



Lightweight design and small size maximize patient comfort and compliance.
 Accelerometer: Displays a patient activity graph in Sentinel 10
 Uses oscillometry, the most widely accepted and validated method of automatic NIBP measurement.
 Measures systolic, diastolic, mean blood pressure and heart rate.
 Ability to make 300 measurements over periods of 24 hours to 7 days.
 No chest electrodes or microphones — reduces operating cost, improves patient comfort and measurement reliability.
 Independently programmable measurement periods and inflation frequencies.
 USB communications feature allows remote programming and data retrieval.
 Real-time clock facilitates diary notations.
 Stand alone ABP Report printing via PictBridge.



FEATURES

Controls, Connectors, and Indicators

The monitor has the following features	<ul style="list-style-type: none"> • 2.4" color LCD • Battery powered • USB communications port • PictBridge compatible • Independent Initialization • 3 function buttons (UP, DOWN AND ACTION)
On/Off	Single button operation
Manual Readings	ACTION button; depressed to begin manual blood pressure measurement if none in progress; if depressed during blood pressure measurement, measurement in progress stops
Audio	Audible tone indicates start and end of a cycle when tone is selected
Independent Initialization	The OnTrak 90227 monitor provides an initialization option without the need for a PC
PictBridge Printing	Print ABP Report direct to a PictBridge Printer without the need for a PC

Physical Dimensions

Height	1.08in (2.76 cm)
Depth	3.99 in (10.15 cm)
Width	2.76 in (7.0 cm)
Weight	6.1 oz (175 g) excluding battery
Accelerometer	OnTrak units with firmware version 4 and higher are supplied with an accelerometer. This is always activated. Customers who review the ABP data in Sentinel 10 will be shown an activity graph which also prints into the final report. The activity graph reflects movement and volatility of activity by the patient based on accelerometer data from the recorder

Electrical Requirements

Power Requirement	Two AA size (LR6 or equivalent), alkaline, lithium or rechargeable NiMH batteries
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Environmental Requirements

Storage	<ul style="list-style-type: none"> • Temperature -22 °F to 167 °F (-30 °C to 75 °C) • Humidity 15 % - 93 % (non-condensing) • Altitude -500 to 40,000 ft (-152 to 12192 m) • Atmospheric Pressure 209.3 hPa to 1060 hPa
Operating	<ul style="list-style-type: none"> • Temperature 32 °F to 104° F (0 °C to 40 °C) • Humidity 15 % - 93 % (non-condensing) • Altitude 0 to 10,000 ft (0 to 3,048 m) • Atmospheric Pressure 700 hPa to 1060 hPa
Water Ingress Protection	IP22 compliant (when device is in pouch)



General

Measurement Ranges	Heart Rate: 40 to 180 bpm; Pressure: 60 to 260 mmHg for systolic, 30 to 200 mmHg for diastolic.		
Pressure Measurement Method	Oscillometric		
Automatic Measurement Intervals	Set via PC Initialization	Adjustable from 6 minutes (minimum) to 120 minutes (maximum); up to 12 different periods can be independently programmed, including an interval during which no readings are taken	
	Set via Independent Initialization	Adjustable from 5 minutes (minimum) to 120 minutes (maximum) with 2 independently programmed periods - Day & Night.	
Measurement Time	Typically 35-50 seconds		
Number of Measurements	Approximately 300 measurements using standard size adult cuff; stores results of 300 readings in memory per battery set and a total of 500 overall.		
Cuff Pressure	Adult mode	Initial inflation pressure	In Adult mode, OnTrak has an initial inflation limit of 170 mmHg (default). Comfort mode allows a user to change the first inflation limit to 110 mmHg, 130 mmHg, 150 mmHg or 170 mmHg as desired; thereafter, the cuff inflates to approximately 30 mmHg above the previous systolic measurement.
		Maximum cuff inflation pressure	270 mmHg
	Child mode	Initial inflation pressure	In Child mode, OnTrak has an inflation limit of 130 mmHg (default). Comfort mode allows a user to change the first inflation limit to 110 mmHg or 130 mmHg as desired, thereafter, the cuff inflates to approximately 30 mmHg above the previous systolic measurement.
		Maximum cuff inflation pressure	250 mmHg
Auto-zeroing	Pressure is automatically zeroed before each reading		
Artifact Rejection	Discriminates between pressure signals, patient movement, and respiratory artifact		
Cuff Inflation/Deflation	Inflation and deflation rates under microprocessor control		
Data Storage System	Nonvolatile Flash Memory; information retained until reprogrammed; timing of events provided by real-time clock		
Digital Display	2.4" color liquid crystal display showing systolic, diastolic, heart rate and time		
Patient Safety	Failsafe mechanisms limit the inflation period to less than 180s and the absolute maximum pressure to 300 mmHg. The air hose is detachable by the patient.		

Electromagnetic Compatibility

Emissions	CISPR11/FCC Part 15 Class B
Immunity	IEC 61000-4-3 RF Fields 20 V/m 80 MHz to 2.5 GHz IEC 61000-4-2 ESD 6 kV contact, 8 kV air

Regulatory

Regulatory	CE marked in accordance with Medical Device Directive 93/42/EEC Meets EN IEC 60601-1:2006/A1:2013, EN IEC 60601-1-2:2007, EN IEC 60601-1-11:2015 and EN IEC 80601-2-30:2013 (excluding ISO 81060-2:2013 section 5.2.6) ETL certified: UL 60601-1:2003, IEC 60601-2-30:1999 and IEC 60601-1-6:2004	 
Validation	British Hypertension Society (BHS): A/A European Society of Hypertension (ESH): Pass AAMI/ANSI/ISO 81060 (Adults & Children) Excludes clause 5.2.6 – The 90227 is contraindicated for use with stress testing equipment.	

ACCESSORIES

For information about supplies, please contact your local Spacelabs Healthcare representative