PHILIPS

Efficia

Defibrillator/monitor

DFM100

At the core of your critical care emergency response

To deliver high levels of care, you need to make quick, informed decisions – at the scene of an emergency and across the entire course of treatment. You need your equipment to be easy to use as you care for a patient, monitor developments in the patient's condition during transport to the hospital, and as you care for your patient in the hospital. We designed the Efficia DFM100 defibrillator/monitor so you can meet the demands of patient care in the pre-hospital and hospital environment effectively and consistently. With field-proven Philips technology, the Efficia DFM100 offers core functionality with a scalable feature set and improved cost of ownership, allowing you to enhance patient care, no matter where the patient is located.

Key advantages

- Dependable and easy to use
- Scalable feature set
- Enhanced cost of ownership

Specifications

General

Parameter	Specification
Approximate dimensions	23.5 cm (H) x 29 cm (W) x 20.5 cm (D); 9.25 in (H) x 11.4 in (W) x 8 in (D)
Approximate weight (without battery)	5.66 kg; 12.5 lbs
Standard operator position	Within one meter (3 feet) of the device.
Power	Rechargeable lithium-ion battery; AC power using a protectively grounded outlet.
Alarm tone and voice message volume range	Maximum - 85 dB(A), minimum - 45 dB(A).
Alarm tone volumes:	Imminent shutdown – Continuous tone alternating between 1000 and 2100 Hz. High priority – tone of 960 Hz lasting 0.5 second repeated every second. Medium priority – tone of 480 Hz lasting 1 second repeated every two seconds. Low priority – tone of 480 Hz lasting 0.25 second repeated every two seconds.
Visual alarm characteristics	High priority (Red) – flashing at 2 Hz with 50% duty cycle (a .25-second flash twice every second). Medium priority (Yellow) – flashing at 0.5 Hz with 50% duty cycle (a 1-second flash every other second). Low priority (Cyan) – constant on.

Defibrillator

Parameter	Specification
Waveform	Biphasic truncated exponential. Waveform parameters adjusted as a function of patient impedance.
Shock delivery	Via multifunction electrode pads or paddles.
Shock series	Configurable energy escalation in a series.
Leads off sensing and PCI sensing for pads/paddles:	Apply 500nA rms (571Hz); 200uA rms (32KHz)

Delivered energy accuracy

Nominal delivered energy vs. load impedance

Selected energy	Load impedance (ohms) ±2%						
	25	50	75	100	125	150	175
1 J	1.2	1.3	1.3	1.2	1.1	1.0	0.9
2 J	1.7	2.0	2.1	2.0	1.9	1.7	1.6
3 J	2.6	3.0	3.1	3.2	3.2	3.1	2.9
4 J	3.5	4.0	4.2	4.3	4.4	4.5	4.3
5 J	4.3	5.0	5.2	5.4	5.5	5.6	5.4
6 J	5.2	6.0	6.3	6.5	6.6	6.7	6.5
7 J	6.1	7.0	7.3	7.6	7.8	7.8	7.6
8 J	6.9	8.0	8.4	8.6	8.9	8.9	8.7
9 J	7.8	9.0	9.4	9.7	10	10	9.8
10 J	8.7	10	10	11	11	11	11
15 J	13	15	16	16	17	17	16
20 J	17	20	21	22	22	22	22
30 J	26	30	31	32	33	33	33
50 J	43	50	52	54	55	56	54
70 J	61	70	73	76	78	78	76
100 J	87	100	105	108	111	111	108
120 J	104	120	126	130	133	134	130
150 J	130	150	157	162	166	167	163
170 J	147	170	178	184	188	189	184
200 J	173	200	209	216	222	223	217

The delivered energy accuracy is ±10% or ±1J whichever is greater for all energy settings.

Charge times:

Less than 5 seconds to the recommended adult energy level (150 joules) with a new fully-charged battery installed.

Less than 6 seconds to the selected energy level (up to 200 joules) with a new fully-charged battery installed, even after the delivery of 15 discharges at maximum energy.

Less than 15 seconds to the selected energy level while connected to AC power only, even when operating on 90% of the rated mains voltage.

The device powers on in manual defibrillation mode ready to deliver shock in less than:
- 23 seconds with AC power only and at 90% of rated mains voltage.
- 15 seconds with a new, fully-charged battery even after 15 discharges of maximum energy.

