

Product Manual

Kamoer Fluid Tech (Shanghai) Co., Ltd.

Version: A0

Product name	Intelligent Peristaltic Pump
Product model	UIP WIFI V3-KK1800
Execution date	2026.02.04
Company name	Kamoer Fluid Tech (Shanghai) Co.,Ltd.

1. Product Overview

1.1 Product physical picture



1.2 Model definition

UIP WIFI V3-KK1800-T1.6-3R-GB	UIP WIFI	V3	KK1800	T1.6-	3R	GB
Product Model	Product Series	Version	Pump Head Model	Tube Wall Thickness	Number of Rotors	Standard

Standards:

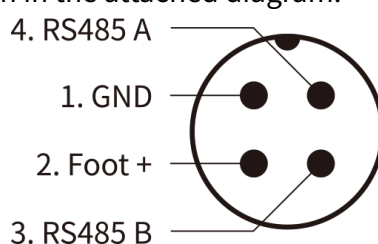
Standard	Chinese Standard	American Standard	European Standard	British Standard	Australian Standard
Code	GB	US	EU	UK	AU

1.3 Interface definition

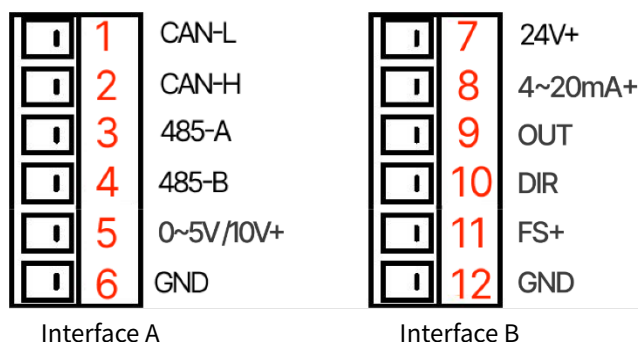


Back Interface Definitions:

- 1) **Switch:** After power-on, used to control the on/off state of the device.
- 2) **Power Interface:** For connecting the power cord to supply power to the device.
- 3) **Plug-in Interface A:** Integrates CAN, RS485, and voltage analog control signals.
- 4) **Plug-in Interface B:** Integrates current analog signals, direction control, and foot switch control.
- 5) **Aviation Socket (GX16-4):** Dedicated foot switch interface, providing an independent foot control channel. Definitions are shown in the attached diagram.



3、4 Plug-in Interface Definitions



Control Type	Pin Number
0~5V/10V Voltage Analog Signal	Positive: 5, Negative: 6
4~20mA Current Analog Signal	Positive: 8, Negative: 12
Analog Direction Control	Positive: 10, Negative: 12
Foot Switch Control	Positive: 11, Negative: 12

Note: For analog direction control: When **Pin 10 (Direction)** is connected to **Pin 12 (Common Terminal)**, the corresponding direction is **Clockwise**; when they are disconnected, the direction is **Counterclockwise**.



1.4 Pump head

Pump head type	Pump tube wall thickness	Number of rotors	Picture
KK1800-T1.6	1.6mm	3 rotors 6 rotors	
KK1800-T2.5	2.5mm	3 rotors	

1.5 Optional Pump pipe

Material	Code	Icon	Characteristic	Standards
Silicone tube	S		Low adsorption, good temperature resistance, not easy to age, low precipitates, etc., the chemical corrosion resistance decreases with the increase of temperature; Working temperature: -60°C~200°C.	RoHS Comply with food grade certification (GB4806.11-2016)

1.6 Performance characteristics and typical applications

1.6.1 Performance characteristics

- Compact size, large flow rate, and wide flow range
- Easy pump tube replacement
- Stainless steel rotors for long service life
- Stepper motor for precise control
- Suitable for conveying viscous and non-viscous liquids
- Thick-walled pump tube, capable of withstanding high pressure
- Compatible with external sensing devices for automation implementation
- Supports continuous mode and quantitative mode operation
- Supports flow calibration function
- Supports RS485 remote control
- Supports foot switch function



	Product Manual		File No.: CPBZ- UIP WIFI V3 -01
			Ver: A0
	Name: Intelligent Peristaltic Pump	Model: UIP WIFI V3-KK1800	Date: 2026-02-04

1.6.2 Typical Applications

- Dosing & Dispensing Equipment: Automatic Food Packaging Machines, Automatic Reagent Dispensers
- Chemical Reagent Conveying: Laboratory Liquid Transfer and Dispensing

