

Specifications: C22



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Fetal Monitor

C22



Standard Configuration		AC power input socket	
FHR1, TOCO, FM, Recorder, 3/5-lead ECG, NIBP, Resp, HR, Temp (Single Channel), Comen SpO2		Two USB ports	
Optional Configuration		RJ45 port	
12-lead ECG, Fetal Stimulator, FHR2, Nellcor/ Masimo SpO2, Trolley		Data storage	
Safety Standards		Alarm Event Review	300 groups
ISO 13485:2003 approved, CE marking according to MDD93/42/EEC		Full Disclosure	
Physical Characteristics		Waveform Review	48 hours
Product Size	340mm×270mm×95mm	NIBP Review	2000 groups
Net Weight	5.5kg	Trend Table	120 hours
Operation Environment		Freeze Review	240s waveform review (Maternal); 60 hours waveform review (Fetal)
Working Temperature	5—40°C	Power-off storage	Yes
Humidity	≤93%	Alarm	User-adjustable High and Low 3-level Limits;
Power Supply	100—240V~, 50/60Hz±1Hz		Prioritized audible and visual alarm
Battery Type	Rechargeable & Lithium-ion battery	Network	Connects to Central Monitoring System by hardwire/wireless
Battery Capacity	4400mAh	Recorder	
Battery Recharging Time	Maximum 5.5 hours for charging	Type	Built-in; thermal array
Battery backup	4 hours for continuous working	Channel	5 channel waveforms (2FHR, MHR, TOCO, FM)
Display	12.1" color TFT touch screen	Mode	Fast, real time
Resolution	800×600	Speed	1/2/3cm/min selectable, 25mm/s(review)
Trace	7 Waveforms (Max)	Record width	150mm
Indicators		Ultrasound	
	Two Alarm indicators	Technique:	Ultrasound Pulse Doppler
	Power indicator	Pulse Repetition Rate:	1.32KHz
	Battery indicator	Ultrasound Frequency:	1.0MHz ±1%
	QRS beep and alarm sound & FHR Sound	Mechanical Index (MI)	<1
	Operating key sound	Soft-tissue Thermal Index (TIS)	<1
Interface			
	Parameter cable interface		

Bone Thermal Index (TIB)	<1	Uterine pressure measurement nonlinear error	Upper limit $\geq$ (low level lower limit+1 - medial alarm higher limit); Lower limit:0. error: $\leq\pm 1$
FHR Measurement Range:	30bpm ~ 250bpm		
Resolution:	1bpm		$\leq\pm 10\%$
Accuracy:	± 1 bpm		
Alarm Measurement Range:	31bpm ~ 249bpm	Baseline Drift due to Temperature Change	1unit/min/ $^{\circ}\text{C}$ (free air) 5units/min/ $^{\circ}\text{C}$ (underwater)
Alarm time:	$\leq 30\text{s}$	Dielectric Strength	4000Vrms
Alarm Accuracy:	± 1 bpm	Zero Mode	Auto/Manual
I_{ob} :	$< 5\text{mW}/\text{cm}^2$	Auto Fetal Movement (AFM)	
P (Peak negative acoustic pressure)	$< 1\text{MPa}$	Technique	Ultrasound Pulse Doppler
I_{spta} (spatial peak - temporal average intensity)	$< 100\text{mW}/\text{cm}^2$	Range	10—80 (%)
I_{sata}	$< 20\text{mW}/\text{cm}^2$	Resolution	10%
$I_{sppa.3}$	$< 190\text{mW}/\text{cm}^2$	FM-Marking	
$I_{spta.3}$	$< 94\text{mW}/\text{cm}^2$	Marking Modes	Auto/Manual fetal movement mark
Max Output Power	$< 30\text{mW}$	Respiration	
Effective Radiating Area	$1356.5\text{mm}^2 \pm 15\%$	Method	RA-LL Impedance Method
Dielectric Strength	4000Vrms	RR measurement range	Adult: 6-120bpm
Maximum Transducer Temperature Rise during Use	$< 5^{\circ}\text{C}$	Accuracy	Pediatric neonate: 6-150bpm 7—150bpm, $\pm 1\text{bpm}$ or 1%, whichever is greater. 0-6bpm unspecified
Expanded Uncertainty of Temperature Test	$U=0.4^{\circ}\text{C}$, $k=2$	Resolution	± 1 bpm
TOCO		RESP Apnea	Off,10s, 15s, 20s, 25s, 30s, 35s, 40s, 45s,55s,60s, error: 5s.
TOCO Range:	0-100%	Alarm	Audible and visual alarm; alarm events reviewable
Resolution:	1%	Sweep Speed	6.25,12.5,25mm/s
TOCO alarm range and error	High alarm: Upper limit $\geq$ (medial alarm higher limit - 100); Lower limit : 0. Medial alarm: Upper limit $\geq$ (low level higher limit - high level higher limit); Lower limit :0. Low alarm:	Gain Selection	X0.125, X0.25, X0.5, X1, X2, X4
		ECG	
		Lead Type	CardioTec™ 5-lead ECG Analysis, 12-lead and 3-leads selectable
		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
		Gain Selection	X0.125, X0.25, X0.5, X1, X2, X4, Auto
		Sweep Speed	6.25,12.5, 25, 50mm/s
		Heart Rate Range	Adult: 15—300bpm

