

DECLARATION OF BLOOD PRESSURE MEASURING DEVICE EQUIVALENCE 2013

A SIGNED COPY WILL BE POSTED ON THE www.dableducational.org WEBSITE

SECTION A - Please complete all items.

I **Joe Zhao,** a Director of **Globalcare Medical Technology,**
 Name of a Company Director Company name

hereby state that there are no differences that will affect blood pressure measuring accuracy between the

Maker^a **Paul Hartmann AG** Address **Paul Hartmann AG, Paul-Hartmann-Strasse 12, 89522 Heidenheim, Germany**

Manufacturer^b **Globalcare Medical Technology** Address **A7th Building 39 Middle Industrial Main Road European Industrial Zone, Xiaolan Town, Zhongshan City Guangdong Province 52815 CHINA**

Brand^c **Hartmann** Model^d **HARTMANN Veroyal BPU22**

Blood pressure measuring device for which validation is claimed. If alternative model names are used, include all.

blood pressure measuring device and the validated blood pressure measuring device

Maker^a **Globalcare Medical Technology** Address **A7th Building 39 Middle Industrial Main Road European Industrial Zone, Xiaolan Town, Zhongshan City Guangdong Province 52815 CHINA**

Manufacturer^b **Globalcare Medical Technology** Address **A7th Building 39 Middle Industrial Main Road European Industrial Zone, Xiaolan Town, Zhongshan City Guangdong Province 52815 CHINA**

Brand^c **Globalcare Medical Technology** Model^d **GCE603**

Existing validated blood pressure measuring device.

which has previously passed the ESH-2010 protocol, the results of which were published as follows:

Validation of the Globalcare GCE603 automated blood pressure monitor for self-measurement according to the European Society of Hypertension International Protocol revision 2010

Cheng Songa, Yang Yub, Bao-Chuan Lua and Xi-Ling Yanc

Full reference

The only differences between the devices involve the following components:

Tick one box for each item 1–18.

Part I	1	Algorithm for Oscillometric Measurements	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A ^e <input type="checkbox"/>
	2	Algorithm for Auscultatory Measurements	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A ^f <input checked="" type="checkbox"/>
	3	Artefact/Error Detection	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	4	Microphone(s)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A ^f <input checked="" type="checkbox"/>
	5	Pressure Transducer	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	6	Cuffs or Bladders	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	7	Inflation Mechanism	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	8	Deflation Mechanism	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Part II	9	Model Name or Number	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	10	Casing	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	11	Display	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	12	Carrying/Mounting Facilities	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	13	Software other than Algorithm	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	14	Memory Capacity/Number of stored measurements	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	15	Printing Facilities	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A ^g <input checked="" type="checkbox"/>
	16	Communication Facilities	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A ^g <input checked="" type="checkbox"/>
	17	Power Supply	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	18	Other Facilities	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A ^g <input type="checkbox"/>

An explanation of each item ticked "Yes" must be included in Section B or on a separate sheet.

Notes: a Provide the name and address of the actual maker of the device.

- b Provide the name and address of the legal manufacturer of the device, even if it is the same as that of the maker.
- c Provide the name of the brand under which it is sold, even if it is the same as that of the manufacturer or maker.
- d Provide the model name. If alternative or internal model names are used, include all. Each device must be uniquely identifiable.
- e Only tick N/A (Not Applicable) if neither device measures blood pressure using the oscillometric method.
- f Only tick N/A (Not Applicable) if neither device measures blood pressure using the auscultatory method.
- g Only tick N/A (Not Applicable) if neither device provides printing, communication or other facilities, as appropriate.

SECTION B An explanation for each item, 1 to 18, ticked "Yes" in Section A must be provided here or in an attached document. All differences between the devices must be described.

SECTION C Please check that the following are included with the application

- A manual for the validated device
- A manual for the device for which equivalence is being sought
- An image of the validated device
- An image of the device for which equivalence is being sought
- An image of the screen layout of validated device*
- An image of the screen layout of the device for which equivalence is being sought*

* Screen layouts shown complete, and without obscuring labels or lines, in manuals need not be included separately.

