



Lightweight design and small size maximize patient comfort and compliance.
 Accelerometer: Displays a patient activity graph in Sentinel 10 / 11.
 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	3.99 in (10.15 cm)
Depth	1.08in (2.76 cm)
Width	2.76 in (7.0 cm)
Weight	6.1 oz (175g) 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 / 11 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: 30 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 180 seconds and the absolute maximum pressure to 300 mmHg. The air hose is detachable by the patient	
Electromagnetic Compatibility		
Emissions	CISPR11/FCC Part 15 Group 1 Class B	
Immunity	IEC 61000-4-2 ESD 8 kV contact, 15 kV air IEC 61000-4-3 RF Fields 20 V/m 80 MHz to 2.7 GHz and per EN 60601-1-2:2015 in ISM and amateur radio bands between 0.15 MHz and 80 MHz.	
Regulatory		
Regulatory	CE marked in accordance with Medical Device Directive 93/42/EEC Meets EN IEC 60601-1:2006/A1:2013, EN 60601-1-2:2015, EN IEC 60601-1-11:2015 and EN IEC 80601-2-30:2013.  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 81060-2:2013 (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