

Chapter 5 Product Specifications

Product Name: Ultrasonic Pocket Doppler

Model No.: SONOTRAX Lite, SONOTRAX Basic, SONOTRAX Pro

Safety

Complies with: EN 60601-1/1990

Classification:

Anti-electric Shock Type: Internally powered equipment

Anti-electric Shock Degree: Type B equipment 

Degree of Protection against Harmful Ingress of Water:

Main Unit: Non-protected

2.0MHz Waterproof Monitoring Probe, 2.0MHz Waterproof Probe, 3.0MHz Waterproof Probe: IP68 level, protected against the effects of continuous immersion in water with 1 m depth for 24 hours

Degree of Safety in Presence of Flammable Gases: Equipment not suitable for use in presence of flammable gases

Working System: Continuous running equipment

EMC: Group I Class B

Physical Characteristic

Size: 32 (Depth) x 85 (Width) x 138 (Height) mm

Weight: 290±5g (including one battery)

Environment

Working: Temperature: +5°C~ +40°C
 Humidity: ≤80%
 Atmospheric Pressure: 86kPa ~ 106kPa

Transport and Storage: Temperature: -10°C~+ 55°C
 Humidity: ≤93%
 Atmospheric Pressure: 86kPa ~106kPa

Display: 45*25mm LCD display

FHR Performance

FHR Measuring Range: 50BPM~210BPM

Resolution: 1BPM

Accuracy: ±3BPM

Recording and Playing

Audio Sampling Frequency: 4KHz /8KHz

Recording Length: 480s/240s

Recording can be played

White Back Light

Two Brightness Adjustable: OFF, ON

Audio Output Power: 0.5W

Auto Shut-off: After 1 minute no signal, auto power off

Battery Type Recommended: 9 volt DC alkaline battery.

IEC Type No. 6LR61/6LF22 or equivalent.

Battery life (6LR61) exceeds 250 examinations (It is a typical figure based on the number of one minute examinations - will vary depending on use)

Rechargeable Battery

Normal Charge Temperature: 0°C~45°C

Storage Temperature: -5°C~35°C

Normal Charge: ≥ 4 h (normal temperature), 160mA

Cycle Life ≥ 300 times

Ultrasound

Nominal Frequency (2.0MHz Waterproof Monitoring Probe/ 2.0MHz Waterproof Probe/
3.0MHz Waterproof Probe): 2.0MHz/ 2.0MHz/ 3.0MHz

Working Frequency (2.0MHz Waterproof Monitoring Probe/ 2.0MHz Waterproof Probe/
3.0MHz Waterproof Probe): 2.0MHz $\pm 10\%$ / 2.0MHz $\pm 10\%$ / 3.0MHz $\pm 10\%$

P-: <1MPa

$I_{ob} < 20 \text{ mW/cm}^2$

$I_{spta} < 100 \text{ mW/cm}^2$

Working Mode: Continuous wave Doppler

Effective Radiating Area of Transducer (2.0MHz Waterproof Monitoring Probe/ 2.0MHz
Waterproof Probe/ 3.0MHz Waterproof Probe): 113 mm² $\pm 15\%$ / 245mm² $\pm 15\%$ /
245mm² $\pm 15\%$