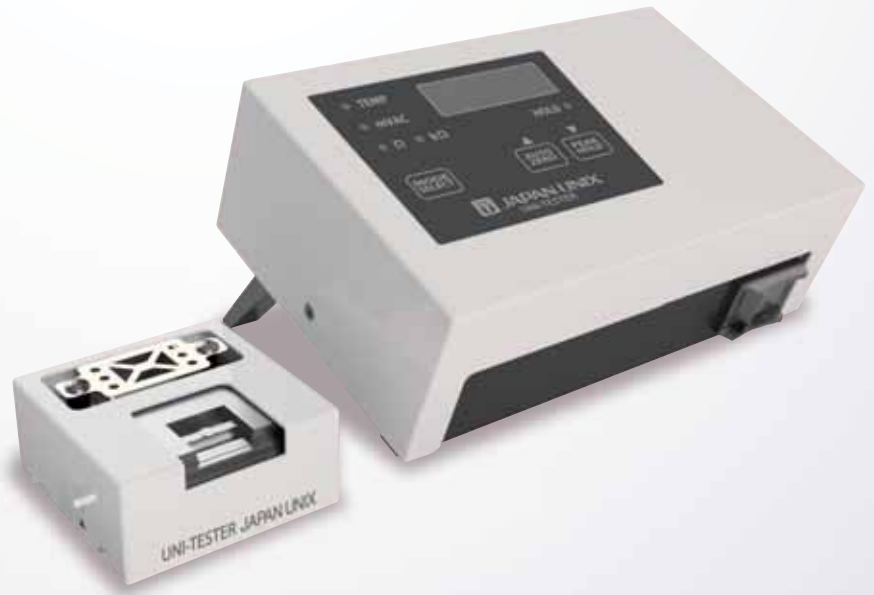


Soldering Iron Tester

# UNI-TESTER

It can be used for  
the both automatic machine  
and manual work  
Soldering iron tester



## Features

- Tester that can measure the iron tip voltage leakage, Tip-to-Ground the resistance, and the iron tip temperature of soldering robots. (It can also be used with a hand soldering iron)
- Take the installation to the robot into consideration, the control unit and measuring part adopt a separate method.
- Data communication with external devices is possible via serial communication (RS-232C)
- Measured values can be used in various ways of applications such as automatic offset of iron tip temperature.
- The measurement range of the iron tip grounding resistance is 0-950kΩ corresponding to IEC-61191-1 (Ed3 / 2018).
- The measurement range of iron tip leakage voltage is corresponding to IEC-61191-1 (Ed3/2018) / IPC J-STD-001G.
- Installed with a "PEAK HOLD function" that holds the maximum value of the iron tip temperature measurement value and an "AUTO ZERO function" that resets the iron tip leakage voltage and/or the iron tip grounding resistance to zero.

## Standard configurations

Kit model number	UNI-031A ** * <sup>※1</sup>	UNI-032A ** * <sup>※1</sup>	UNI-031B ** * <sup>※1</sup>	UNI-032B ** * <sup>※1</sup>
Control unit	UNI-03E			
Base unit	UNI-03S			
Temperature sensor (Temperature sensing part)	UNI-031 (φ 3mm)	UNI-032 (φ 4mm)	UNI-031 (φ 3mm)	UNI-032 (φ 4mm)
Conduction plate (Temperature sensing part)	UNI-03E (□3mm)			
Conversion plug	UNI-515			
Harness (Total length)	UNI-03A (2.9 m)		UNI-03B (0.5 m)	
Power cord (Total length)	ULJP-POW-PS (2m)			

<sup>※1</sup> The contents of \*\* for the model name is changed depending on the shape of the power source or outlet for the country in where you use. Example) EU: UNI-031A-E / North America, South and Central America, Taiwan, and Japan: \*\* = NONE / EU (except UK) : \*\*\* = -E / UK: \*\* = -U / CHINA: \*\* = -C

## Supplies



Temperature sensor  
UNI-31K / UNI-32K

Temperature sensing part :  
φ 3 (UNI-31K)  
φ 4 (UNI-32K)



Conduction plate  
UNI-31P / UNI-32P

Temperature sensing part :  
φ 3 (UNI-31P)  
φ 4 (UNI-32P)

