

Warrior (standard)

(Q1110S0000)

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



December 2021 | Version 6











- **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



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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 60601-1-11
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)	IP22

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)

cm = centimeter

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

= degree in Celsius = degree in Fahrenheit Standard AC = Alternate Current
BU = Base Unit

CDU = Compact Disposable Unit

DU = Disposable Unit = European Norms $\mathsf{FDA} \ = \ \mathsf{Federal}\,\mathsf{Drug}\,\mathsf{Administration}$ = gram

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

IFU = Instructions for Use = Ingress Protection rating = Intravenous

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

^[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.