

smartsigns® Compact 300 Series Technical Specification

The SC300 is a mains and battery operated SPOT check vital signs monitor, the system is capable of measuring Adult, Paediatric and Neonatal patients' vital signs:

- Non-invasive blood pressure
- Oxygen saturation (SpO2)
- Pulse rate
- Temperature.



The system is available with two SpO2 options, furthermore, the wireless tympanic thermometer option can be fitted to any of the configurations.

Size and Weight

Item	Specifications
Size and Weight	130mm x 125mm x 299mm
	1.25Kg, including the weight of battery:0.25Kg

General

Item	type
Degree of protection against electric shock	Class I
Classification	Type BF The device must not be used in the presence of flammable anesthetics
General safety	MDD 93/42/EEC, EN ISO13485:2012+AC2012, EN ISO14971: 2012, EN 60601-1: 2006/ AC:2013, EN 60601-1-2: 2007/AC:2010, EN60601-1-6:2010, EN 980:2008, EN 1041: 2008, EN ISO10993-1:2009, EN ISO10993-5:2009, EN ISO 10993-10:2010,

	EN 1060-1:1995+A2:2009, EN 1060-3:1997+A2:2009, EN 1060-4:2004, EN ISO 80601-2-30 : 2009+A1 : 2013, EN ISO 80601-2-61 : 2011, EN 62366:2008 EN62304:2006
Degree of protection to prevent the ingress of water.	IPX1
Mode of operation	Continuous

Environmental

Item	Specifications	
Operating	Temperature	0°C - 40°C (without thermometer) 15°C - 36°C (with thermometer)
	Humidity	93% non-condensing (without thermometer) ≤93% non-condensing (with thermometer)
	Altitude	700hPa ~ 1060hPa
Power supply	Power	100V-240Vac
	Frequency	50Hz / 60Hz
	Current	0.3 - 0.15A
Transportation and storage	-20°C to 60°C, ≤93% relative humidity	

Battery

Item	Specifications
Battery specifications	2200mAh 11.1V lithium ion battery
Charging time	Between 3 and 5.5 hrs.
Capacity (time)	12 hrs.
Battery Specifications (ear thermometer)	DC 3v (2 batteries) AAA LR03 type

Display

Item	Specifications
Display type	LED 100mm x 120mm colour graphic

Controls and indicators

Item	Specifications
ON/OFF indicator	Green / Amber)
AC power indicator	Green
Battery indicator	Green

Input / Output

Item	Description
Power	AC input
RS-232	Data I/O (service port)
Equipotential socket	Earth point

NIBP

Item	Specifications		
Measurement method	Oscillometric		
Parameter display	Systolic, diastolic and MAP pressure and pulse		
Measurement range and accuracy	Adult	systolic	40-270mmHg (5.3 – 36 kPa)
		diastolic	10-215mmHg (1.3 - 28.7 kPa)
		MAP	20-235mmHg (2.7 - 31.3 kPa)
	Child	systolic	40-200mmHg (5.3 - 26.7 kPa)
		diastolic	10-150mmHg (1.3 – 20 kPa)
		MAP	20-165mmHg (2.7 – 22 kPa)
	Neonate	systolic	40-135mmHg (5.3 – 18 kPa)
		diastolic	10-100mmHg (1.3 - 13.3 kPa)
		MAP	20-110mmHg (2.7 - 14.7 kPa)
	Accuracy	±5mmHg,	
Resolution	1mmHg (0.1kPa)		
Measurement range and accuracy of static pressure	0 mmHg - 300 mmHg ±3 mmHg (0 kPa - 40.0 kPa ±0.4 kPa)		

SpO₂

Item	Specifications			
Resolution of display	1%			
Accuracy	Technology	Measurement range	Accuracy (70%~100%)	Accuracy (0%~69%)
	Own brand	0%~100%	±2%(measured without motion in adult/child mode) ±3%(measured without motion in adult/child mode)	Not specified
	Nellcor	0%~100%	±2%(measured without motion in adult/child mode) ±3%(measured without motion in neonate mode)	

Pulse Rate

Item	Specifications			
Range and accuracy	Technology	Measurement range	Resolution	Error
	Own brand	25bpm~250bpm	1bpm	±1bpm
	Nellcor	20bpm~300bpm	1bpm	±3bpm (20bpm - 250bpm) Not specified (251bpm - 300bpm)
	NIBP Module	40bpm~240bpm	1bpm	±3bpm or ±3%(MAX)

Temperature

Item	Specifications	
Range and accuracy	Range	34°C - 42.2°C (93.2°F - 107.6°F)
	Error	36°C - 42°C: ±0.2°C (±0.4°F) 20°C - 34°C: ±0.3°C (±0.5°F)
Resolution	0.1°C	

Warranty

The **smartsigns**[®] **Compact 300 series** is guaranteed for a period of 24 months from the date of dispatch.

Huntleigh Healthcare's standard terms and conditions apply to all sales. A copy is available on request from the Customer Care Department. These contain full details of warranty terms and do not limit the statutory right of the customer.

Technical service manuals are available from the Service Department.

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