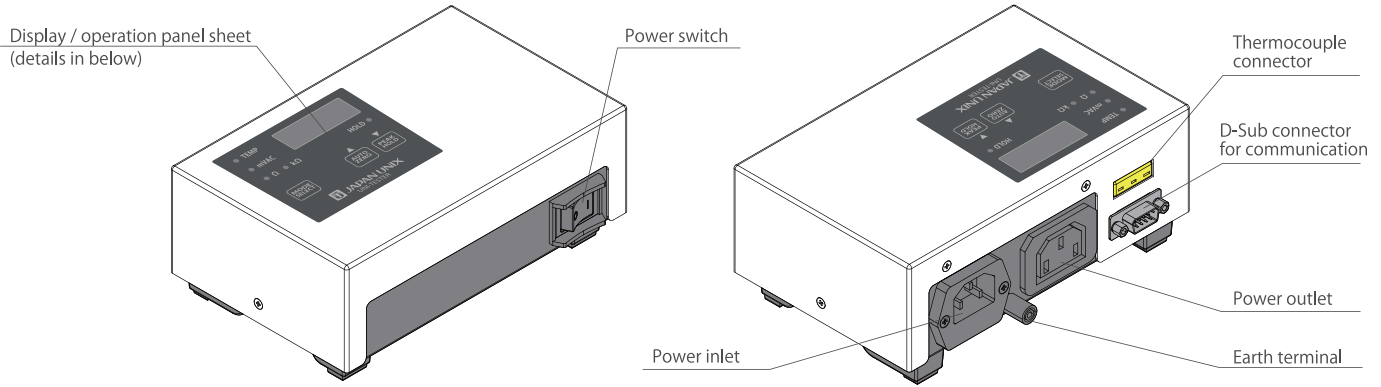


Harness  
UNI-03A / UNI-03B

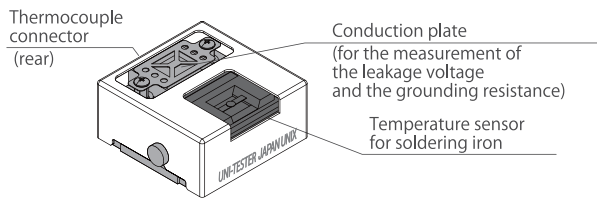
Total length :  
2.9m (UNI-03A)  
0.5 (UNI-03B)

# Explanation of each part

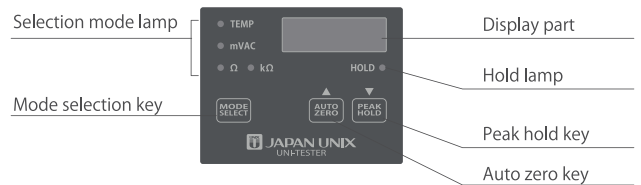
## Control unit



## Base unit



## Display / operation panel sheet (upper part of control unit)



# Specifications

Kit model number	UNI-031A**※1	UNI-032A**※1	UNI-031B**※1	UNI-032B**※1
Power	AC100 - 230 V (50/60 Hz)			
Power Consumption	2.3 W			
External dimensions (excluding protrusion part)	Control unit : W172×D108×H70 (mm) Base unit : W65×D65×H30 (mm)			
Weight	Control unit : Approx. 900 g Base unit : Approx. 220 g			
Energizing current (connected equipment)	7 A			
Temperature resolution	1 °C			
Temperature measurement range	0 - 500 °C / 32 - 932 °F			
Allowable difference of temperature measurement	± (0.1% of reading + 1 digit) (Sensor error does not include)			
Temperature sensor	Thermocouple K (class 2)			
Dimension of temperature sensing part	φ 3 mm	φ 4 mm	φ 3 mm	φ 4 mm
Voltage measurement range	0 - 3000 mV			
Voltage resolution (Display resolution)	0.0 - 9.9 mV RMS (0.1mV)※2 10 - 999 mV RMS (1mV) 1000 - 3000 mV PEAK (100 mV)※3			
Allowable difference of voltage measurement	± (5% of reading + 1 digit)			
Resistance measurement range	0 - 950 kΩ			
Resistance resolution (Display resolution)	0.0 - 99.9 Ω (0.1Ω) 100 - 999Ω (Ω) 1k - 950 kΩ (1kΩ)※4			
Allowable difference of resistance measurement	± (5% of reading + 1 digit)			
Display method	4-digit 7-segment LED			
Operating environment	Ambient temperature : 23±10 [°C] Ambient humidity : 45 - 85 [%RH] (No condensation)			
Harness length	2.9 m	2.9 m	0.5 m	0.5 m

※1 The contents of \*\* for the model name is changed depending on the shape of the power source or outlet for the country in where you use. Example) EU: UNI-031A-E North America, South and Central America, Taiwan, and Japan : \*\* = NONE / EU (except UK) : \*\* = -E / UK : \*\* = -U / CHINA : \*\* = -C

※2 With IEC-61191-1 (Ed3 / 2018), "the iron tip leakage voltage is 2 mV (RMS) or less". With IPC J-STD-001G, there is no regulation for the iron tip leakage voltage.

※3 With IEC-61191-1 (Ed3 / 2018) and IPC J-STD-001G, "the transient voltage is 2V peak or less".

※4 With IEC-61191-1 (Ed3 / 2018), "the iron tip grounding resistance value is 5Ω or less, and for the over current protection is 1MΩ or more." With IPC J-STD-001G, "the iron tip grounding resistance value is 5Ω or less". When the measurement value is 95kΩ or more, the over range is displayed.

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