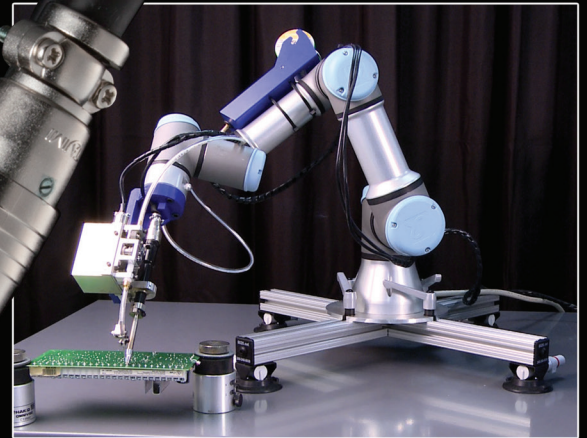


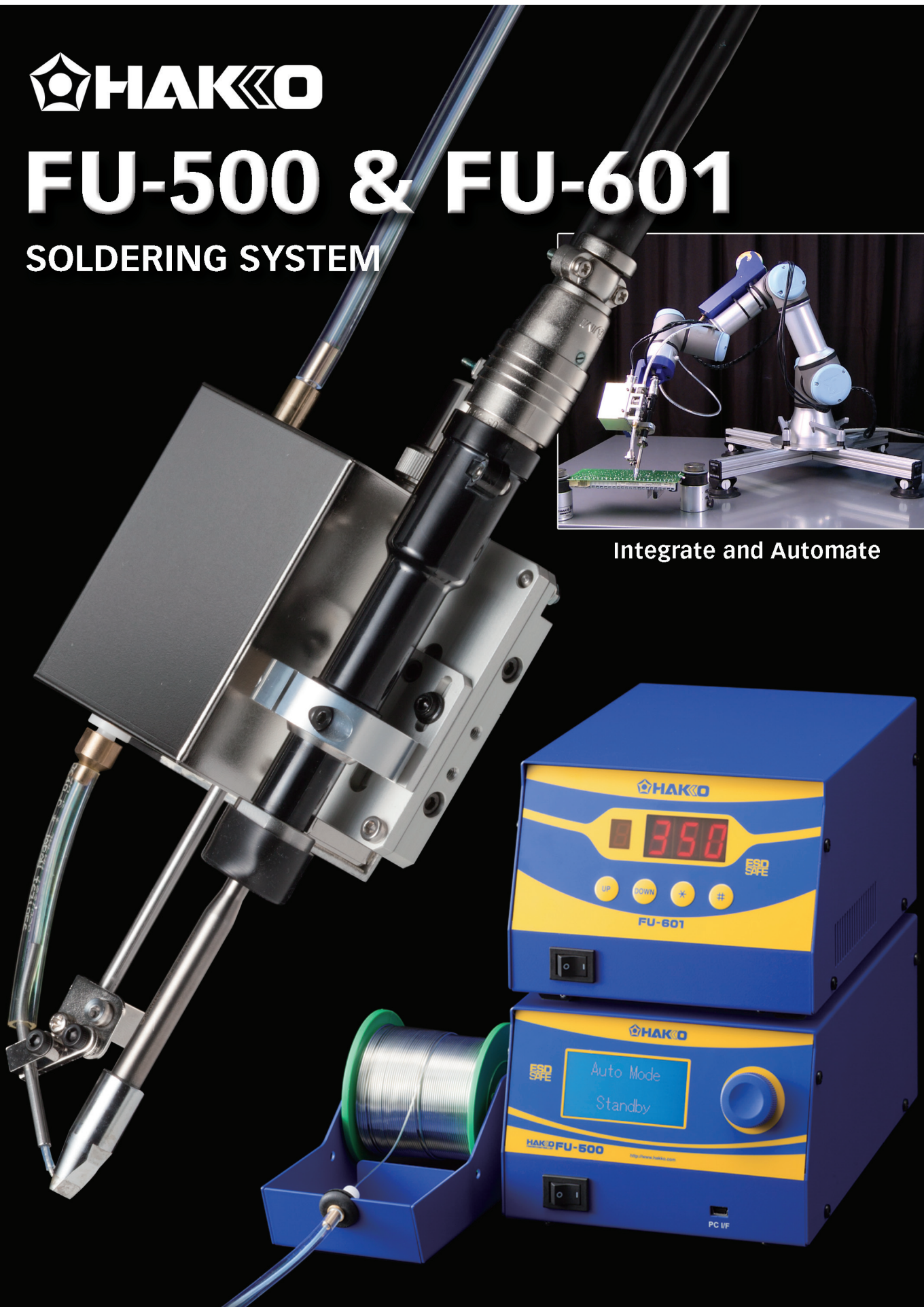


# FU-500 & FU-601

SOLDERING SYSTEM



Integrate and Automate





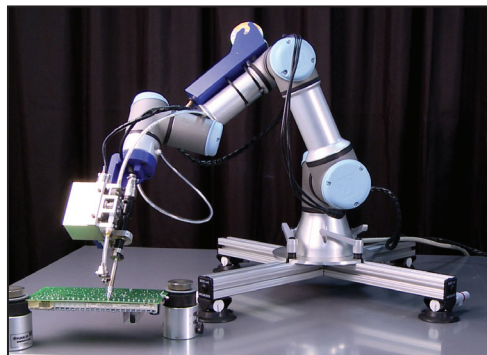
# FU-500

## INTELLIGENT SOLDER FEEDER

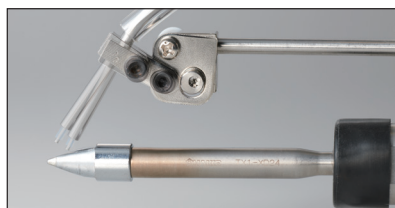
### Automated Soldering Systems

Using an automated system improves consistency and repeatability in the process and decreases process time.

The HAKKO FU-Series modules communicate with the automation platform of your choosing. Or, we can assist with integration of the FU-series benchtop system.



The HAKKO FU-500 and FU-601 integrated with Universal Robots UR3 motion platform.

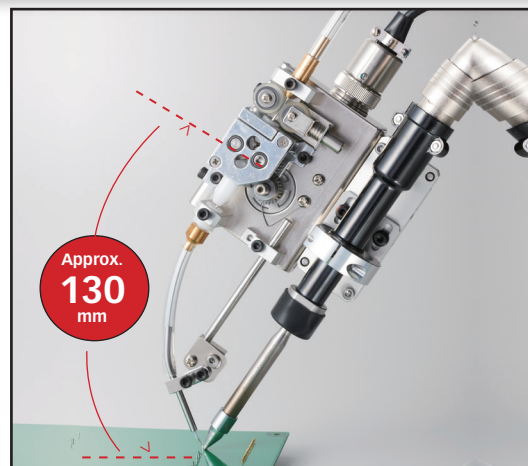


