



Technical data

FRED® easyport® plus

System

Versions

FRED® easyport® plus:

- **AED FIRST:** AED semi-automatic with or without ECG display (configurable)
- **AED AUTO:** AED fully automatic with or without ECG display (configurable)
- **AED MANUAL:** AED semi-automatic and manual with ECG display

Device

Dimensions: 46 x 150 x 143 mm (h x l x w)

Weight:

- Approx. 0.780 kg with battery (battery = 93 g)
- Approx. 0.870 kg with battery and electrodes
- Approx. 1.510 kg with bag, electrodes & feedback sensor (feedback sensor = 161 g)

Ambient conditions

Temperature:

- Operation: -5 to 50 °C;
- Limited operation: -10 °C to -5 °C for 1 hour or -20 °C to -10 °C for 20 minutes
- Transport/storage: -10 to 50 °C/5 to 50 °C

Humidity:

- Operation: 10 to 95% non-condensing
- Transport/storage: 10 to 95% non-condensing

Pressure:

- Operating: 540 to 1060 hPa
- Transport/storage: 500 to 1060 hPa

Dust and water protection: IP44

Electrical data

Power supply:

- Lithium/MnO₂ 12V, 16.8 Wh (non rechargeable)
- Lithium-Ion 11.1V, 12.9 Wh (rechargeable)

Battery capacity:

(corresponding to laboratory tests at 25 °C)

Lithium/MnO₂:

- approx. 80 shocks at max. energy with 2 minutes monitoring between shocks with total running time of approx. 4 h 50 minutes
- **Standby:** with weekly self-tests approx. 1 year, 1 month
- **Standby:** with monthly self-tests approx. 2 years, 6 months

with Li-Ion (rechargeable):

- approx. 70 shocks at max. energy with 2 minutes monitoring between shocks with total running time of approx. 3 h
- **Standby:** with weekly self-tests approx. 1 year, 1 month
- **Standby:** with monthly self-tests approx. 1 year, 6 months

Display/voice prompts

Display:

- High resolution colour LCD 320x 240, 3.5 "
- ECG curve display 61 x 15 mm (configurable)
- Action picture
- CPR feedback information

Voice prompts languages: The device can be provided with various languages

Display/voice prompts

Metronome: configurable pace for CPR

Interfaces & data recording

Recorded data: 8 hours ECG signal recording and technical events on a internal 8 GB memory SD card

USB

- USB A 2.0 host (max. 500mA) for LifePoint sensor
- USB mini B 2.0 device only for service

Wireless

- Bluetooth 4.0

Defibrillation

Defibrillation mode

Semi-automatic or fully automatic AED version

Manual defibrillation

Waveform

BTE (Biphasic Truncated Exponential)

Multipulse Biowave®

Energy

AED adult: 150/200/200 J - other energy settings can be configured

AED child: 50/50/50 J - other energies settings can be configured - automatic adaptation when paediatric pads are connected.

Pads

Type: for adults and children

Cable length: 2 m

Size pads: 80 cm² (adult) and 42 cm² (child) active surface

CPR feedback (optional)

Sensor: Argus LifePoint®

Measurements: Depth, speed and recoil^a during chest compression

a. Except for France, Germany, UK and USA

Standards

Certification:

Classification according to Directive 93/42/EEC: IIb

Standards:

- IEC60601-1: Electrical safety
- IEC60601-1-2: EMC
- IEC 60601-1-11: Requirements for MD devices in home healthcare environment
- IEC 60601-1-12: Environmental condition for emergency medical devices
- IEC60601-2-4: Defibrillators infrequent (non-rechargeable battery/frequent use (rechargeable battery)
- IEC 60529: Protection indication
- EN 13718-1 Requirements for medical devices used in air ambulances
- EN 1789 Medical vehicles and their equipment
- RTCA DO-160 A1 Environmental Conditions and Test Procedures for Airborne Equipment

Notified body: CE 0123

