



DFM 600

Defibrillator/Monitor

Standard Configuration

ECG, RESP, Thermal Recorder

Optional

12-Lead ECG, NIBP, TEMP, PR, EtCO₂, IBP, SPO₂

Safety Standards

ISO 13485:2016 approved, CE marking according to MDD93/42/EEC

Physical Characteristics

Size: 323 mm × 277 mm × 338 mm
 Weight: 7.2 kg
 Screen Size: 8.4" TFT Screen
 Resolution: 800 × 600
 Waveforms: 4 waveforms

Operation Environment

Temperature: 0~45°C
 Humidity: 10%~95%, non-condensation
 Water Resistance: IP44 (without external power)
 Solids Resistance: IP4X
 Power requirement: 100-240 V~, 50/60 Hz±1 Hz
 Battery type: Rechargeable Lithium-ion battery
 Battery capacity: 4500 mAh, d.c.14.8 V
 Battery number: Max 2
 Battery recharging Time: Less than 2 hours to 80% and less than 3 hours to 100% with equipment power off

Battery backup: Monitoring Mode: 12 hours;
 (Two new, fully charged battery) Defib Mode: 420 times (360J charge at intervals of 1 minute without recording);
 Pacing Mode: 9 hours (50 Ω load impedance,
 Pacing rate: 80 bpm,
 Pacing output: 60 mA, without recording)

Brightness: Manual from 1 to 10

Indicators

Two alarm indicators
 Power indicator
 Battery indicator
 Maintain indicator
 Error indicator
 QRS beep and alarm sound
 Operating key sound

Interface

USB interface
 RJ45 interface
 AC power input
 VGA interface
 Multi-functional connector





Data storage

Alarm Event:	200 groups
Patient profiles:	1000 groups
Wave Review:	48 hours
NIBP Review:	2000 groups
Trend Graph:	160 hours
Trend Table:	160 hours
ECG report:	500 cases of 12-lead ECG diagnosis report (Up to 5 case reports per patient)
Voice recording:	Max 240 min in total; (Up to 60 min for each patient)
Marked events:	Available
Power-off storage:	Yes
Alarm:	User-adjustable High and Low 3-level Limits; Prioritized audio and visual alarms
Network:	Connected to Central Monitoring System by hardware/wireless

Recorder

Type:	Built-in; Thermal array
Channel:	4 channel waveforms
Real-time recording:	3s, 16s, 32s, auto
Speed:	12.5/25/50 mm/s
Record width:	80 mm
Resolution:	8 dot/mm (Horizontal and vertical)
Background grid:	Configurable
External printer:	Yes

Defibrillator

Operating mode:	Manual Mode, AED Mode, Synchronous defibrillation
Waveform:	Biphasic truncated exponential waveform, with impedance compensation
Defibrillation pathway:	External defibrillation & Internal defibrillation
Electrode type:	External defibrillation electrode plate, multifunctional electrode pads and internal defibrillation electrode plate
External defibrillation electrode plate:	Supports charging, discharging, energy selection and other operational functions; Charging completion indicator

Charge Time: Less than 5 seconds to 200 Joules with a new, fully charged battery
(Battery power) Less than 8 seconds to 360 Joules with a new, fully charged battery

Energy accuracy: $\pm 1.5J$ or $\pm 10\%$ of setting, whichever is higher, into $50\Omega \pm 2J$ or 15% of setting, whichever is higher, into 25 Ω , 75 Ω , 100 Ω , 125 Ω , 150 Ω , 175 Ω ,

Patient Impedance Range: 25~300 Ω (External defibrillation); 15~250 Ω (Internal defibrillation)

Defibrillation proof: Type CF: ECG, RESP, SpO₂, NIBP, IBP, TEMP, PR;
Type BF: CO₂

Manual Mode

External defibrillation: 1J~360J

Internal defibrillation: 1J~50J

Synchronous Cardioversion: Energy transfer begins within 60ms of the QRS peak; Energy transfer begins within 25ms of the External Sync signal

AED

Output Energy: User configurable
AED Shock Series: Configurable

Ambulance Fixing Bracket (Optional)