The ability to adjust the position of the solder feed to the soldering iron tip with the adjustment screw is critical for automatic soldering systems.

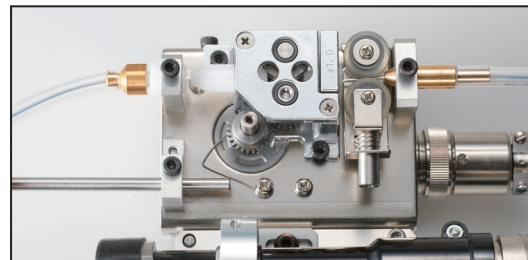
SPECIFICATIONS		
Part No.	FU500-21X (L Type FU500-71X (Straight Type)	
Input Voltage	127 VAC, 50/60 Hz	
Power Consumption	35W	
Outer Dimensions (W x H x D)	145 mm x 100 mm x 230 mm / 5.7" x 3.9" x 9.1"	
Weight (w/o cord)	2.3 kg / 5.1 lb	
ESD Safe	Yes	
Feeder Unit		
Part No.	CX1010 (L Type)	CX5006 (Straight Type)
Composite Solder Diameter	Ø0.3 - 1.6 mm	Ø0.3 - 1.6 mm
Weight	800 g / 1.8 lb	800 g / 1.8 lb

Note: Solder feed pulley unit, solder feed guide set and Teflon tube sold separately based on the required solder diameter. (See Parts List.)

