

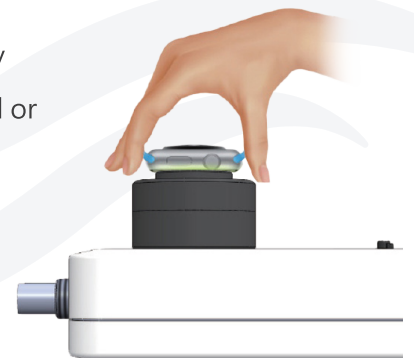


HRS100+

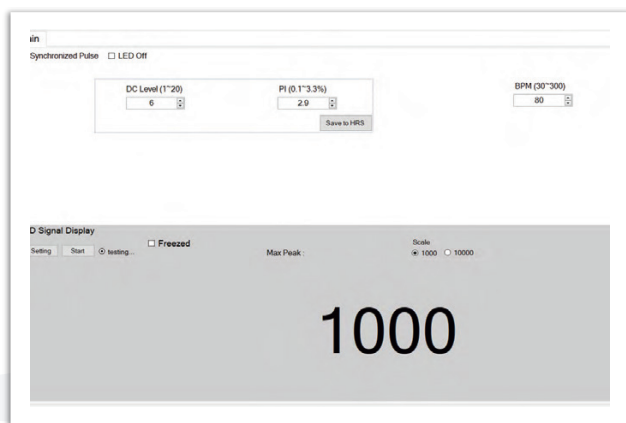
PPG Heart Rate Tester

Verify Heart Rate Measurement Function of
Your Wearable Device Effectively

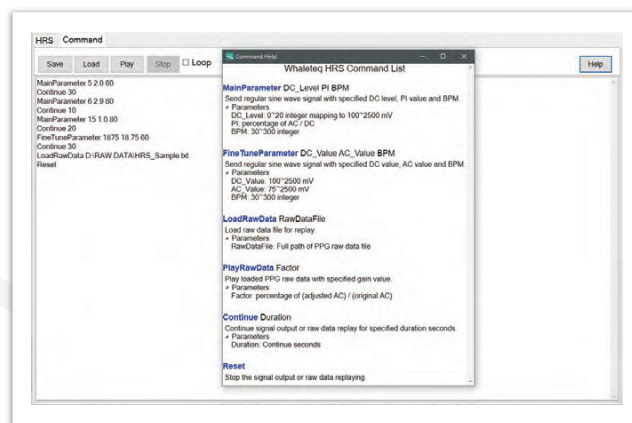
- Built-in LED outputs adjustable PPG waveform signals as the reflected optical signal of different human skin tones
- Built-in photodiode can detect and display DUT LED brightness
- Adjustable parameters includes heart rate (BPM), reflected skin brightness (DC), arterial blood volume change (AC) and Perfusion Index $((AC/DC) \times 100\%)$
- Command mode function allows to conduct test quickly and repeatedly
- Software Development Kit (SDK) assists users in developing customized or automated test software with less efforts



The Effective Tool for Verification



Adjustable DC, PI and BPM parameters with the bright detection function of DUT LED



Easy to use commands to create customized test sequences

Specifications

Parameters	Supported range / types	Accuracy
BPM ⁽¹⁾	30 ~ 300BPM (PC software); 30 ~ 240BPM (Standalone usage)	±1BPM
DC - Main Mode	1 ~ 20 Level	N/A
DC - Fine Tune Mode	100mV ~ 2500mV	±5mV
PI - Main Mode	0.1% ~ 20% (AC / DC, differs with DC level)	N/A
AC - Fine Tune Mode	0.75mV ~ 25mV	±3%
Lumen ⁽²⁾	50 ~ 800Lux (5mm from diffusion film)	±3%
Light Wavelength	525nm	±10nm
PD Sampling Rate ⁽³⁾	<8 ksps (Normal Mode of software); 30 ksps (High Resolution Mode of software)	±5μS
S/N Ratio	>51dB (with USB isolator)	N/A
Power - USB	USB Type-B Plug connector, DC 5V IN	N/A
Power - Battery	Type AA battery x 3	N/A
Size (L x W x H)	6.12cm x 13.5cm x 7.6cm	N/A
Temperature	10°C ~ 40°C	N/A

Note:

(1) Heart rate test range is different in standalone mode and PC mode. In PC software mode, heart rate range is from 30 to 300BPM; in standalone mode, heart rate value can be set to 30, 60, 70, 80, 90, 120, 150, 180, 210, 240BPM, plus user can manually select other 3 values from 30 to 300BPM as preset parameters.

(2) Lumen accuracy would be ±10Lux when the light source is lower than 400Lux.

(3) We suggest users to observe PD's analog signals via connecting HRS100+'s BNC port to an oscilloscope. Under High Resolution Mode, users need to check "LED Off" option to switch off HRS100+'s LED and no optical signals will be sent then.



HRS100+
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more information

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