Resolution	1 bpm
Protection	Withstand 4000VAC/50Hz voltage in isolation;
	Against electrosurgical interference and defibrillation;
Accuracy	±1% or ±1bpm (whichever is greater)
Bandwidth	MON Mode:0.5 Hz—40 Hz
	OPE Mode:1 Hz—20 Hz
NIBP	
Method	Automatic Oscillometric
Working modes	Manual/Automatic/Continuous
Measurement time	Adjustable (1—720min)
Maximum measurement time	Adult: 120s
Measurement Unit	mmHg / kPa selectable
Measurement types	Systolic, Diastolic, Mean
Range of systolic pressure	Adult Mode: 40—270mmHg
Range of diastolic pressure	Adult Mode: 10—215mmHg
Range of mean pressure	Adult Mode: 20—235mmHg
Over-pressure protection	Both hardware and software over pressure protection
Accuracy	±3mmHg
Resolution	1mmHg
Alarm	Systolic, Diastolic, Mean
Nellcor SpO₂	
Measurement range	0—100%
Resolution	1%
Accuracy	±2% (70—100%, Adu/Ped, non-motion)
Accuracy	±3% (70—100%, Neo, non-motion)
Alarm range	1—69% unspecified
	20—100%
PR Measurement Range	20—300bpm
Resolution	1bpm
Accuracy	±3bpm (20—250bpm); Unspecified (251—300bpm)
Alarm Range	20—300bpm
Masimo SpO₂	

Measurement & alarm range	1—100%
Resolution	1%
Accuracy	±2% (70—100%, Adu/Ped, non-motion)
	±3% (70—100%, Neo, non-motion)
	1—69% unspecified
PR Measurement Range	25—240bpm
PR Resolution	1bpm
PR Accuracy	±3bpm(non-motion) ±5bpm(motion)
PR Alarm Range	20—300bpm
PI Value	0.02~20%
PI Resolution and Accuracy	0.01% (0.02%—9.99%) 0.1% (10.0%—20.0%) Unspecified
Comen SpO₂	
Measurement & alarm range	0—100%
Resolution	1%
Accuracy	±2% (70—100%, Adu/Ped, non-motion)
Accuracy	±3% (70—100%, Neo, non-motion)
PR Measurement Range	Unspecified (0—69%) 20—254bpm
PR Resolution	1bpm
PR Accuracy	±1bpm
PR Alarm Range	20—300bpm
Temperature	
Measurement & alarm range	0—50°C
Sensor	Skin/rectal TEMP sensor
Resolution	0.1°C
Accuracy	±0.1°C (excluding sensor-based error)
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DOUBLE FACE PHARMACY TROLLEY



27499

FRONT

MADE IN ITALY



45730

FRONT



45731

FRONT

• **27499 DOUBLE FACE PHARMACY TROLLEY** - 3 large, 30 small drawers
Two trolleys in one: 3 large drawers on one side, 30 (6+9+15) monodose cassettes on other side; with locking system.

Size of cassettes:

- 6 cassettes
115x290xh 75 mm

- 9 cassettes
115x290xh 45 mm

- 15 cassettes
70x290xh 45 mm

Size of trolley:
920x590xh 810 mm

Provided with 4 revolving castors Ø 125 mm (3 with brake, 1 of trolley, antistatic).



BACK

• **45730 DOUBLE FACE PHARMACY TROLLEY** - 3 large, 22 small drawers
Two trolleys in one: 3 large drawers on one side, 22 (6+6+10) monodose cassettes on other side; with locking system.

Size of cassettes:

- 6 cassettes
115x290xh 75 mm

- 10 cassettes
115x290xh 45 mm

Size of trolley:
920x590xh 810 mm

Provided with 4 revolving castors Ø 125 mm (3 with brake, 1 of trolley, antistatic).



BACK

• **45731 DOUBLE FACE PHARMACY TROLLEY** - 62 small drawers
Two trolleys in one: 31 (6+10+15) monodose cassettes on both sides; with locking system.

Size of cassettes:

- 6 cassettes
115x290xh 75 mm

- 10 cassettes
115x290xh 45 mm

- 15 cassettes
70x290xh 45 mm

Size of trolley:
920x590xh 810 mm

Provided with 4 revolving castors Ø 125 mm (3 with brake, 1 of trolley, antistatic).



BACK

EXCEL TROLLEY

Multilingual instructions:
GB, FR, IT, ES,
PT, DE, GR.



27441

Castors
Ø 100 mm
(2 with brake).

Without upstands
at four sides for an easier
cleaning.

MADE IN ITALY

• **27440 EXCEL TROLLEY** - 3 shelves (60x45cm) Size: 67x69xh 80 cm.
• **27441 EXCEL TROLLEY** - 4 shelves (60x45cm) Size: 67x69xh 110 cm.
Maximum load: 80kg
Delivered in kit form.

TRIS TROLLEY



27438

MADE IN ITALY

• **27438 TRIS TROLLEY**
A practical trolley for ECG, Electrosurgical unit or any other device, with 4 nylon castors and 2 lateral handles for easy moving.
Size: 49x37xh 77 cm. Shelf size: 40x30 cm.
Total load: 39 kg, max per shelf 13 kg
Colour: RAL 9002
Multilingual manual: GB, FR, IT, ES, PT, DE.
Delivered in kit form.

PROFESSIONAL CARTS

27887
+
27873

Medical Devices
Class I

MADE IN ITALY

• **27885 PRO CART 2 shelves** - h 80 cm
• **27887 PRO CART 2 shelves + keyboard and monitor support**
• **27873 BASKET**
• **27874 INFUSION STAND**

TECHNICAL SPECIFICATIONS

Load capacity: - total load 240kg - shelf 35kg
Base: 60.8x50 cm
Shelves: 2 shelves 50x50 cm + base
Material: - vertical extrusions in aluminium
- plastic parts in ABS