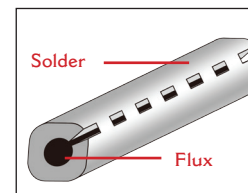
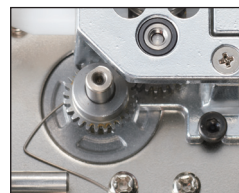
Hakko's FU-500 Intelligent Solder Feed works in conjunction with the Hakko FU-601 Robotic Integration Soldering Module and can be integrated with various robotic systems to achieve low-cost soldering automation.



Compact driver unit that allows the feed to be brought closer to the iron, increasing the accuracy of the amount of solder fed.



With an optical sensor, the FU-500 can detect solder clogging, slipping, and the end of the solder roll.



The Intelligent Solder Feeder is also equipped with a mechanism that perforates into the solder wire as a countermeasure against flux and solder splash.

CONTENTS			
FU500-21X Solder Feed Unit		FU500-71X Solder Feed Unit	
Part No.	Description	Part No.	Description
CX1010	Feeder Unit (L-Type)	CX5006	Feeder Unit (Straight Type)
BX1041	Tube Unit (0.3 - 1.0 mm)	BX1041	Tube Unit (0.3 - 1.0 mm)
BX1042	Tube Unit (1.2 - 1.6 mm)	BX1042	Tube Unit (1.2 - 1.6 mm)
BX1036	Feeder cable	BX1036	Feeder cable
B3508	Power cord	B3508	Power cord
BX1057	Solder Reel Strand	BX1057	Solder Reel Stand
--	Instruction Manual	--	Instruction Manual



The Hakko FU-601 Robotic Integration Soldering Module is designed to communicate with the Hakko FU-500 Intelligent Solder Feeder and integrate with various robotic systems to achieve low-cost soldering automation.

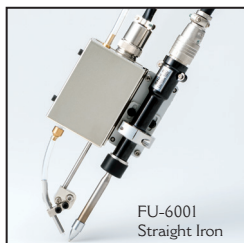
### High Performance Composite Tips

The station uses TX2 series tips that feature 260W composite ceramic heating elements that have a top controlled temperature of 500°C (940°F) and high mass shapes. FU-601 also supports 130W TX1 series tips with additional tip shapes.

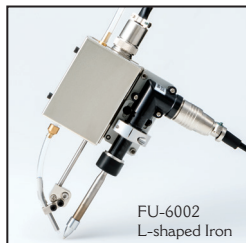


### Two Soldering Iron Styles

Select straight or L-shaped to meet your process requirements. The tip can be easily replaced and the position of the tip end can be easily adjusted using the tip alignment tool.



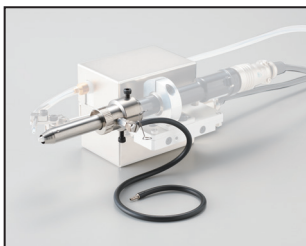
FU-6001  
Straight Iron



FU-6002  
L-shaped Iron

### Nitrogen Adapter Assembly (optional)

For nitrogen soldering, attach the optional N2 adapter to the iron and install a nozzle assembly that matches the tip.



