At CRS, we make “Human Scale Robots”. Our robots are designed with the same range of motion and payloads as the average human arm. They are designed for light payload applications that require articulated motion in the horizontal and vertical planes. With over 17 years of experience, our robots offer high performance with low initial costs, short start-up times, and fast return on investment.

If you are a systems integrator or dedicated machine builder, our robots help your company make flexible automation solutions that are faster, more reliable and more cost effective.

The A255 five axis articulated robot is ideally suited for laboratory automation, educational and industrial users. Typical industrial applications include machine tending, adhesive dispensing and light material handling as well as general pick and place operations.

The A255 robot is available in two configurations. For basic applications, we offer ASH-PRO, a concise software command set for rapid setup and deployment. More complex operations use ASH-PRO S.I., with over 300 commands that allow system integrators and custom machine builders to solve even the most demanding workcell or automation tasks.

The A255 robot uses the CRS C500C multitasking robot/workcell controller and the RAPL-3 programming language. This powerful easy-to-learn and easy-to-use language makes the C500C controller one of the best robot control platforms available. The C500C is also capable of running over 30 processes simultaneously for complete workcell control. Based on the industry accepted PC-104 hardware standard, a variety of third party options are available to take advantage of the latest automation trends.

The Best Light-Payload Robot Available

- 1 Kg Payload
- ±0.05 mm Repeatability
- 560/660 mm Reach
- Fast J4 & J5
Robot Arm Configuration:
- Articulated
- Five degrees of freedom
- Upright or inverted mounting
- Integrated linear track in standard lengths (invertible)

Drive:
- DC servo motors
- Optical encoders

Transmission:
- Harmonic drives and spur/bevel gears with pre-loaded drive chains

End-of-arm:
- 4-way pneumatic solenoid
- Servo gripper connector

Performance Specifications

<table>
<thead>
<tr>
<th>Payload</th>
<th>1kg/2.2lbs nominal</th>
<th>2kg/4.4lbs maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reach</td>
<td>560mm w/o gripper</td>
<td>660mm w/ gripper</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Repeatability</th>
<th>+/- 0.05mm</th>
<th>+/- 0.002&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>17kg</td>
<td>37.4lb</td>
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</table>

Work Range and Speed

<table>
<thead>
<tr>
<th>Axis</th>
<th>Range</th>
<th>Max Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1 (waist)</td>
<td>+/- 350 deg</td>
<td>210 deg/sec</td>
</tr>
<tr>
<td>J2 (shoulder)</td>
<td>+/- 110 deg</td>
<td>210 deg/sec</td>
</tr>
<tr>
<td>J3 (elbow)</td>
<td>+/- 125 deg</td>
<td>210 deg/sec</td>
</tr>
<tr>
<td>J4 (wrist pitch)</td>
<td>+/- 220 deg</td>
<td>675 deg/sec</td>
</tr>
<tr>
<td>J5 (wrist roll)</td>
<td>+/- 360 deg</td>
<td>1350 deg/sec</td>
</tr>
</tbody>
</table>

C500C Controller:
- Over 30 concurrent tasks
- Windows development software
- RAPL-3 programming language
- PC-104 bus
- High speed serial ports
- Integrated force sensing
- 31 Kg
- 267 mm x 483mm x 400mm
- 19 inch rack mountable

General Purpose I/O:
- 16 Opto isolated inputs
- 12 Opto isolated outputs
- 4 Contact relay outputs

CRS - Get Connected

As part of our "Get Connected" initiative, CRS is working with other vendors of automation software and hardware, to ensure that our users have easy access to state-of-the-art development and deployment tools. Check our website www.crsrobotics.com for the latest info on third party software and hardware options.

The CRS Robotics Corporation has a worldwide sales and service network. Contact the CRS corporate headquarters in Burlington, Ontario or our website, for the location of a CRS office or channel partner in your area.