Time from the initiation of analysis in AED mode until ready to deliver shock is less than 20 seconds with:
- AC power only and at 90% of rated mains voltage.
- A new, fully charged battery even after 15 discharges of maximum energy.

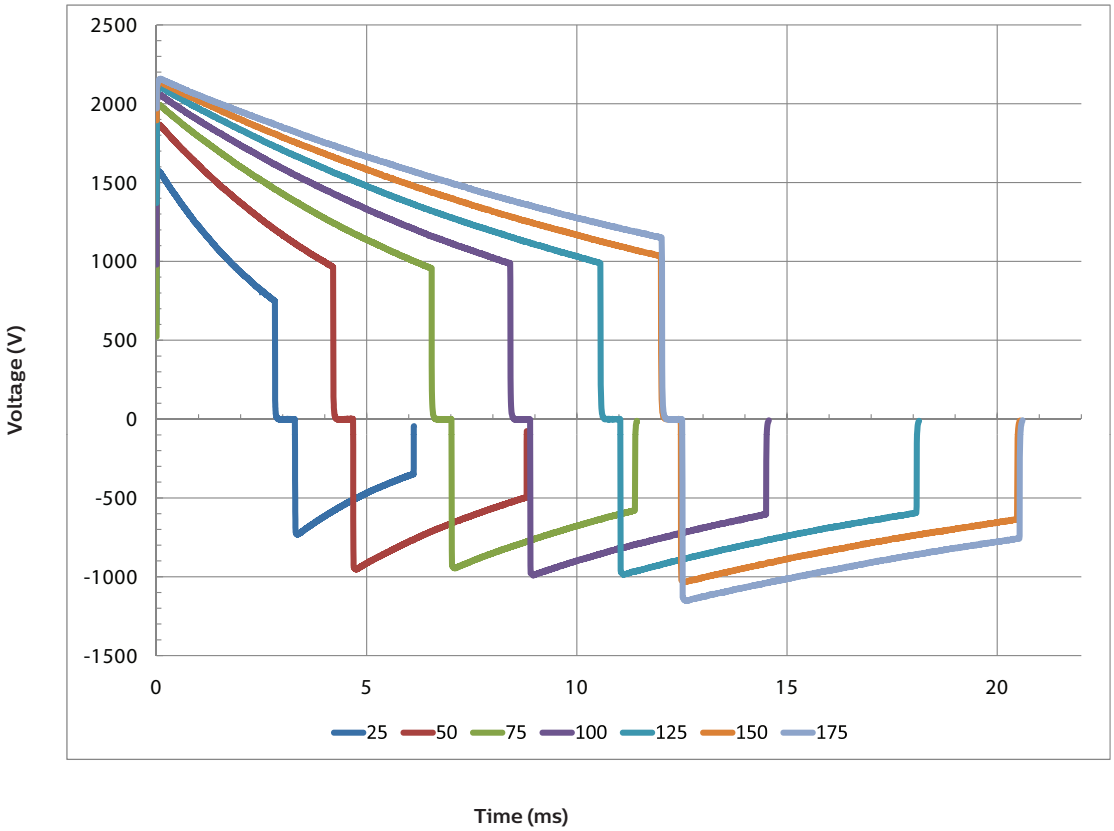
The device powers on in AED mode ready to deliver shock in less than:
- 32 seconds with AC power only and at 90% of rated mains voltage.
- 24 seconds with a new, fully charged battery even after 15 discharges of maximum energy.

Patient impedance range

Minimum: 25 ohm (external defibrillation); 15 ohm (internal defibrillation);
Maximum: 250 ohm. Actual functional range may exceed these values.

Smart biphasic waveform

Philips smart biphasic waveform at 200J into 25-175 ohms



Manual defibrillation mode

Parameter	Specification
Manual output energy (selected)	1-10, 15, 20, 30, 50, 70, 100, 120, 150, 170, 200 Joules; maximum energy limited to 50J with internal paddles.
Controls	On/off therapy knob, charge, shock, sync, ECG lead select, patient selection, print, mark events, reports, alarms, smart select knob.
Energy selection	Front panel therapy knob.
Charge control	Front panel button; button on external paddles.
Shock control	Front panel button; buttons on external or switched internal paddles.
Synchronized control	Front panel sync button.
Synchronized shock timing:	Maximum time from R-wave detected to shock delivered is 25ms, as measured with oscilloscope from peak of input QRS wave to leading edge of defibrillation discharge into a 50 ohm test load.
Indicators	Text prompts, audio alerts, QRS beeper, battery status, ready for use (RFU), external power, sync mode.
Armed indicators	Charging/charged tones, flashing shock button on front of panel and on external paddles, energy level indicated on the display.