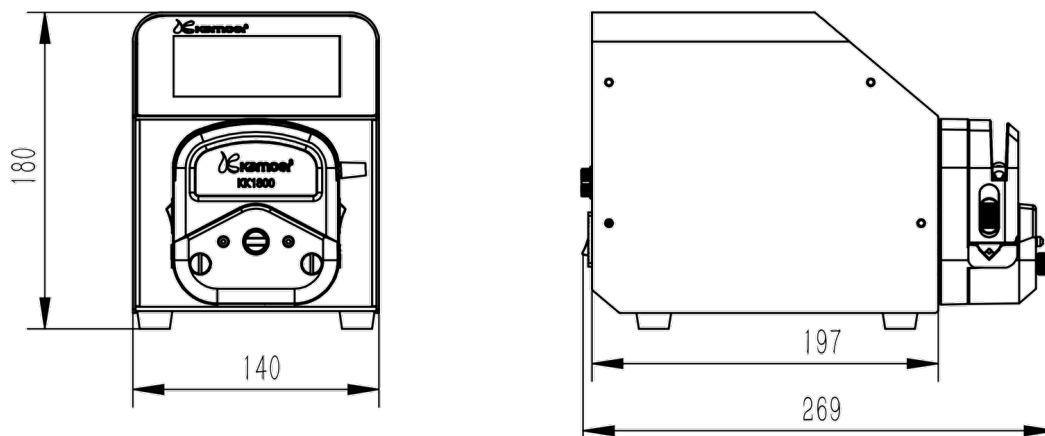
1.7 Daily Maintenance and Precautions

- If you are conveying specific solutions, please contact the manufacturer to confirm the chemical compatibility of the pump tube for a suitable match.
- For compatible pump tubes that have been pre-matched, regular replacement is still required based on usage frequency and medium characteristics (e.g., corrosiveness, particulate matter) to avoid leakage or flow degradation.
- Verify the operating voltage before use, connect the power supply in accordance with the product parameter sheet, and check that the power cord and plug are intact with reliable grounding to prevent electrical faults.
- Regularly inspect the smooth operation of the roller bearings; apply grease to the synchronous disc to improve performance.
- The product must be operated within the specified working environment range. Severe working conditions may cause premature damage to the unit.
- Liquid leakage accidents caused by hose rupture depend on the liquid medium and your specific application conditions.
- Overloading the unit may result in premature damage.
- Due to component tolerance variations, mechanical noise may differ slightly during operation.



2. Product specification

2.1 Product size



2.2 Product main material

Complete Machine Enclosure	KK1800 Pump Head			
	Structural Shell	Rotor	Synchronous Disc	Handle
Sheet Metal	Engineering Plastic	Stainless Steel	Aluminum Alloy	Stainless Steel

2.3 Technical Parameters

Project		Technical parameters
Basic parameters	Working voltage	AC 100~240V
	Weight	Approximately 4.3Kg
	Size (L * W * H)	269x140x180mm
	Power	<50W
	Maximum speed	350 RPM
	Speed Adjustment Resolution	0.1 RPM
	Language settings	Chinese/English
	Mode setting	Continuous Mode/Volume Mode
	External control	Footswitch, RS-485 Communication、 Analog quantity
	Motor type	Closed-loop Stepper Motor
	Motor lifespan	not less than 6,000 hours
	Pump head	3-Rotor/6-Rotor KK1800
	Reference noise level	≤65dB (the horizontal distance between the product and the noise meter is 0.5 meters)



Applicable pump heads, hoses and flow parameters:

Applicable pump heads	Number of supported channels	The wall thickness of the hose	Applicable hose models	Flow rate of single channel (ml/min)
KK1800-T1.6-3R	1、 2	1.6mm	19# (2.4*5.6) 、 16# (3.2*6.4) 、 25# (4.8*8.0) 、 17# (6.4*9.6) 、 18# (7.9*11.1)	0.1~1500
KK1800-T1.6-6R	1、 2	1.6mm	19# (2.4*5.6) 、 16# (3.2*6.4) 、 25# (4.8*8.0) 、 17# (6.4*9.6) 、 18# (7.9*11.1)	0.1~750
KK1800-T2.5-3R	1	2.5mm	15# (4.8*9.8) 、 24# (6.4*11.4)	0.5~950

Attention: All the above flow rates are obtained by testing pure water with Kamoer silicone tubes under the conditions of normal temperature and normal pressure in the laboratory, and are for reference only. In actual use, factors such as the ambient temperature, the material and elasticity of the pump tube, and the viscosity of the test liquid will all affect the actual flow rate. For specific situations, you can consult Kamoer engineers.

3. Ordering instructions

3.1 Complete Machine

Name	Material Number
UIP WIFI V3- KK1800; Silicone tube/7.9*11.1/3 rotors/1.6 wall thickness/US	CA.01.03.0021-01
UIP WIFI V3- KK1800; Silicone tube/7.9*11.1/3 rotors/1.6 wall thickness/EU	CA.01.03.0021-02
UIP WIFI V3- KK1800; Silicone tube/7.9*11.1/3 rotor/1.6 wall thickness/UK	CA.01.03.0021-03
UIP WIFI V3- KK1800; Silicone tube/7.9*11.1/3 rotors/1.6 wall thickness/AU	CA.01.03.0021-04

3.2 Accessories

Accessory Name	Type	Accessory Image	Function Introduction
Power line	Standard configuration		1.8 metres



 Kamoer® Precise And Reliable Fluid Transfer	Product Manual		File No.: CPBZ- UIP WIFI V3 -01
			Ver: A0
	Name: Intelligent Peristaltic Pump	Model: UIP WIFI V3-KK1800	Date: 2026-02-04
Foot switch	Standard configuration		The foot switch is used as a substitute for the start/stop button. In a suitable interface, stepping on the foot switch can control the start and stop of the pump.
Quick-connect terminal	Standard configuration		Two (pieces) The pluggable quick-connect terminals make it convenient and fast to connect wires, and the connections are reliable and safe.
Photoelectric sensor switch	Optional Configuration		Photoelectric sensor used to identify the presence or absence of solution bottles for automatic filling Sensor recognition distance length 0.5 meters

Add: Building 4, No. 79 Xiangjing Road, Songjiang District, Shanghai

Tel: 021-67742578

www.kamoer.com



Make it smart to pump fluid