### PARTS LIST

Part No.	Description
BX1023	Nitrogen adapter for TX1 tips
BX1024	Nitrogen nozzle assembly A for TX1-XD24/XD3
BX1025	Nitrogen nozzle assembly B for TX1-XD/XD08/XD16
BX1026	Nitrogen nozzle assembly C for TX1-XBCR4 / XRK
BX1029	Nitrogen adapter for TX2 tips
BX1030	Nitrogen nozzle assembly D for TX2-XD4/XD6/XDR4/XDR6/XBCR4/XBCR6
BX1031	Nitrogen assembly E for TX2-XD3/XDR3/XBCR3
CX1000	Point solder slide unit for FU-6001/6002
CX1001	Drag solder slide unit for FU-6001/6002
CX1002	Temperature probe
CX1003	Robotic tip cleaner
FU6001-01X	Straight type soldering unit
FU6002-01X	L-shape type soldering unit



# FU-601

ROBOTIC INTEGRATION SOLDERING MODULE

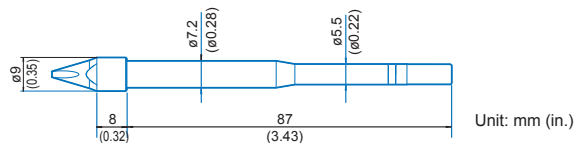
### SPECIFICATIONS

Model	FU-601	
Part No.	FU601-40X (L-shape Iron) FU601-60X (Straight Iron)	
Input Voltage Output Voltage Power Consumption Temperature Range Outer Dimensions (W x H x D) Weight (w/o cord) ESD Safe	120 VAC, 50/60 Hz 29 V 300W 50° - 500°C / 120° - 940°F 145 mm x 107 mm x 211 mm / 5.7" x 4.2" x 8.3" 4.0 kg / 8.8 lb. Yes	
Handpiece (FU-6001 / FU-6002)		
Model	FU-6001 (Straight)	FU-6002 (L-shape)
Power Consumption	260W / 29V	
Tip-to-Ground Resistance	< 2 Ω	
Tip-to-Ground Potential	< 2 mV	
Heater	Composite Ceramic Cartridge	
Tips <sup>1</sup>	TX1 and TX2 Series	
Cord Length	5 m / 16.4 ft.	
Total Length (w/o cord) <sup>2</sup>	194 mm / 7.6"	168 mm / 6.6"
Weight (w/o cord) <sup>3</sup>	172 g / 0.38 lb	172 g / 0.38 lb

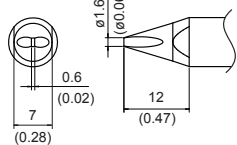
<sup>1</sup> Tips not included

<sup>2</sup> As Measured with TX2-4XD Tip installed

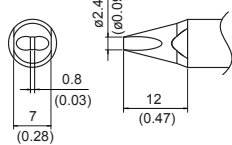
## FU-601 TX1 Series Tips (140W)