AED mode

Parameter	Specification
AED energy profile	150 joules (factory default) for adult/50 J for infant/child nominal into a 50 ohm test load.
AED controls	On/off, shock.
Text and voice prompts	Extensive text/audible messages guide user through a user-configured protocol.
Indicators	Monitor display messages and prompts, voice prompts, battery status, RFU, external power.
Armed indicators	Charging/charged tones, flashing shock button, energy level indicated on the display.
ECG analysis	Evaluates patient ECG and signal quality to determine if a shock is appropriate and evaluates connection impedance for proper defibrillation pad contact.
Shockable rhythms	SMART analysis is designed to shock ventricular fibrillation, ventricular flutter and polymorphic ventricular tachycardia. It is designed to avoid delivering a shock for rhythms that are commonly accompanied by a pulse or rhythms that would not benefit from an electrical shock.
Shock advisory algorithm sensitivity	Meets AAMI DF39 requirements and AHA recommendations; adult: ventricular fibrillation - 90% with lower confidence limit (LCL) of 87%, polymorphic ventricular tachycardia and ventricular flutter - 75% with LCL of 67%; infant/child: ventricular fibrillation - 90% with LCL of 87%.
Shock advisory algorithm specificity	Meets AAMI DF39 requirements and AHA recommendations; normal sinus rhythm - 99% with LCL of 97%; Asystole - 95% with LCL of 92%; other non-shockable rhythms - 95% with LCL of 88%.

ECG and arrhythmia monitoring

Parameter	Specification
Inputs	Up to 3 ECG waves may be viewed on the display and up to 2 waves printed simultaneously. Lead I, II or III is obtained through the 3-wire ECG cable and separate monitoring electrodes. With a 5-Lead ECG cable, leads aVR, aVL, aVF and V can also be obtained. Pads ECG is obtained through two multifunction electrode pads.
Lead fault	Messages and dashed lines appear on the display if an electrode or lead becomes disconnected.
Pad fault	Dashed line appears on the display if a pad becomes disconnected.
Heart rate display	Digital readout on the display from 16 to 300 bpm (adult patient category) or 16 to 350 bpm (infant/child), with an accuracy of ±10% or ±5 bpm whichever is greater.
Heart rate/arrhythmia alarms	HR high/low, asystole, VFIB/V-TACH, VTACH, extreme tachy, extreme brady, PVC rate, pacer not capture, pacer not pacing.
Common mode rejection	105 dB for leads ECG, 96 dB for pads ECG.
ECG size:	1/4x, 1/2x, 1x, 2x, 4x, auto gain (1x gain is 10mm/mV on the printed strip).
ECG waveforms:	Displayed at a fixed timebase of 25 mm/second (printer) ±5%, 25 mm/second (display) ±10%.
ECG leads off sensing:	3- and 5-lead wires apply a <35nA DC current patient electrodes, <1.0uA other electrodes.
Maximum T-wave amplitude	Device rejects up to 80% of R-wave amplitude for synchronized cardioversion; up to 55% of R-wave amplitude for demand pacing; up to 34% of R-wave amplitude for arrhythmia analysis. Maximum T-wave amplitude when a QRS test signal is 1 mV amplitude and 100 ms duration, with a heart rate of 80 1/minute used: 18mm.
Frequency response:	• ECG AC line filter: 50 Hz or 60 Hz. • ECG for Display: 0.15-40 Hz, 0.05-40 Hz (IEC 60601-2-27:2011 201.12.1.101.8 a, b), 2.0-20.0 Hz • ECG for Printer: 0.05-150 Hz - Diagnostic, 0.05-40 Hz - ST Monitor (IEC 60601-2-27:2011 201.12.1.101.8 a, b), 0.15-40 Hz - Monitor, 2.0-20.0 Hz – EMS

