

Warrior (standard)

(Q1110S0000)

Top performance yet genuinely portable blood and IV fluid warmer for mid- and long-haul critical care transports

April 2024 | Version 7



Key Benefits:

- **Simple to Operate:** One button operation; simple setup
- **Portable:** Can fit small transport platforms
- **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 200ml/min for the full warming range (4°C-38°C / 39.2°F-100.4°F)
- **Superb Handling of Push-Pull / Bolus / Intermittent Resuscitation Method:** Fast reaction to flow changes and unmatched intermittent flows handling (e.g. hand pump, syringe, etc.)
- **Highly Efficient Technology:** 3-5 liters of warmed fluids with a single battery
- **Mountable:** To pole, rail or stretcher
- **Communicative:** Built-in display and audio indications
- **No Calibration:** No need for periodic calibration
- **Practically 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°C / 100.4°F output



- **Safe Technology:** Gradual warming; real-time temperature sensing with auto-adjustments and audio 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 thousands of field utilizations
- **Affordable Consumables:** Cost effective consumable design
- **Multipurpose Consumables:** The same consumable fits all protocols
- **Unique Continuum of Emergency Care Proposition:** Same consumable can be used across the entire continuum of emergency care, simplifying patient handoff between emergency settings and reducing costs

For more information: info@qinflow.com

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Performance:	
Set-Point Temperature	38°C (±2°C) / 100.4°F (±3.6°F)
Warming Time	Up to 11 seconds
Minimum Delivery Rate	KVO or 2 ml/min
Maximum Delivery Rate at 4°C/39.2°F Input ^{[1] [2]}	Up to 200 ml/min
Maximum Delivery Rate at 20°C/68°F Input ^{[1] [2]}	Up to 290 ml/min
Battery Capacity at 4°C/39.2°F Input	Up to 3.5 liters
Battery Capacity at 20°C/68°F Input	Up to 5 liters
Physical Characteristics:	
Dimension (H x W x L)	23.2 x 15.6 x 7.8 cm 9.13" x 6.14" x 3.07"
Weight	1,720 g / 3.79 lb
Electrical Characteristics:	
Battery Characteristics	Rechargeable, Li-ion, 21.6V, 4.6Ah, 99.36Wh
Battery Charging Input Voltage	100–240 VAC 50–60 Hz Max 2.0 A 12/24V
Target Regulatory Envelope:	
Certifications	CE, FDA & Health Canada
IEC	• IEC 60601-1 • IEC 60601-1-2:2014 (EMC standard 4th edition) • IEC 60601-1-12
Compliance	EN1789
Environmental Specifications:	
Storage Conditions	-30°C to 70°C (-22°F to 158°F) ^[3]
Operating Conditions	-5°C to 40°C (23°F to 104°F) ^[3]
Atmospheric Pressure /Altitude	549 to 1,060 hPa / -400 to 4,572 meter (-1,312 to 15,000 ft) ^[4]
Ingress Protection (IP)	IP33

Core Components:

Base Unit (QPORT1100)

Hosts the control module and user indications (audio, visual). Connects with the battery and the Disposable Unit (note: EXTREME Base Unit configuration available as well; contact your QinFlow representative for details)

Enhanced Battery (QPORT1180)

Rechargeable, Li-ion, 21.6V, 4.6Ah, 99.36Wh

Disposable Unit:

Compact Disposable Unit (QPORT0500)

Compact sterile disposable unit

Charging Components:

Charger (FY-17036-ADT)

Adapter (QPORT1330)

Accessories:

Mounting (QPORT1010)

Mounting option to pole, rail or stretcher

Extension Cable (QIF-CBL00019)

To extend the connection between the base unit and the disposable unit

Soft Carrying Bag (QPORT1410)

Hard Carrying Case (QPORT1400)

12-24V Charger (MASCOT-2544Li6C)

[1] Using standard IV kit and a 14G catheter. Blood products' flow rate may differ due to their viscosity. Output temperature and volume may differ based on ambient temperature, flow rate and battery condition.

[2] This document is based on EU-approved spec. For the USA-cleared version, please refer to the IFU or to your QinFlow representative.

[3] Under EN1789:2007 +A2:2014.

[4] In compliance with IEC60601-1-11:2010 section 4.2.2c.

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.

°C = degree in Celsius
°F = degree in Fahrenheit Standard
" = inch
AC = Alternate Current
BU = Base Unit
CDU = Compact Disposable Unit

cm = centimeter
DU = Disposable Unit
EN = European Norms
FDA = Federal Drug Administration
Ft = Feet
g = gram

hPa = hecto Pascal (100 Pascal)
HxWxL = Height x Width x Length
IEC = International Electrotechnical Commission
IFU = Instructions for Use
IP = Ingress Protection rating
IV = Intravenous

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

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