

# Adept Cobra s600



The Adept Cobra™ s600 robot is a high-performance SCARA robot system for mechanical assembly, material handling, packaging, machine tending, screw driving, and other applications that require fast and precise automation. Adept Cobra s-Series robots include the Adept SmartController™ motion controller, which provides performance capabilities unmatched in the industry.

## Product Features and Benefits

- Adept ACE™ software to deploy your applications through a user-friendly interface
- High-resolution, absolute encoders to provide high accuracy, superior slow-speed following, and easy calibration
- High-efficiency, low-inertia Harmonic Drives™ and a lightweight arm to deliver maximum acceleration
- 8 kHz servo update rate to improve path following and control
- Diagnostics display enables faster trouble shooting
- Ethernet TCP/IP capability to control the robot through a PC, PLC, or controller
- Complete interchangeability between robots and controllers



The Adept Cobra s600 robot comes with the high-performance Adept SmartController™ motion controller, which is based on the Adept SmartServo architecture. It has a small footprint of 329w x 187d x 86h mm.

## Specifications

Reach	600 mm
Payload	Rated 2 kg Max. 5.5 kg
Adept Cycle	
Burst Mode	0.42 sec
Sustained (20°C)	0.45 sec
Joint Ranges	
Joint 1	± 105°
Joint 2	± 150°
Joint 3	210 mm
Joint 4	± 360°
Joint Speeds	
Joint 1	386°/sec
Joint 2	720°/sec
Joint 3	1100 mm/sec
Joint 4	1200°/sec
Repeatability	
XY	± 0.017 mm
Z	± 0.003 mm
Theta	± 0.019°
Pass-Through Connections	
Electrical	24 (12 twisted pairs)
Pneumatic	6 mm (x2) 4 mm (x3)
DeviceNet	1
Digital I/O Channels	
AIB:	12 inputs, 8 outputs
Controller:	12 inputs, 8 outputs
Optional solenoid:	4 outputs
Weight	41 kg
Environmental Requirements	
Ambient Temperature	5 - 40 °C
Humidity Range	5 - 90 % (non-condensing)
Power Requirements for SmartController	24 VDC : 5 A
Power Requirements for AIB	24 VDC : 6 A 200 - 240 VAC : 10 A, single-phase
CE and cULus Compliant	

# ADEPT COBRA s600

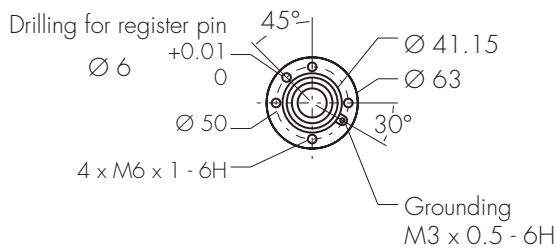
## Dimensions Adept Cobra s600



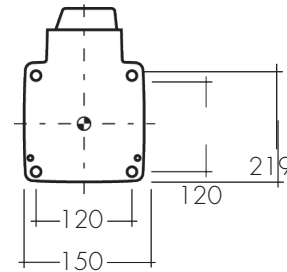
■ Work Envelope: Radius 600 mm  
Inner Limit: Radius 163 mm  
Height: 210 mm

■ Required clearance to open AIB Chassis

## Dimensions: Flange (mm)



## Dimensions: Footprint (mm)



## The Adept Cobra s600 system includes the following:

- Adept Cobra s600 robot with AIB (Amplifiers In Base)
- Adept SmartController motion controller
- Front panel with E-Stop
- Adept ACE software
- User documentation

## Options and Peripherals:

- AdeptSight™ vision guidance and inspection system (requires a PC—Adept recommends using the Adept SmartVision™ EX)
- T2 manual control pendant
- Dual robot configuration option
- Conveyor-tracking option
- sM16 SmartMotion™ interface
- sDIO I/O expansion (32 digital input and 32 digital output channels)
- IO Blox I/O module (8 digital input and output channels each)
- High-resolution Joint 4 option
- Solenoid valve kit
- Cleanroom ISO4 (class 10) option/ ESD option
- Adjustable Hardstop Kit

## Downloads:

Download CAD files for the Adept Cobra s600 robot from <http://www.adept.com/support/downloads/file-search> using the following download ID: 500502



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