



## Technical data

# FRED® PA-1 / Online

## System

### Versions

**FRED® PA-1:** Standalone version

**FRED® PA-1 Online:** Connected via cellular network technology to the LifeDataNet® G2 Server for devices pool management and intervention data transmission.

### Device

**Dimensions:** 310 x 255 x 100 mm (h x l x w)

**Weight:** 2.5 kg (incl. battery)

### Ambient conditions

#### Temperature:

- Operation: -5 to 40 °C;
- Transport/storage: -20 to 50 °C

#### Humidity:

- Operation: 30 to 95 % non-condensing
- Transport/storage: 0 to 95 % non-condensing

#### Pressure:

- Operating: 700 to 1060 hPa
- Transport/storage: 500 to 1060 hPa

**Dust and water protection:** IP55

### Electrical data

**Power supply:** Replaceable Li-MnO2 battery 15 V, 2.8 Ah

**Battery capacity:** more than 140 shocks at maximum energy and 6 hours of operation, if device is stored/used in optimal temperature conditions between 15 to 25 °C.

#### Standby duration:

- 6 years with weekly self-tests (corresponding to laboratory tests at 25°C) for FRED® PA-1
- 3 years with weekly self-tests for FRED® PA-1 Online (corresponding to laboratory tests at 25°C)

### Display/voice prompts

LED and pictograms with voice prompts to guide the user.

**Voice prompts languages:** The device can be provided with different languages. Optional configuration with 3 languages, selectable after switching ON the device.

**Metronome:** configurable pace for CPR

### Interfaces & data recording

**Interface:** SD card

**Recorded data:** 2 hours ECG signal recording and 500 technical events

### FRED® PA-1 Online

#### Interface:

- Quad band GSM/GPRS/EDGE 850/900/1800/1900 MHz
- UMTS/HSPA+ 850/900/AWS1700/1900/2100 MHz

#### LifeDataNet® G2:

- is hosted by an approved provider for hosting health and medical data
- complies with the highest security standards (ISO 27001).
- server to device communication is certified with an SSL certificate and encrypted over AES 128 bits.

## Defibrillation

### Defibrillation mode

AED

Semi-automatic or fully automatic version

### Waveform

BTE (Biphasic Truncated Exponential)

### Energy

**AED adult:** 150/200/200 J - other energies 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 adult and child

**Cable length:** 2 m

**Size pads:** 80 cm<sup>2</sup> active surface

**RFID tag:** for pads shelf life monitoring

### FreeCPR

Optional information on the chest compression frequency using impedance variation acquired with defibrillation pads.

## Standards

### Certification:

**Classification according to Directive 93/42/EEC:** II b

#### Standards:

- IEC60601-1: Electrical safety
- IEC60601-1-2: EMC
- IEC60601-2-4: Defibrillators
- IEC 60529: Protection indication

**Notified body:** CE 0459