SECTION D Complete all items, bar signatures and seal, online and print. Sign and seal it then send the original to our address below. Please email a signed copy of this form, together with the manuals and images for both devices, to info@dableducational.org.

Signature of Director _____

Name

[Handwritten Signature]

Date

2022-2-18

Signature of Witness _____

Name

[Handwritten Signature]

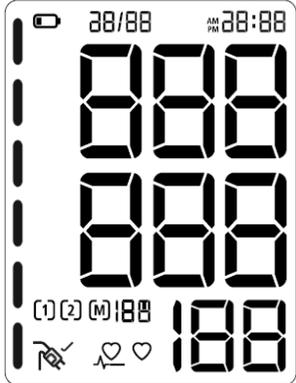
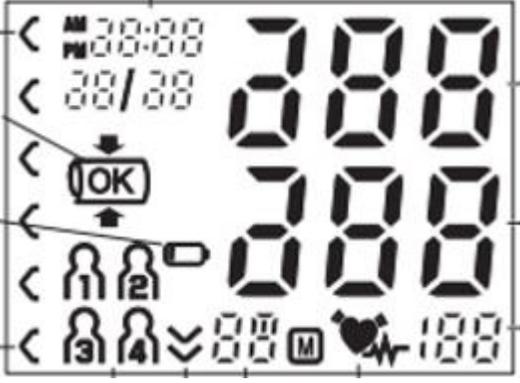
2022-2-18

Address

Company Stamp/Seal



Comparison of the HARTMANN Veroval BPU22 with the Globalcare - GCE603

Devices – Item 9	HARTMANN Veroval BPU22	Globalcare - GCE603
Pictures		
Display Image		
Validation	Equivalent to GCE603	ESH 2010 ESH 2002 BHS AAMI
Category	Arm Type Blood Pressure Monitor	Arm Type Blood Pressure Monitor

Casing – Item 10	<p><i>Dimensions</i> 134 * 48 * 91 mm (W * H *D)</p> <p><i>Ports</i> Cuff Port</p> <p><i>Features</i> NA</p>	<p><i>Dimensions</i> 112 * 110 * 58 mm (W * H *D)</p> <p><i>Ports</i> Cuff Port</p> <p><i>Features</i> NA</p>
Display – Item 11	<p><i>Type</i> LCD</p>	<p><i>Type</i> LCD</p>
Carrying/Mounting Facilities – Item 12	NA	NA
Software other than Algorithm – Item 13	Different from GCE603 for different functions as 2 users, date and time setting, alarm, average	Different from bpu22 for different functions as 2 users, date and time setting, alarm, average
Memory Capacity Item 14	<p><i>Number of stored measurements</i> 2*100 times with date and time</p>	<p><i>Number of stored measurements</i> 4*30 times with date and time</p>
Printing Facilities Item 15	Artwork logo, gift box and manual is different from GCE603 for different functions	Artwork logo, gift box and manual is different for different functions
Communication Facilities – Item 16	NA	NA
Power Supply Item 17	4 * AA Batteries	4 * AA Batteries
Other differences	<p><i>Other Details on Equivalent device that are different to Validated device</i> NA</p>	<p><i>Other Details on Validated device that are different to Equivalent device</i> NA</p>
Same Criteria	<p>Measurement</p> <p><i>Accuracy</i> Blood Pressure Accuracy ± 3 mmHg Pulse Accuracy $\pm 5\%$</p> <p><i>Method</i> Oscillometric</p> <p><i>Ranges</i></p>	<p>Measurement</p> <p><i>Accuracy</i> Blood Pressure Accuracy ± 3 mmHg Pulse Accuracy $\pm 5\%$</p> <p><i>Method</i> Oscillometric</p> <p><i>Ranges</i></p>

