

# Adept Quattro ePLC650H/HS



Allen-Bradley PLC



Siemens PLC

The Adept Quattro™ ePLC650 is the fastest parallel robot in the world. It is intended for high-speed applications in picking, packing, assembly and material handling. The ePLC650HS is the single parallel robot available with United States Department of Agriculture (USDA) acceptance for meeting rigorous food safety regulations. Adept's ePLC robots natively run Adept ePLC Connect™ software, which allows them to communicate directly with an existing Programmable Logic Controller (PLC) without the use of a separate external controller. This ePLC configuration allows users to install, program, operate and support our high-performance robots using the familiar interface of their existing PLC. Adept ePLC robots are designed to provide significant cost and time savings for users with new or existing PLC automation systems.

## Product Benefits

- Lower system cost due to controller-less operation
- Rapid deployment using familiar ladder logic programming languages of existing PLC (IEC 61131-3)
- Maximum facility utilization with the most compact system footprint in the industry
- Increased facility safety and lower cost with minimal power and signal cabling requirements
- USDA-accepted HS model for hygienic primary packaging

## Product Features

- Compatible with 1756 ControlLogix® or CompactLogix™ (by Allen-Bradley) and S7-300 SIMATIC (by Siemens) PLCs
- High-resolution, absolute encoders to provide high accuracy, superior slow-speed following, and easy calibration
- 8 kHz servo update rate to improve path following and control
- Integrated 10/100 Base-T Ethernet for EtherNet/IP™ communication

## Specifications

Number of Axes	4
Payload	
Rated	2 kg
Max.	6 kg (Up to 15kg with P30)

Max Working Range (see diagram for details)	
Diameter	1300 mm
Height	500 mm
Rotation	0° (fixed) (P30)
(platform dependent)	± 46.25° (P31) ± 92.5° (P32) ± 185° (P34)

Repeatability	± 0.1 mm (Uni-directional) ± 0.2°, 0.6° (P31, P34)
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Max. Speed	10 m/s 3600°/s
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Max. Acceleration	150 m/s <sup>2</sup>
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Robot Cycle Times, sustained  
(seconds, at 20°C ambient)

Payload	Std. Cycle*	Ext. Cycle**
0.1 kg	0.30	0.46
1.0 kg	0.36	0.47
2.0 kg	0.37	0.52
4.0 kg	0.41	0.58
6.0 kg	0.43	0.61

\* Adept Cycle, in mm (25/305/25)

\*\* Extended Cycle, in mm (25/700/25)

Digital I/O Channels

eAIB: 12 inputs, 8 outputs

Power Requirements

24 VDC : 6A  
200 - 240 VAC : 10A, single-phase

Ingress Protection

Base: IP-65/66 (optional)  
Tooling Area: IP-67

Quattro ePLC650HS:

USDA-Accepted for meat and poultry processing



Mounting	Inverted
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Environmental Requirements	
Ambient Temperature	1 - 40 °C
Humidity Range	5 - 90 % (non-condensing)

Weight	117 kg
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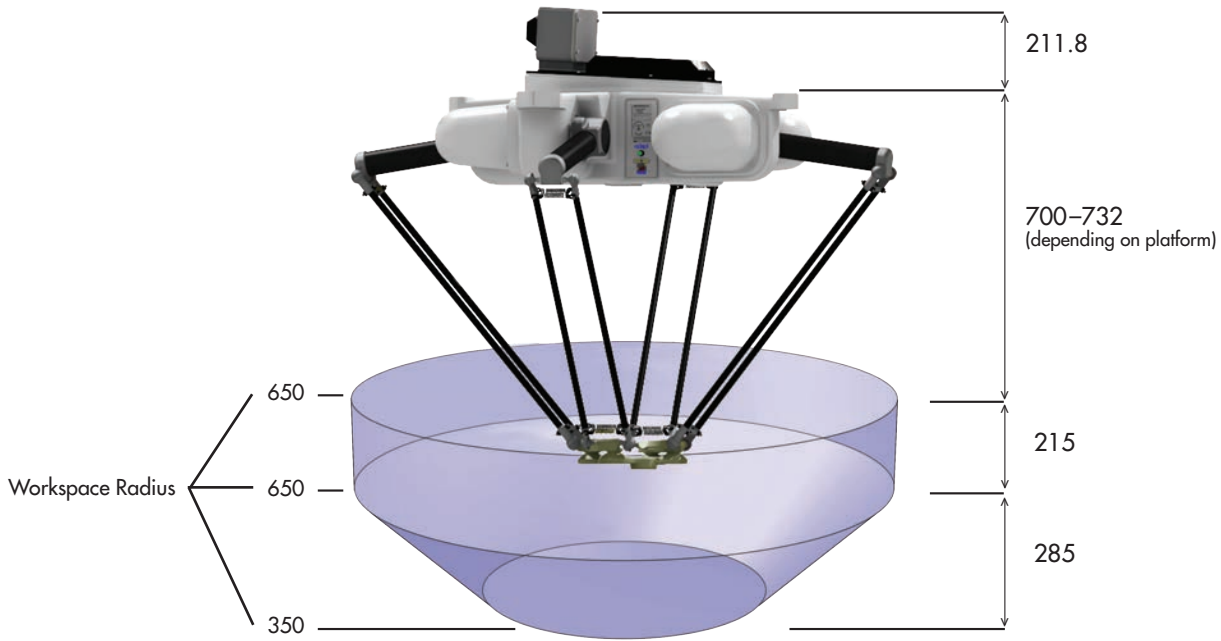
CE Compliant

# ADEPT QUATTRO ePLC650H/HS

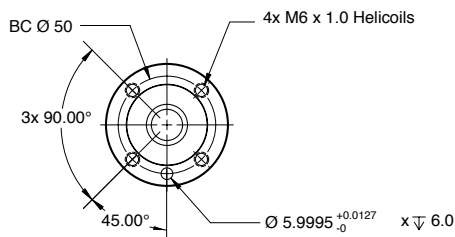


USDA-ACCEPTED  
FOR MEAT & POULTRY PROCESSING

## Dimensions: Adept Quattro ePLC650H/HS (mm)



## Dimensions: Flange (mm)



## The Adept Quattro ePLC650H/HS system includes the following:

- Adept Quattro ePLC650H/HS robot with eAIB (Amplifiers In Base)
- Rotational Tooling: P30 (fixed), P31, P32, or P34
- Front panel with E-Stop
- Adept ACE™ software and documentation
- User documentation
- Cables to connect E-Stop and other peripherals

## Accepted cleaning solutions for the Adept Quattro ePLC650HS: (at manufacturer's concentrations)

- Dura Foam 263
- Chloro Clean 269
- Multiquat 455
- Liquid Fury
- Enrich 299

## Options and Peripherals:

- USDA-accepted kit and IP-65 cable-seal kit
- AdeptSight™ vision software
- T20 manual control pendant

## Optional T20 Manual Control Pendant:



## Downloads:

Download CAD files for the Adept Quattro ePLC650H/HS robot from  
<http://www.adept.com/support/downloads/file-search>



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