DFM 600 Ambulance Fixing Bracket (It is used together with DFM 600 Packet)





Noninvasive Pacing

Waveform:	Monophasic square wave pulse
Pulse Width:	20 ms
Accuracy:	±5%
Pacing Mode:	Demand or fixed
Pacing rate:	40 bpm to 170 bpm
Accuracy:	±1 bpm or ±1.5% (whichever is higher)
Pacing output:	0 mA to 200 mA
Accuracy:	±5% or ±5 mA, whichever is higher
4:1 pacing:	Pacing pulse frequency reduced by factor of 4 when activated

Monitoring ECG

Lead Type:	3 lead ECG, 5 lead ECG, 12 leads ECG, AUTO
Lead selection:	12-Lead: I; II; III; aVR; aVL; aVF; V1~V6 5-lead: I; II; III; aVR; aVL; aVF; V 3-lead: I; II; III
Multi-lead synchronization analysis:	Available ECG size: Auto, 1.25 mm/mV (×0.125), 2.5 mm/mV (×0.25), 5 mm/mV (×0.5), 10 mm/mV (×1), 20 mm/mV (×2), 40 mm/mV (×4), Less than ±5%
Accuracy:	Less than ±5%
Sweep speed:	625mm/s, 125mm/s, 25mm/s, 50mm/s
Accuracy:	Less than ±10% Heart Rate
Measurement & alarm range:	Adult: 15~300bpm Pediatric/Neonate: 15~350 bpm
Resolution:	1 bpm
Accuracy:	±1% or ±1bpm (whichever is higher)
Bandwidth:	MON: 0.5~40 Hz DIA: 0.05~150 Hz Treat: 1~20 Hz ST: 0.05~40 Hz
CMRR:	MON: >105 dB DIA: >90 dB Treat: >105 dB ST: >105 dB
Input Impedance:	≥5 MΩ
Input signal range:	±8 mV
HR trigger value:	200 μV
Lead off detection current:	Measuring electrode: <0.1 μA Driving electrode: <1 μA
Pacemaker pulse suppression switch:	Manual selection when the pacemaker is turned on
Analog output:	Magnification: 1:1000; Accuracy: ±5% Bandwidth: 0.5 Hz~40 Hz Delay: ≤35 ms
ST Detection:	-2.0 mV~+2.0 mV

Resolution: 0.01 mV
Accuracy: -0.8 mV ~ +0.8 mV: ±0.02 mV or ±10%; Others: Unspecified

System noise: Less than 25 µV
Calibration voltage: 1 mV;
Accuracy: ±5%
Arrhythmia Analysis: 26 Types
Pacemaker detection: Detectable

Defibrillation ECG

Lead Type: Single lead ECG
Heart Rate measurement & alarm range: Adult: 15~300 bpm
Pediatric/Neonate: 15~350 bpm

Resolution: 1 bpm
Accuracy: ±1% or ±1 bpm (whichever is higher)
Bandwidth: Defib: 1~20 Hz
CMRR: Defib: >105 dB
Input Impedance: ≥5 MΩ
Input signal range: ±8 mV
HR trigger value: 200 µV
Arrhythmia Analysis: 5 Types

Respiration

Method: RA-LL Impedance Method
RR measurement range: Adult: 0~120 bpm
Pediatric/Neonate: 0 ~150 bpm
Accuracy: 7~150 rpm: ±2 rpm or ±2% (whichever is greater)
0~6 rpm: unspecified
Apnea Alarm: Adult: 10s~60s Ped/Neo: 10s~20s
Accuracy: ±5s
Alarm: Audible and visual alarm; alarm events reviewable

NIBP

Method: Automatic oscillometric
Work mode: Manual / Automatic/Continuous
Measurement Time: Adjustable (1~720min)
Maximum measurement time: Adu/Ped: 120s; Neo: 85s
Measurement Unit: mmHg / kPa selectable
Measurement types: Systolic, Diastolic, Mean
Range of systolic pressure: Adult Mode: 40~270 mmHg
Pediatric Mode: 40~200 mmHg
Neonate Mode: 40~135 mmHg
Range of diastolic pressure: Adult Mode: 10~215 mmHg
Pediatric Mode: 10~150 mmHg
Neonate Mode: 10~100 mmHg
Range of mean pressure: Adult Mode: 20~235 mmHg
Pediatric Mode: 20~165 mmHg
Neonate Mode: 20~110 mmHg
Over pressure protection: Both Hardware and software over pressure protection
Accuracy: ±3% or ±3 bpm, whichever is greater
Resolution: 1 bpm
Alarm: Systolic, Diastolic, Mean PR form
NIBP: 40 bpm~240 bpm