ECG and arrhythmia monitoring (continued)

Parameter	Specification
Heart rate accuracy and response to irregular rhythm:	Meets AAMI standard for ventricular bigeminy (HR=80 bpm); slow alternating ventricular bigeminy (HR=60 bpm); rapid alternating ventricular bigeminy (HR=120 bpm); bidirectional systoles (HR=90 bpm) as measured after a 20 second stabilization time.
Heart rate averaging:	For heart rates ≥50 bpm, heart rate is determined by averaging the 12 most recent R-R intervals. Beats N, P, and V are included. When heart rate drops below 50 bpm, the four most recent R-R intervals are used in the average. Note: For ventricular tachycardia alarms, which have a user-definable PVC run length limit, the heart rate is based on the user-selected PVC length up to 9 PVCs maximum. Heart rate display update time is 1 second maximum.
Pace pulse detection Sensitivity	1 mV for a width of 100 µs; 200 µV for a 500 µs width and 200 µV for widths of 500 µs to 2 ms.
ECG analog output bandwidth	0.5 to 70 Hz
ECG analog output gain	1v output per 1mV input ±10%
ECG analog output delay	Propagation delay time is <25ms from ECG input to ECG analog output.
Pacemaker pulse rejection capability:	Amplitude from ± 2 mV to ± 700 mV, width from 0.1 ms to 2.0 ms as per IEC 60601-2-27:2011 201.12.1.101.13/YY 1079 4.1.4.1, except the full overshoot range of IEC 60601-2-27 methods A and B.
Pacer pulse detector rejection of fast ECG signals	Slew rate of 1.1 V/s.
Heart rate response time:	7 seconds for a high heart rate alarm when the rate changes from 80 to 120 bpm, with the alarm limit set at 100 bpm; 6 second for a low heart rate alarm when the rate changes from 80 to 40 bpm, with the alarm limit set at 60 bpm.
Time to alarm for tachycardia:	4 seconds for 206 bpm (1 mV, halved amplitude and double amplitude) and 195 bpm (2 mV, halved amplitude and double amplitude) as measured following a normal 80 bpm rate with upper alarm limit set at 100 and lower alarm limit set at 60 bpm.
Patient isolation (defibrillation proof):	• Lead ECG: type CF • SpO_2: type CF • CO_2: type BF • NBP: type CF • Pads/paddles: type BF • Internal paddles: type CF
Other consideration:	The Efficia DFM100 is suitable for use in the presence of electrosurgery. Burn hazard protection is provided via a 1K current-limiting resistor contained in each ECG lead wire. Proper lead placement is important to reduce burn hazards in the event of a defect in the electrosurgical equipment. Do not entangle the ECG cables with the electrosurgical equipment wires; do not place the ECG cabling near the electrosurgical equipment's grounding plate.

Display

Parameter	Specification
Size:	Approximately 7 in (17.8 cm) diagonal viewing area.
Type:	Color TFT LCD.
Resolution:	800 x 480 pixels (SVGA) with 32 brightness levels per color.
Sweep speed:	25 mm/s ± 10% nominal (stationary trace; sweeping erase bar) for ECG and SpO_2 ; capnogram wave is 6.25 mm/s ± 10%.
Wave viewing time:	6.5 seconds ± 10%.

Battery

Parameter	Specification
Type:	Rechargeable, lithium-ion; see battery label for capacity information.
Approximate dimensions:	28.5 mm (H) x 80 mm (W) x 145.7 mm (L); 1.1 in (H) x 3.1 in (W) x 5.7 in (L)
Approximate weight:	Approximately 0.44kg (1 lb)
Capacity:	With a new fully charged battery, at 20 °C (68 °F), one of the following: • 100 full-energy charge/shock cycles. • 2.5 hours of monitoring (ECG, $EtCO_2$ and SpO_2 continuously monitored and NBP sampled every 15 minutes) followed by 20 full-energy charge/shock cycles. • Two hours of pacing (180ppm at 140mA with 40msec pulse) and monitoring (ECG, $EtCO_2$ and SpO_2 continuously monitored and NBP sampled every 15 minutes).
Charge time, with device turned off and AC power connected:	With temperature at 25 °C (77 °F), less than 3 hours to 100% capacity; less than 2 hours to 80% capacity.
Battery indicators:	Battery gauge on battery, capacity indicator on display, power indicators on front of device; flashing RFU indicator, audio beep and low Battery messages on the display for low battery condition. When a low battery message first appears there is still enough energy for at least 10 minutes of monitoring and 6 maximum energy discharges.