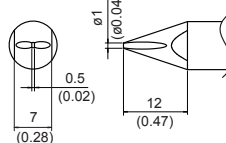
TX1-XD16 Shape-1.6XD



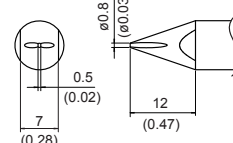
TX1-XD24 Shape-2.4XD



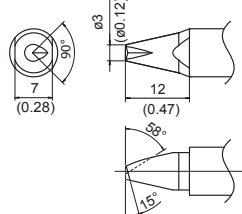
TX1-XD Shape-XD



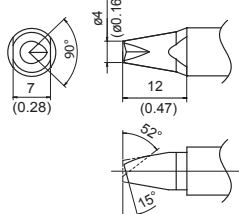
TX1-XD08 Shape-0.8XD



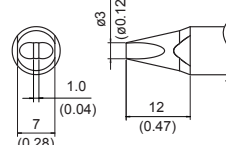
TX1-XBCR3 Shape-3XBCR



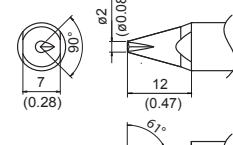
TX1-XBCR4 Shape-4XBCR



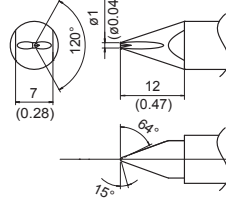
TX1-XD3 Shape-3XD



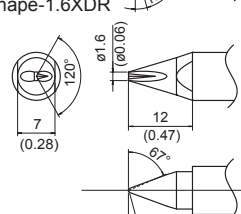
TX1-XBCR2 Shape-2XBCR



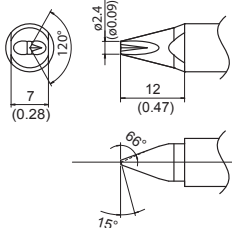
TX1-XDR Shape-XDR



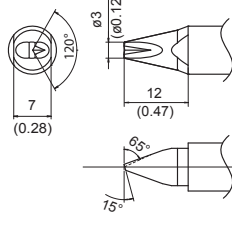
TX1-XDR16 Shape-1.6XDR



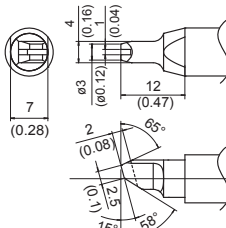
TX1-XDR24 Shape-2.4XDR



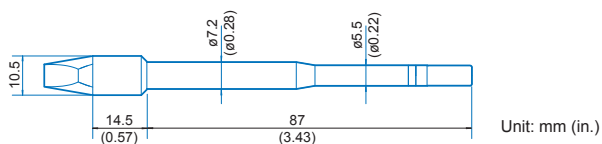
TX1-XDR3 Shape-3XDR



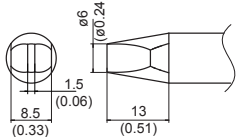
TX1-XRK Shape-XRK



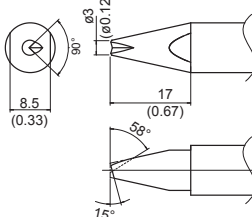
## FU-601 TX2 Series Tips (300W)



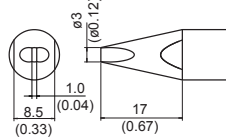
TX2-XD6 Shape-6XD



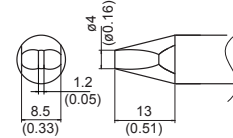
TX2-XBCR3 Shape-3XBCR



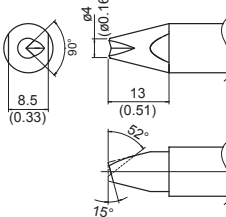
TX2-XD3 Shape-3XD



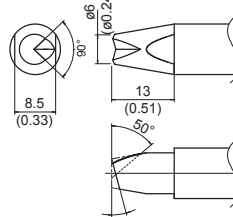
TX2-XD4 Shape-4XD



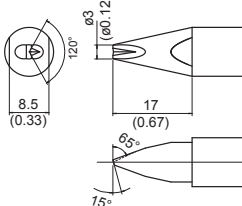
TX2-XBCR4 Shape-4XBCR



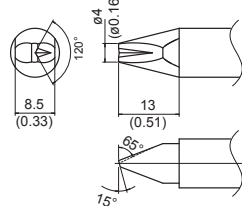
TX2-XBCR6 Shape-6XBCR



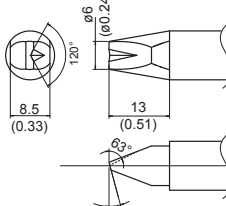
TX2-XDR3 Shape-3XDR



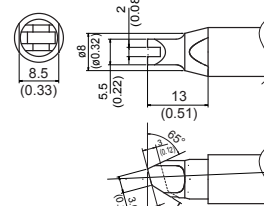
TX2-XDR4 Shape-4XDR



TX2-XDR6 Shape-6XDR



TX2-XRK Shape-XRK



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