

# A465 Articulated Robot

## A465 Robot



- 2 kg Payload
- $\pm 0.05$  mm Repeatability
- 711/864 mm Reach

### ***Reliability at an Affordable Price***

At CRS, we make "Human Scale Robots". Our robots are designed with the same range of motion and payloads as the human arm, making them ideally suited for light payload applications that require articulated motion in both the horizontal and vertical planes. With several years of experience in the field, our robots offer low capital costs, short set-up times, and fast return on investment.

The A465 robot provides a powerful combination of high speed flexible automation, high reliability, and ease-of-use. Durable servo motors and high-stiffness harmonic drives make it both fast and robust. Users will see increased production rates, reduced costs, and improved quality for laboratory automation, education, and industrial applications.

Typical uses for the A465 robot include a wide range of laboratory automation and

industrial processes such as machine loading, dispensing, polishing, deburring, cutting, drilling, trimming, and parts transfer.

The A465 robot uses the CRS C500C multitasking robot/workcell controller. The C500C is capable of running over 30 processes simultaneously for complete workcell control, and fully supports the RAPL-3 programming language and ActiveRobot™ software as well as our POLARA™ open architecture laboratory automation software. These powerful, easy-to-learn, and easy-to-use programming tools make the C500C one of the best robot control platforms available. The open architecture software design facilitates integration with third party options, making it easy to take advantage of the latest automation trends.

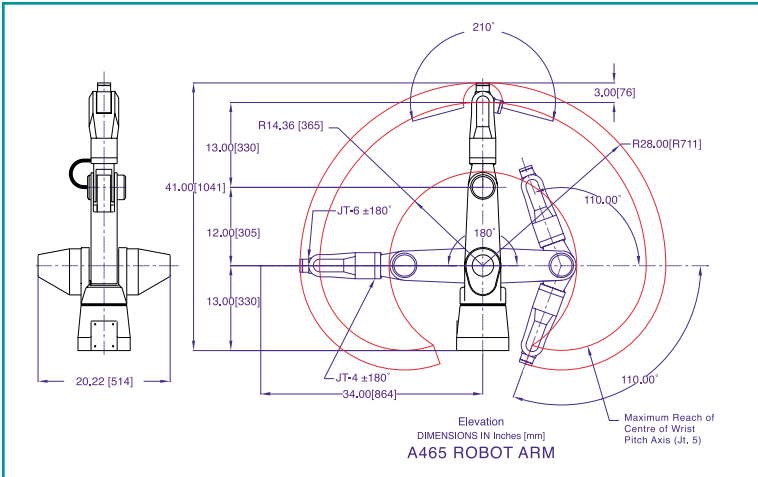


- Lab Automation • Education • Material Application
- Material Handling • Assembly • Product Testing

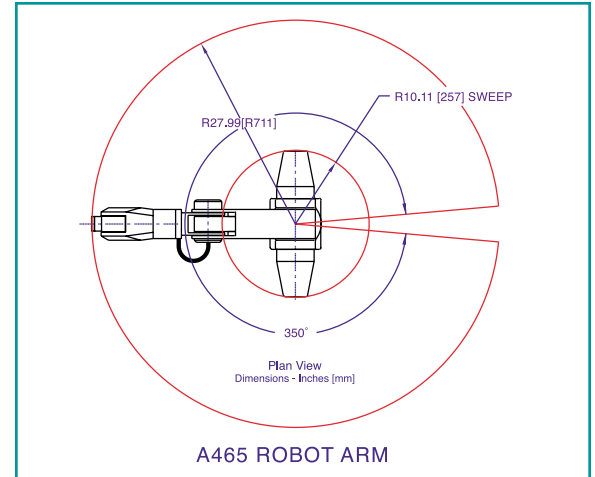


# A465 Six Axis Robot

## Dimensions



Elevation View (w/o gripper)



Plan View (w/o gripper)

## Features

### Robot Arm Configuration

- Articulated
- Six degrees of freedom
- Upright, inverted, or track mounting

### Drive

- Servo motors
- Encoders with proximity sensors at each joint

### Transmission

- Harmonic drives and timing belts

### End-of-arm

- Pneumatic connector
- Servo gripper connector

### C500C Controller Safety

- Integrated E-Stop circuit
- Continuous fault detection

Safety Compliance Standards	
CE (European)	EN55011:1991
EM Emissions:	EN50082-1:1992
EM Immunity:	EN775:1992
Machine Safety:	ISO 10218:1992 (E)
	EN60204-1:1992
	EN292:191
ANSI/RIA	15.06-1992
CSA (Canadian) Process Control Equipment	C22.2 No. Z434-94
CSA Std:	C22.2 No. Z434-94
Motor Operated :	CAN/CSA-C22.s No 68-92
Appliances	

## Performance Specifications

Nominal payload	2 kg (nominal)	4.4 lb
Reach (no gripper)	711 mm	28.0 in.
Reach (std. gripper)	864 mm	34.0 in.
Repeatability	± 0.05 mm	± 0.002 in.
Weight	31 kg	68.2 lb

Axis	Work Range	Maximum Speed
J1 (waist)	± 175°	180°/second
J2 (shoulder)	± 90°	180°/second
J3 (elbow)	± 110°	180°/second
J4 (wrist rotate)	± 180°	171°/second
J5 (wrist pitch)	± 105°	173°/second
J6 (wrist roll)	± 180°	171°/second

## Contact

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## Options

- Servo gripper
- ActiveRobot™ programming software
- Robcomm3 PC based development software
- Teach Pendant
- Linear Track
- Fully integrated ATI force sensor