Thermal array printer

Parameter	Specification
Continuous ECG strip:	The print key starts and stops the strip. The printer can be configured to be run real time or with a 10-second delay. The strip prints the primary ECG lead and a second wave with event annotations and measurements.
Auto printing:	The printer can be configured to automatically print on mark events, charge, shock and alarm.
Reports:	The following can be printed: • Event summary (long or short) • Vital signs trends • Operational check • Configuration • Status log • Device information
Speed:	25 mm/s with an accuracy of ±5%
Amplitude accuracy:	5% for offset voltages of ± 300 mV at 5Hz
Paper size:	50 mm (W) x 20 m (L)

Noninvasive pacing

Parameter	Specification
Waveform:	Monophasic
Current pulse amplitude:	10 mA to 200 mA if the pulse width is set to 20 ms (5 mA increments); accuracy ±10% or ±5 mA whichever is greater. For a 40 ms setting, the maximum pacing current is 140 mA.
Pulse duration	20 or 40 msec with ±10% accuracy
Rate:	30 ppm to 180 ppm (10 ppm increments); accuracy ±1.5%
Mode:	Demand or fixed
Refractory period:	340 msec (30 to 80ppm); 240 msec (90 to 180 ppm) ±10%
Universal-function electrodes (pads):	After 60 minutes of pacing with approved defibrillators, the multifunction electrodes (pads) exhibit a post-defibrillation DC offset of less than ± 800 mV at ≥ 4 seconds post-shock.

SpO_2 pulse oximetry

Parameter	Specification			
SpO_2 measurement range:	0-100%			
SpO_2 resolution:	1%			
SpO_2 update period:	1-2 seconds typical; maximum of ≤ 30 seconds			
Sensor accuracy[1]	Sensor	Accuracy	Sensor	Accuracy
	M1191B	±2%	989803160611	±3%
	M1191BL	±2%	989803160621	±3%
	M1192A	±2%	989803160631	±3%
	M1196A	±3%		
	M1196S	±3%		
Ambient light sensitivity:	Interference from fluorescent light is <2% SpO_2 under the following conditions: 0.3 and 1% perfusion, 50 nA/mA transmission, 10 to 1000 lx light intensity, 50/60Hz power line frequency ±0.5 Hz line frequency.			
SpO_2 alarm range:	• Low limit: 50-99% (adult and infant/child) • High limit: 51-100% (adult and infant/child)			
SpO_2 and pulse high/low alarm signal generation delay:	10 seconds			
SpO_2 response time (90 to 80%):	Average 18.9 seconds, standard deviation 0.88 seconds			
SpO_2 and pulse averaging time:	10 seconds			
Emitted light energy:	≤ 15 mW			
Wavelength range:	500-1000 nm (information about wavelength range can be useful to clinicians, especially those performing photodynamic therapy.)			
Desat alarm signal generation delay:	20 seconds			
Pulse rate measurement range:	30-300 bpm			
Pulse rate resolution:	1 bpm			
Pulse rate accuracy:	±2% or 1 bpm whichever is greater			
Pulse response time (90 to 120 bpm):	average 18.0 seconds, standard deviation 0.86 seconds			
Pulse alarm range:	• Low limit: 30-295 (adult and infant/child) • High limit: 35-300 (adult and infant/child)			

[1] Specified accuracy is the root-mean-square (RMS) difference between the measured values and reference values.

Accuracy outside the range specified for each sensor is not indicated. The above referenced sensors were validated for use with the Efficia DFM100 using the Philips picoSAT II SpO_2 module with Fourier Artifact Suppression Technology (FAST).

While the SpO_2 module is able to report values below 70% and alarm limits can be set below 70%, the accuracy of measurements less than 70% has not been validated.

SpO_2 accuracy was validated in human studies against arterial blood sample references measured with a CO-oximeter. In a controlled desaturation study, healthy adult volunteers with saturation levels between 70-100% SaO_2 were studied. The population characteristics for those studies were approximately 50% male and 50% female, ranging in age from 19-39 with skin tone from light to dark.

