





AN UPPER BODY ROBOT
INTENDED FOR RESEARCH
IN MANUFACTURING
ENVIRONMENTS

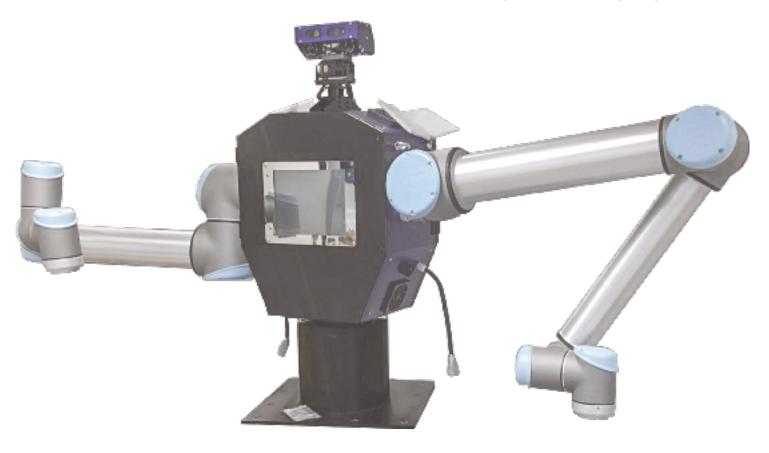
IT REQUIRES NO SAFETY
CAGES & IS SAFE TO **OPERATE DIRECTLY NEXT TO PEOPLE**

RESEARCH & DEVELOPMENT
OF HUMAN ROBOT INTERACTION
IN MANUFACTURING ENVIRONMENTS

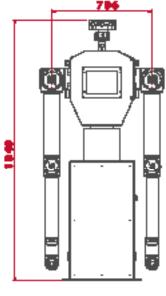
ADVANCED PERCEPTION & MANIPULATION TASKS

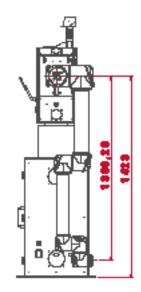
INDUSTRIAL HUMANOIDS

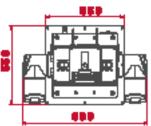
ARTIFICIAL INTELLIGENCE











TECHNICAL SPECIFICATIONS

MECHANICAL

Dimensions 1.840 x 880 x 550 mm

Total mass Approx 105 Kg

Exterior structure Frame structure: aluminium

alloy cast metal

Degrees of freedom (axes) 15 axes

Joints Head: 2 axes (pitch and yaw)

Arm: 6 axes Waist: 1 axis (yaw)

Additional devices Hand (8 axes)

Gripper (1 axis) Frontal screen

Perception devices (head camera x 2, hand camera x

2, 3D sensor x 1)

Power supply 220VAC, 10A

CONTROL

Operating System Ubuntu 12.04, 14.04

Interface LAN port (100 base-T) x 1, Axis

control via CAN bus

ROBOT SOFTWARE

Control ROS (Robot Operating System)

Movelt

Operation mode **Point-to-point motion control**

of all axes, (linear) cartesian trajectories of each arm, being possible to define different TCPs (Tool Center Points), Euler angles

trajectories of both arms.