



American Hakko Products, Inc.

PRODUCT BULLETIN

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Description/Title:
 NEW HAKKO HU-200 Robotic Soldering System

Part No:
 HU200-03Z

Specification:

Model		HU-200
Part No.		HU200-03Z
Input Voltage		100-240 VAC
Power Consumption		300W
Movement	X axis	400mm
	Y axis	300mm
	Z axis	200mm
	Θ axis	±200°
Drive System		Servo motor (All axes)
Position Detection		Absolute Encoder
Max Speed	X axis	800mm/s
	Y axis	800mm/s
	Z axis	800mm/s
	Θ axis	800°/s
Repeatability	X axis	±0.01mm
	Y axis	*Only when the unit temperature is constant
	Z axis	temperature is constant
	Θ axis	±0.01°
Noise Level		56dB
Ambient Temperature Range		0-40°C
Max Workpiece Payload		20kg (44.1 lb.)
External I/O Ports		20 Inputs 12 Outputs (2 for cleaner)
External Interface		4 USB Ports (1 for PC)
Dimensions (WxHxD)mm		600 x 910 x 650mm (23.6 x 35.8 x 25.6in.)
Weight		50 kg (110.23 lb.)
ESD Safe		Yes



Contents:

HU200-03Z	
Part No.	Description
--	Soldering Robot
FU601-40X	Robotic Soldering Station
BX1052	Tube Unit B 0.5-1.0mm
BX1053	Tube Unit B 1.2-1.6mm
BX1054	Tube Unit B 0.3mm
BX1042	Tube Unit 1.2-1.6mm
BX1055	Tube Unit 0.3-1.0mm
--	USB Cable
BX1045	Feeder Cable 4m
CX5004	Soldering Unit Mount
CX5002	Soldering Unit Fixture Base
CX5003	Cleaner Base
CX5005	Feeder Unit
--	PC (Windows Tablet)
--	Quick Manual
--	PC Software
CX1003	Cleaner
--	I/O Cable for Cleaner
--	Attachment Holder
--	Display Arm
--	Instruction Manual



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Station:

Model	FU-601
Part No.	FU601-40X(L-shaped Iron)
Input Voltage	120 VAC 50/60 Hz
Power Consumption	300W
Temperature Range	50°C – 500°C (120°F – 940°F)
ESD Safe	Yes
Output Voltage	29 V
Outer Dimension (W x H x D)	145 x 107 x 211 mm (5.7 x 4.2 x 8.3 in.)
Weight (w/o Cord)	4 kg (8.8 lb.)

Handpiece:

Power Consumption	260W (29V)
Tip-to-Ground Resistance	< 2 ohms
Tip-to-Ground Potential	< 2 mV
Heater	Composite Ceramic Cartridge
Tips¹	TX1 and TX2 Series
Cord Length	5 m (16.4 ft.)
Total Length (w/o Cord)²	168mm (6.6 in.)
Weight (w/o Cord)²	173g (0.38lb.)

¹ Tips not included

² As measured with TX2-4XD Tip installed

Comments:

The new Hakko HU-200 Robotic Soldering System is an expansion of Hakko's robotic soldering solutions first built by the FU-Series soldering station and feeder for automation. The HU-200 is a 4-axis system and has a large working envelope of 200mm x 300mm with the top speed of 800mm/s and boasts a repeatability of 0.01mm. An absolute encoder enables the machine to monitor the location of the soldering iron at all times, ensuring a high level of repeatability. The HU-200 utilizes the power of the Hakko FU-601 Robotic Integration Soldering Module but integrates the communication of the Hakko FU-500 Feeder Controller directly into the robot. Since the HU-200 uses the FU-601 soldering station, both TX1 and TX2 tips are still compatible.

The HU-200 software allows for simple and easy to program soldering as the entire system is designed specifically for soldering in mind. The program is focused to help the user optimize movements that are ideal for soldering robots while also keeping the number of programming steps required to a minimum. Additionally, the HU-200 carries a feature for reading Gerber data. If a Gerber file is available, the file can be read by the HU-200 to locate and program the positions of the solder joints. Another prominent feature of the HU-200 are the joysticks used for teaching the positions of the robot. Instead of having to input position points or controls on touch screens that are hard to feel, the joysticks allow the operator to find the correct position while focusing on the solder joints. The touch and feel of the joysticks allow for a much faster and more accurate robot positioning method.

With the power of the FU-601, the easy robot programming and the reliability of Hakko products, the HU-200 offers a solution to almost any soldering project.

For more information please visit www.HakkoUSA.com or call 1-800-88-HAKKO (42556)