

Warrior lite AC

(Q230000000)

High performance, simple-to-use, and compact blood & IV fluid warmer for operating rooms and intensive care units

July 2024 | Version 2.0



Key Benefits:

- **Simple to Operate:** Fail-safe assembly; one-button operation that minimizes the likelihood of human errors and enables consistent care in mass casualty event
- Immediate Warming: Warm fluids in less than 11 seconds
- At Any Input Temperature: Even at 4°C/39°F fluid input temperature
- Even At High Flow Rates: Up to 180ml/min for the full warming range (4°C 38°C / 39.2°F 100.4°F)
- Unmatched Handling of Push-Pull / Bolus / Intermittent Resuscitation Method: Fast reaction to flow changes and unmatched intermittent flows handling (e.g. hand pump, syringe, etc.)
- **Communicative:** Built-in LED display
- Upgradeable to Full Portability: Smooth upgrade path to portability by adding a battery
- **No Calibration:** No need for periodic calibration
- **Zero Maintenance:** 5 years between service cycles
- Patent-Protected Smart Warming Technology:
 Microprocessor-controlled smart warming technology that
 measures fluids temperature 100s of times a second and
 automatically adjusts warming to maintain 38℃ / 100.4°F
 output.



- Safe Technology: Gradual warming; real-time temperature sensing with auto-adjustments and visual indications; aluminum free (heat exchanger using medical grade stainless steel)
- **Field Proven Technology:** In clinical use since early 2014 with hundreds of end users and >100K field utilizations
- Affordable Consumables: Cost effective consumable design
- One Consumable Unit Fits All Warrior Products
- Continuum of Emergency Care: Consumable unit fits all blood and IV fluid protocols and can be used across the entire continuumof emergency care, simplifying patient handoff between emergency settings and reducing costs



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Performance:	
Set-Point Temperature	38°C (±2°C) / 100.4°F (±3.6°F)
Warming Time	Less than 11 seconds
Minimum Delivery Rate	KVO or 2 ml/min
Maximum Delivery Rate at 4°C/39.2°F Input [1] [2]	180 ml/min
Maximum Delivery Rate at 20°C/68°F Input ^{[1] [2]}	270 ml/min
Physical Characteristics:	
Dimension (H x W x L)	22 × 12.5 × 10 cm 8.66" x 4.92" x 3.93"
Weight	1.46 kg / 3.22 lb
Electrical Characteristics:	
Electrical Specifications	100-240VAC 50-60Hz; 2.2-5.3A
Target Regulatory Envelope:	
Certifications	CE, FDA & Health Canada
IEC	 IEC 60601-1 IEC 60601-1-2:2014 (EMC standard 4th edition)
Environmental Specifications:	
Storage Conditions	-20°C to 70°C (-4°F to 158°F) & 93% RH
Operating Conditions	-5°C to 50°C (23°F to 122°F) & 90% RH
Atmospheric Pressure / Altitude	700 to 1,060 hPa / -400 to 3,200 meter (-1,312 to 10,499 ft)
Ingress Protection (IP)	IP22

Core Components:

Base Unit: (QIF03-BUA1000) Hosts the control module and user indications. Connects with the battery and the Compact Disposable Unit

Power Supply Module (QIF-ACL10000) Medical grade power supply module in a dedicated case

Disposable Unit:

Compact Disposable Unit (QPORT0500) Compact sterile Disposable

Accessories:

Extension Cable (QIF-CBL00019) To extend the connection between the base unit and the disposable unit

Mounting Unit (QIF03-MUA1000) To secure the Warrior lite AC to pole or rail

CDU Secure Basket (QIF-MCH00041) To secure the disposable unit to the bed

Online Training:



[2] This document is based on EU-approved spec. The product is not yet cleared for distribution in the USA.

Note: the information provided in the Instructions For Use (IFU) shall govern in case of conflict . This document is adjusted to CE approvals; for exact specifications of the USA-cleared version, please refer to the relevant IFU or contact your QinFlow representative.

degree in Celsius = degree in Fahrenheit Standard

= Inch AC = Alternate Current BU = Base Unit CDU = Compact Disposable Unit

centimeter DU = Disposable Unit EN = European Norms

FDA = Federal Drug Administration = Feet = gram g

= hecto Pascal (100 Pascal) HxWxL = Height x Width x Length IEC = International Electrotechnical Commission

= Instructions for Use

Ingress Protection ratingIntravenous

kilogram KVO = Keep Vein Open = Libra (Pound) MIL-STD = Military Standard ml/min = milliliter per minute RH = Relative Humidity

^[1] Using standard IV kit and a 14G catheter. Blood products' flow rate may differ due to their viscosity.