

## The Accoson greenlight 300 sphygmomanometer

Want to replace your mercury sphygmomanometer but don't want to compromise on accuracy? The **green**light 300 is a new electronic device that has been developed to provide a reliable and accurate alternative to the mercury sphygmomanometer. The **green**light 300 combines manual blood pressure measurement with the reliability and robustness of electronic pressure detection. It is made with the highest quality components, auto-calibrates every time it is switched on, and, for the first time, displays the clinically important cuff deflation rate.

## Why the greenlight 300?

The **green**light 300 is a new type of manual sphygmomanometer that has been developed to provide a reliable and accurate alternative to the mercury sphygmomanometer, the current gold standard in blood pressure measurement. This is achieved by using silicon chip technology to replace the traditional mercury column with an electronic pressure detection system.

The **green**light 300 overcomes the problems associated with other types of sphygmomanometer: it is non-toxic and robust and, most importantly, automatically self-calibrates to zero every time it is switched on, thus ensuring reliable accuracy. The **green**light 300 is suitable for use in all patient groups – including the pregnant and elderly – where mercury has been used in the past.

The table below summarizes how the **green**light 300 addresses the problems posed by other types of sphygmomanometer. Click on the device type for more detailed information about their associated problems.

Device	Problem	The greenlight 300 solution
Mercury	Risk of mercury	The mercury column has been
	contamination	replaced by a non-toxic
		electronic pressure detection
		system
	Lack of portability	Can be transported safely due
		to lack of mercury and can be
		used in any orientation
Aneroid	Fragility of	Mechanical parts have been
	mechanical parts	replaced by robust electronic
		pressure detection system
	Requires frequent	The calibration need only be
	maintenance checks	checked after four years
	and recalibration to	
	maintain accuracy	
<u>Automated</u>	Not as accurate as	As accurate as the mercury
	mercury devices and	sphygmomanometer:
	verification of	
	accuracy hard to	Calibrated to
	achieve	0.4mmHg
		Automatic self-
		calibration to zero
		every time it is
		Switched on Validated by the Mayo
		• Validated by the Mayo
		International Protocol <sup>1</sup>
		International Trotocol
	Cannot be used in	Suitable for all patient groups
	some patient groups	where mercury is currently
		used
	Does not use	Manual device allowing use
	auscultatory technique	of the familiar auscultatory
		technique

Item	The greenlight 300	
Dimensions:		
Height	9.75" (25cm)	
Width	6.75" (17cm)	
Depth	4" (10cm)	
Weight	1.4lb (0.65kg)	
Protection against electric shock:		
Туре	Internally powered equipment	
Degree	Type BF	
Protection against ingress of water	IPX0	
Protection against flammable anesthetic mixtures	None	
Mode of operation	Continuous	
Batteries:		
Туре	4 x AA/LR6 alkaline cells	
Life (typical)	170 hours continuous use	
Time from start of battery	3.5 hours continuous use	
warning signal to device failure (typical)		
Displayed cuff pressure:		
Range	2mmHg to 300mmHg, with under- range and over-range indicators	
Accuracy	Better than ±3mmHg	
Deflation rate displays	For indication only:	
	<ul> <li>Five-position green indicator for deflation rates up to 3mmHg per second</li> <li>Two-position orange</li> </ul>	
	indicator for deflation rates	
	above 3mmHg per second	
Operational range	0°C to 46°C	
Storage range	-34°C to 80°C 0 to 100% RH	
Serial number	The serial number gives traceability of calibration and date of	
	manufacture	