	<p>Cuff pressure 0 -300 mmHg Systolic 50 mmHg – 280 mmHg Diastolic 30 mmHg – 200 mmHg</p> <p><i>Inflation</i> Automatic inflation by internal pump</p> <p><i>Deflation</i> Automatic speed deflation system</p> <p><i>Cuffs (Please state sizes and materials used)</i> 22-42 cm Bladder dimension: 140x250mm</p> <p><i>Sensors</i> MSP40-GSF</p> <p><i>Measurement Records</i> 2*100 times with date and time</p> <p><i>Measurements other than Blood Pressure</i> Pulse rate</p> <p>Buttons/Switches <i>Power</i> START/POWER Button (on / off)</p> <p><i>Measurement Records</i> Memory Recall Buttons – User 1 / User 2</p> <p><i>Function</i> Date and Time Setting– combination of button user 1+user2</p> <p><i>Analysis</i> N/A</p> <p><i>Event Marking</i> N/A</p> <p><i>Communication</i> N/A</p>	<p>Cuff pressure 0 -300 mmHg Systolic 50 mmHg – 280 mmHg Diastolic 30 mmHg – 200 mmHg</p> <p><i>Inflation</i> Automatic inflation by internal pump</p> <p><i>Deflation</i> Automatic speed deflation system</p> <p><i>Cuffs(Please state sizes and materials used)</i> 22-42 cm Bladder dimension: 140x250mm</p> <p><i>Sensors</i> MSP40-GSF</p> <p><i>Measurement Records</i> 1*60 times with date and time</p> <p><i>Measurements other than Blood Pressure</i> Pulse rate</p> <p>Buttons/Switches <i>Power</i> START/POWER Button (on / off)</p> <p><i>Measurement Records</i> Memory Recall Button - M</p> <p><i>Function</i> Date and Time Set Button – SET Function Button - +/-</p> <p><i>Analysis</i> N/A</p> <p><i>Event Marking</i> N/A</p> <p><i>Communication</i> N/A</p>
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	<p>Display/Symbols/Indicators <i>Preparation</i> N/A</p> <p><i>Measurement Procedure</i> Inflation symbol Deflation symbol Heartbeat symbol during deflation Irregular Heartbeat symbol</p> <p><i>Post Measurement</i> Systolic blood pressure Diastolic blood pressure Pulse rate WHO indicator</p> <p><i>Measurement Records</i> Memory recall number</p> <p><i>Date and Time</i> Date and Time</p> <p><i>Power</i> Low Battery detection symbol</p> <p><i>Function</i> Average</p> <p><i>Communication</i> N/A</p> <p><i>Features</i> N/A</p> <p><i>Not described</i></p> <p>Algorithms <i>Averages and Differences</i> Average of all measurement Average morning values of the last seven days measurements between 5:00AM and 9:00AM</p>	<p>Display/Symbols/Indicators <i>Preparation</i> N/A</p> <p><i>Measurement Procedure</i> Inflation symbol Deflation symbol Heartbeat symbol during deflation Irregular Heartbeat symbol</p> <p><i>Post Measurement</i> Systolic blood pressure Diastolic blood pressure Pulse rate WHO indicator</p> <p><i>Measurement Records</i> Memory recall number</p> <p><i>Date and Time</i> Date and Time</p> <p><i>Power</i> Low Battery detection symbol</p> <p><i>Function</i> Average Alarm</p> <p><i>Communication</i> N/A</p> <p><i>Features</i> N/A</p> <p><i>Not described</i></p> <p>Algorithms <i>Averages and Differences</i> Average of the last 3 measurements</p>
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	<p>Average evening values of the last seven days measurements between 6:00PM and 8:00PM</p> <p><i>Diagnostic</i> N/A</p> <p><i>Functions</i> N/A</p> <p><i>Communication</i> N/A</p>	<p><i>Diagnostic</i> N/A</p> <p><i>Functions</i> N/A</p> <p><i>Communication</i> N/A</p>
Comparable Criteria		

Comments	
Recommendation	RECOMMENDED
Date	February 2023