish the TM12-1300 AI. Compared to the TM5 AI series, the TM12 AI benefits from a longer reach with a higher payload. The ease of operation of the functions coupled with high efficiency and flexibility in quick change of production lines not only reduce the cost of automated construction and maintenance, but also significantly improve the precision and quality of production. Not only due to its flexibility but also due to the variable application possibilities, the TM12-1300 AI can be used in a wide range of industries.

All collaborative robots are equipped with an integrated vision system that provides the cobots with the ability to perceive their environment, greatly enhancing the cobots' capabilities. The robot's ability to "see" and interpret visual data into command instructions is one of the cobot's distinguishing features. It is a crucial factor for the precise execution of tasks in dynamically changing work environments, for smoother operations and more efficient automation processes.

Products for the electronic industry

Future-proof! Your Cobot with AI.
The main benefits of AI Vision are an automated optical inspection (AOI), Quality assurance & consistency, an increase in production efficiency and a reduction in operating costs. AI-powered cobots recognize the presence and orientation of their environment and parts to perform visual inspections and dynamic pick-and-place tasks. Effortlessly apply AI to the production line and increase productivity, decrease costs, and shorten cycle times. AI vision can also read results from machines or test equipment and make appropriate decisions accordingly. Besides improving automation processes, an AI-driven cobot can track, analyze, and integrate data during production to prevent defects and improve product quality. Easily enhance your factory automation with a complete set of AI technology.

• Max. Speed: 1.3 m/s (4m/s)

• Joint rotation: +/- 270° | +/- 180° | +/- 166°

• Speed: 120°/s | 180°/s | 150°/s | 180°/s

• Repeatability: +/- 0.1mm

• Degrees of freedom: 6 rotation axes

• Communication: 3x COM, 1x HDMI, 1x EtherCAT, 2x GigE, 3x LAN, 4x USB 2.0, 2x USB 3.0

• Camera: 1.2 M / 5 M pixel color | fully integrated vision system with illumination

• I/O power supply: 24 V, 1.5 A

• IP class: IP54 (robot arm), IP32 control unit)

• Clean room class: ISO Class 3

• Temperature range: 0 - 50° C

• Software: FMflow, TMFlow Editor and AOI

• TMFlow AI functions (identify, measure and OCR)

[https://www.youtube.com/watch?v=IkA2WSzAQI8&t=12s|You can find out more information here]

[https://www.youtube.com/watch?v=eEmN3xaBcm8|Information on screw application]

Robot series	AI series
item number	**WL50782**
model	TM12-1300
manufacturer	TECHMAN
scope of supply	• 6-axis robot • Control unit • Connection cable • Control unit • IO cable (HW3.2)
order unit	1 piece
content unit	1 piece
self-weight	33.3 kg

power	300 W
output (to)	300 W
range	1300 mm
camera resolution	1.2M/5M pixel, colour camera
load capacity	12 kg
interfaces	I/O interface: Digital in / Digital out / Analog in / Analog out Communication & Connections: RS232, Ethernet, Modbus TCP/RTU, PROFINET (optional), EtherNet/IP (optional)

Products for the electronic industry

www.weidinger.eu

25.04.2024