Pulse oximetry equipment measurements are statistically distributed, therefore only two-thirds of pulse oximeter equipment measurements can be expected to fall within ±Arms of the value measured by a CO-oximeter.

Functional test equipment designed for SpO_2 testing cannot be used to assess the accuracy of the SpO_2 readings.

The Efficia DFM100 is calibrated to display functional oxygen saturation.

$EtCO_2$

Parameter	Specification
Weight:	Mainstream: 78 g (2.75 oz.); Sidestream: 272 g (9.6 oz.)
Dimensions:	Mainstream: 43 mm (W) x 33 mm (H) x 23 mm (L); 1.69 in (W) x 1.29 (H) x .90 in (L); Sidestream: 66 mm (W) x 38 mm (H) x 89 mm (L); 2.6 in (W) x 1.5 in (H) x 3.5 in (L)
Range:	0-150 mmHg
Resolution:	1 mmHg (0.1 kPa)
Accuracy:	0 - 40 mmHg ± 2 mmHg; 41 - 70 mmHg ± 5% of reading; 71 - 100 mmHg ± 8% of reading; 101 - 150 mmHg ± 10 % of reading. Gas at 25°C.
Drift of measurement accuracy:	Over any 24 hour period, the specified measurement accuracy is maintained.
Warm-up time	2 minutes at 25°C.
System response time:	Sidestream: 3.5 seconds typical.
Alarm delay time:	(after alarm condition has been met) Mainstream – less than 5 seconds; Sidestream – less than 8 seconds; Measurement method: peak $EtCO_2$ value within a 10-second window.
Sample flow rate:	Sidestream - 50 ml/minute ±10ml
Alarm range:	• Low limit: 10-140 mmHg (adult, infant/child) • High limit: 20-145 mmHg (adult, infant/child)

AwRR

Parameter	Specification
Range:	0-150 rpm
Resolution:	1 rpm
Accuracy:	±1 rpm
Alarm range:	• Low limit: 0-99 rpm (adult, infant/child) • High limit: 10-100 rpm (adult, infant/child)
Alarm delay time:	(after alarm condition has been met) Mainstream - less than 5 seconds; Sidestream – less than 8 seconds; measurement method: AwRR - based on the last 8 detected breaths; apnea – Following the configured apnea delay time.

NBP

Parameter	Specification				
Pressure range:	**Measurement**	mmHg		kPa	
		Adult	Infant/Child	Adult	Infant/Child
	Systolic	30-255	30-135	4-34	4-18
	Diastolic	10-220	10-110	1.3-29.3	1.3-14.7
	Mean	20-235	20-125	2.7-31.3	2.7-16.7
Initial pressure:	160 mmHg/21.3 kPa for adults 120 mmHg/16 kPa for infant/child				
Maximum pressure:	300 mmHg/40 kPa				
Overpressure safety limits:	290 mmHg/38.6 kPa				
Cuff inflation time:	75 seconds maximum				
Pressure transducer accuracy:	±3 mmHg over the range 0-300 mmHg/0-40 kPa				

NBP (continued)

Parameter	Specification				
Alarm range:	**Measurement**	mmHg		kPa	
		Adult	Infant/Child	Adult	Infant/Child
	Systolic high limit	35-255, 160	35-135, 120	4.5-34, 21	4.5-18, 16
	Systolic low limit	30-250, 90	30-130, 70	4-33.5, 12	4-17.5, 9
	Diastolic high limit	15-220, 90	15-110, 70	2-29.5, 12	2-15, 9
	Diastolic low limit	10-215, 50	10-105, 40	1.5-29, 7	1.5-14.5, 5
	Mean high limit	25-235, 110	25-125, 90	3.5-31.5,15	3.5-16.5, 12
	Mean low limit	20-230, 60	20-120, 50	3-31, 8	3-16, 7
Auto mode repetition time:	1, 2.5, 5, 10, 15, 30, 60 or 120 minutes				
Maximum measurement time:	120 seconds				
Interconnect tube length:	989803177471 connect tubing 3.0 m (9.24 ft.)				