Nellcor SpO₂

Measurement range: 0~100%
Resolution: 1%
Accuracy: ±2% (70~100%, Adu/Ped, motionless)
±3% (70~100%, Neo, motionless)
1~69% unspecified
Alarm range: 20~100%
PR Measurement Range: 20~300 bpm
Resolution: 1 bpm
Accuracy: ±3 bpm (20~250 bpm)
Unspecified (251~300 bpm)
Alarm range: 20~350 bpm

Masimo SpO₂

Measurement & alarm range: 1~100%
Resolution: 1%
Accuracy: ±2% (70~100%, Ped/Adu, non-motion)
±3% (70~100%, Neo, motionless);
1~69% unspecified
Alarm range: 1~100%
PR Measurement Range: 25~240 bpm
Resolution: 1 bpm
Accuracy: ±3% (non-motion) ±5% (in motion);
Alarm range: 20~350 bpm
PI value: Resolution: 0.02~20%
0.01% (0.02%~9.99%)
0.1% (10.0%~20.0%)
Accuracy: Unspecified
SIQ: Available

Okuman SpO₂

Measurement & alarm range: 0~100%
Resolution: 1%
Accuracy: ±2% (70~100%, Ped/Adu, non-motion)
±3% (70~100%, Neo, non-motion);
0~69% unspecified
PR Measurement Range: 20~254 bpm
Resolution: 1 bpm
Accuracy: ±2 bpm
Alarm range: 20~350 bpm
PI value: 0.05~20%
Resolution: 0.01% (0.05%~9.99%)
0.1% (10.0%~20.0%)
Accuracy: Unspecified
SIQ: Available

Temperature (Dual Channel)

Measurement & alarm range: 0~50°C
TEMP sensor: Standard configuration- skin TEMP sensor
Resolution: 0.1°C
Accuracy: ±0.1°C (except sensor error)
Channel type: T1, T2, TD (Temperature Difference)

MASIMO EtCO₂ (Sidestream)

Measurement range: 0~190 mmHg, 0~25% (at 760 mmHg)
 Accuracy: ± (2.25 mmHg +4% of reading)
 Resolution: 1 mmHg
 awRR range: 0~150 rpm
 awRR accuracy: ±1 rpm
 Response time: <240 msec (10% to 90%)
 Delay time: <2s

Respironics EtCO₂ (Sidestream)

Measurement range: 0~150 mmHg, 0to 25% (at 760 mmHg)
 Accuracy: ± 2 mmHg (0 - 40 mmHg)
 ± 5% of reading (41 - 70 mmHg)
 ± 8% of reading (71 -100 mmHg)
 ±10% of reading (101~150 mmHg)
 Resolution: 1 mmHg
 awRR range: 0~150 rpm
 awRR accuracy: ±1 rpm
 Response time: <240 msec (10% to 90%)
 Delay time: <2s

