

# microlife®

A partner for people. For life.

Accurate blood pressure  
and cardiovascular  
screening monitor with  
multiple features and  
easy to use



## WatchBP Office Vascular

Professional Office Blood Pressure and  
Cardiovascular Screening Monitor



- Double arm measurement
- AFIB
- ABI assessment
- baPWV assessment
- Central blood pressure measurement
- Flexible BPM schedule
- Sprint algorithm
- Upgradeable device version
- PC link
- For use in end stage renal disease
- For use in pregnancy
- 3+ AGES
- For use in diabetes patients

Officially recommended as  
a useful option for  
**NHS clinicians**  
by NICE

Bluetooth® **Clinically Tested** ISO 81060-2: pass **Clinically Tested** BIHS protocol: A/A



### Inter-Arm-Difference (IAD)

Dual-cuff design for simultaneous measurement on both arms to assess the Inter-Arm-Difference (IAD).



### Reliable AFIB screening

Screens for Atrial Fibrillation (AF) with high accuracy (sensitivity 98% - specificity 92%) as demonstrated in multiple comparative studies with 12-lead ECG.<sup>1-10</sup>



### ABI assessment (optional)

Fast, easy, and accurate Ankle Brachial Index (ABI) assessment.<sup>11</sup>



### Brachial-ankle PWV assessment (optional)

User-friendly with high reproducibility cuff-based brachial-ankle PWV measurement method to evaluate arterial stiffness.<sup>12</sup>



### Non-invasive central blood pressure measurement (optional)

Determines blood pressure of the ascending aorta based on Pulse Volume Plethysmography (PVP) waveforms to help in making a reliable diagnosis of cardiovascular risk and hypertension.<sup>13</sup>



### Flexible BPM schedule

Enables the physicians to adjust the settings of time intervals and numbers of consecutive measurements to comply with different guidelines.



### Sprint algorithm

Enable the physicians to perform automated office blood pressure measurements (AOBPM).



### Upgradeable (optional)

Allows on-demand paid upgrades of "ABI" (ABI included) or "PWV" (brachial-ankle pulse wave velocity (baPWV) and central blood pressure indices included).

## Additional features

- ✓ Validated with clinical A/A grade according to the British and Irish Hypertension Society (BIHS), and clinically validated according to AAMI/ISO standards for many special patient groups including children from the age of 3 and patients with end stage renal disease, diabetes, pregnancy pre-eclampsia and large arm circumference.
- ✓ Mean Arterial Pressure (MAP) and Pulse Pressure (PP).
- ✓ Connectable by USB and Bluetooth 4.2.
- ✓ Rechargeable battery, energy-efficient and environmentally friendly.
- ✓ WatchBP Analyzer software, presenting a clear report and relevant analysis. Download from the website free of charge: <https://www.microlife.com/support/software-professional-products>

## Features overview

Office Vascular model types	Rechargeable battery	AFIB	IAD	ABI	PWV	CBP	USB connectivity	Bluetooth connectivity	Flexible BPM schedule	WatchBP Analyzer	Sprint Algorithm	Special patient validations			
												End-stage renal disease	Diabetes patients	Pregnancy & pre-eclampsia	Children
Advanced	●	●	●				●	●	●	●	●	●	●	●	●
ABI	●	●	●	●			●	●	●	●	●	●	●	●	●
PWV	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

## Innovative and reliable AFIB screening

	Patients	Subjects (n)	Age (Years)	AF (n)	Non-AF arrhythmia (n)	Sinus (n)	Sensitivity (%)	Specificity (%)
Wiesel 2004 <sup>1</sup>	Outpatients	450	31-99	54	1	395	100	92
Stergiou 2009 <sup>2</sup>	Outpatients	73	49-92	27	23	23	100	89
Wiesel 2009 <sup>3</sup>	Outpatients	405	34-98	93	64	248	97	89
Wiesel 2013 <sup>4</sup>	Outpatients	139	26-89	14	n/s	125	99	92
Oxford 2014 <sup>5</sup>	Primary care	999	75+	79	n/s	920	95	90
Wiesel 2014 <sup>6</sup>	Outpatients	183	50-100	30	n/s	153	100	92
Gandolfo 2015 <sup>7</sup>	Stroke patients	207	27-101	38	n/s	169	89	99
Chan 2017 <sup>8</sup>	Primary care	2052	68	24	156	1872	83	99
Chan 2017 <sup>9</sup>	Primary care	5969	67	72	430	5467	81	99