Patient data storage

Parameter	Specification
Internal event summary:	The Efficia DFM100 can store up to 8 hours of 2 continuous ECG waves, 1 pleth wave, 1 capnogram wave, research waves (AED mode only) events and trending data per event summary. There is a maximum capacity of approximately 50 event summaries of approximately 30 minutes in length.

USB device

Parameter	Specification
Correct drive:	Use the Philips USB Drive that came with your device.

Environmental

Parameter	Specification
Temperature:	Operating temperature for the device: 0 °C to 45°C (32°F to 113°F); operating temperature range for $EtCO_2$: 0°C to 40°C (32°F to 104°F); Storage/transport temperature range for the device without battery: -20°C to 70°C (-4°F to 158°F).
Setting time to 20°C	Time required for device to warm from -20°C before use is 80 minutes; time required for device to cool from 70°C before use is 80 minutes
Humidity:	15% to 95% relative humidity • $EtCO_2$ measurement meet all specifications during and after exposure to humidity conditions from 10-90% • Printer paper may jam if the paper is wet. • Thermal printer may be damaged if wet paper is allowed to dry while in contact with printer elements.
Atmospheric pressure range/ operation and storage:	1060 mbar to 572 mbar (-1253 to 14,986 ft; -382 to 4,568 m).
Shock:	Operating: half-sine waveform, duration ≤ 11ms, acceleration ≥ 15.3 G, 3 shocks per face. Non-operating: trapezoidal waveform, acceleration 30G, velocity change 7.42 m/s ±10% 1 shock per face.

Vibration:	Operating random		
	Frequency (Hz)	Slope (dB/octave)	PSD $(m/s^2)^2/Hz$
	10-100	—	1.0
	100-200	-3.0	—
	200-2000	—	0.5
	Test duration: 10 minutes/axis x 3 axes; 30 minutes total.		
	Non-operating random		
	Frequency (Hz)	Slope (dB/octave)	PSD (g^2/Hz)
	10-20	—	0.05
	20-150	-3.0	—
	150	—	0.0065
	Total RMS acceleration: 1.6 g; Test duration: 30 minutes x 3 axes		
	Non-operating swept sine		
	Frequency (Hz)	Amplitude	
	10-57	± .15 mm	
	57-150	2 g	
	Test duration: 4 sweeps per axis x 3 axes; each sweep: 10-150-10 Hz cycle at a sweep rate of 1 oct/minute		
Bump:	Half-sine, 15g peak, 6ms, 1000 hits (vertical with the device in its normal mounting position)		
Free fall:	IEC 68-2-32 free fall. Once on each face, total 6 faces (excluding bedrail hook). • 40 cm (16 in.) without cradle and side carry bags • 75 cm (29.5 in.) with cradle and side carry bags		
Water/solids ingress resistance:	Meets ingress protection level IP54 - protected against dust limited ingress (no harmful deposits) and against water sprayed from all directions (limited ingress permitted)..		
EMC:	Complies with the requirements of standard IEC 60601-1-2:2014/EN 60601-1-2: 2015 and IEC 60601-1-2: 2007/EN60601-1-2:2007.		
Transient operating conditions	The DFM100 meets all specifications for 20 minutes during transient operating conditions of a temperature range of -20°C to 50°C and a relative humidity range of 15% to 90%, non-condensing, but not requiring a water vapor partial pressure greater than 50hPa.		
Safety:	Meets EN 60601-2-4:2011/GB9706.8-2009, EN60601-1/A1:2013/GB9706.1-2007		
Other considerations:	• The Efficia DFM100 is not suitable for use in the presence of concentrated oxygen or a flammable anesthetic mixture with air, oxygen or nitrous oxide. • Hazards arising from software errors were minimized by the product's compliance with the software requirements contained in IEC 62304.		
Mode of operation:	Continuous		
AC line powered:	100-240 VAC, 50 or 60 Hz, 1 - 0.46 A, class I equipment		
Battery powered:	Minimum 14.4 V, rechargeable lithium ion		

Hazardous waste:	Pb*	Hg	Cd	Cr6+	PBB	PBDE
	●	○	○	○	○	○

● = more than one of the device's raw materials contains this harmful substances and concentration over the standard concentration limit.

○ = all the raw material concentrations of the device are within allowed limits.

*Internal component(s) of the device may contain a level of lead in solder allowed to be present in portable emergency defibrillators under RoHs exemption Annex IV 17.