IBP

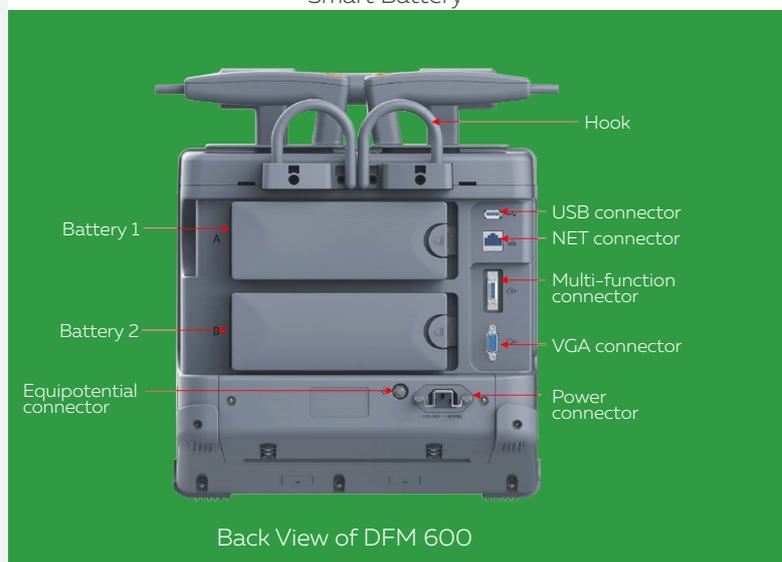
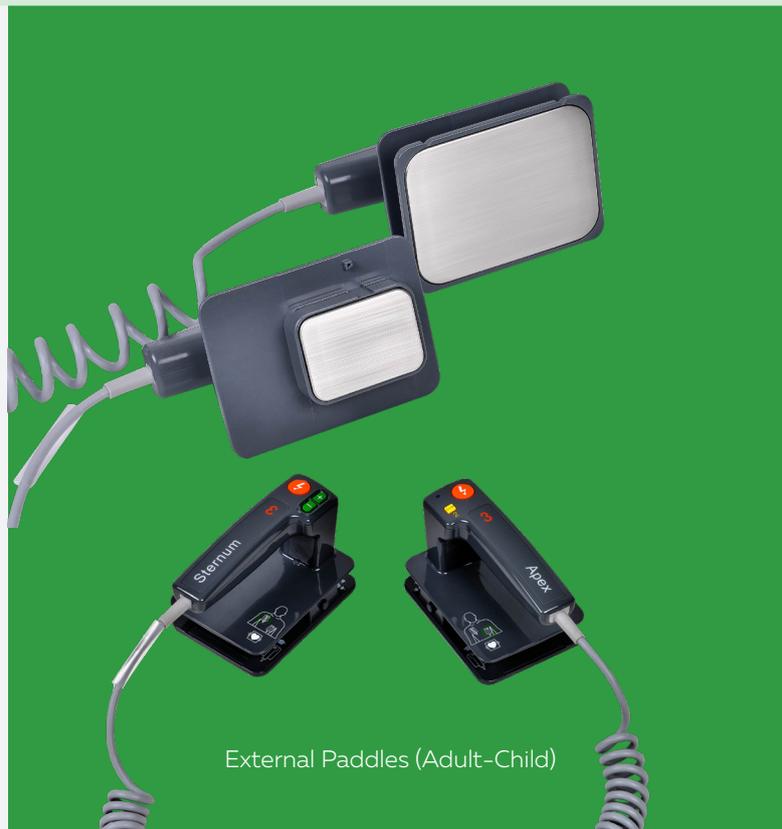
Channel: 2 Channels
 Measured Pressure: ART, PA, CVP, RAP, LAP, ICP, LV, AO, UAP, BAP, FAP, UVP, IAP, P1, P2, P3, P4

Measurement Unit: mmHg/ kPa/ cmH₂O selectable
 Measurement range: ART: 0~300mmHg
 PA: -6~120 mmHg
 CVP: -10~40 mmHg
 RAP: -10~40 mmHg
 LAP: -10~40 mmHg
 ICP: -10~40 mmHg
 LV: 0~300 mmHg

AO: 0~300 mmHg
 UAP: 0~300 mmHg
 BAP: 0~300 mmHg
 FAP: 0~300 mmHg
 UVP: -10~ 40 mmHg
 IAP: -10~40 mmHg
 P1, P2: -50~300 mmHg
 Accuracy: ±2% or ±1 mmHg (whichever is greater)

Resolution: 0.1 kPa or 1 mmHg (-50 mmHg~+300 mmHg)
 Alarm Range: -50 mmHg~+300 mmHg
 PR from IBP: 20 bpm~350 bpm
 Resolution: 1 bpm
 Accuracy: ±1% or ±1 bpm, whichever is higher

PPV/SPV measurement: Available
 PAWP measurement: Available



OKUMAN

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Catalog ID: DFM 600 004-092022-EN