\* n= number; n/s= not specified

WatchBP Office AFIB screens for Atrial Fibrillation with high accuracy at 98% Sensitivity and 92% Specificity while measuring blood pressure. Subjects were compared with 12-lead ECG performed and read by a consultant.

### Reference

- Wiesel J, et al. The use of a modified sphygmomanometer to detect atrial fibrillation in outpatients. *Pacing Clin Electrophysiol.* 2004;27:639-43.
- Stergiou GS, et al. Diagnostic accuracy of a home blood pressure monitor to detect atrial fibrillation. *Journal of human hypertension.* 2009;23:654-8.
- Wiesel J, et al. Detection of atrial fibrillation using a modified microlife blood pressure monitor. *Am J Hypertens.* 2009;22:848-52.
- Wiesel J, et al. Screening for asymptomatic atrial fibrillation while monitoring the blood pressure at home: trial of regular versus irregular pulse for prevention of stroke (TRIPPS 2.0). *Am J Cardiol.* 2013;111:1598-601.
- Kearley K, et al. Triage tests for identifying atrial fibrillation in primary care: a diagnostic accuracy study comparing single-lead ECG and modified BP monitors. *BMJ Open.* 2014;4:e004565.
- Wiesel J, et al. Comparison of the Microlife blood pressure monitor with the Omron blood pressure monitor for detecting atrial fibrillation. *Am J Cardiol.* 2014;114:1046-8.
- Gandolfo C, et al. Validation of a simple method for atrial fibrillation screening in patients with stroke. *Neurol Sci.* 2015;36:1675-8.
- Chan PH, et al. Diagnostic performance of an automatic blood pressure measurement device, Microlife WatchBP Home A, for atrial fibrillation screening in a real-world primary care setting. *BMJ Open.* 2017;7:e013685.
- Chan PH, et al. Head-to-Head Comparison of the AliveCor Heart Monitor and Microlife WatchBP Office AFIB for Atrial Fibrillation Screening in a Primary Care Setting. *Circulation.* 2017;135:110-2.
- Verberk WJ, et al. Screening for atrial fibrillation with automated blood pressure measurement: Research evidence and practice recommendations. *International journal of cardiology.* 2016;203:465-73.
- Kollias, A., et al., Automated determination of the ankle-brachial index using an oscillometric blood pressure monitor: validation vs. Doppler measurement and cardiovascular risk factor profile. *Hypertens Res.* 2011; 34(7): p. 825-30.
- Kollias, A., et al. Automated pulse wave velocity assessment using a professional oscillometric office blood pressure monitor. *J Clin Hypertens.* 2020;00:1-7.
- Cheng, H.M., et al., Measurement accuracy of a stand-alone oscillometric central blood pressure monitor: a validation report for Microlife WatchBP Office Central. *Am J Hypertens.* 2013; 26(1): p. 42-50.
- Kollias A, et al. Validation of the professional device for blood pressure measurement Microlife WatchBP Office in adults and children according to the American National Standards Institute/Association for the Advancement of Medical Instrumentation/International Organization for Standardization standard. *Blood Press Monit.* 2018 Apr;23(2):112-114.
- Palatini P, Fania C, Gasparotti F. Accuracy of the WatchBP office ABI device for office blood pressure measurement over a wide range of arm sizes. *Blood Press Monit.* 2018 Apr;23(2):117-119.

For more information, please visit: [www.watchbp.com](http://www.watchbp.com)

Microlife Corporation is a global corporation working closely with medical societies, specialists and primary care physicians to create tools and solutions that advance healthcare for the benefit of both physicians and patients.