

# Smartdop™ 45

BI-DIRECTIONAL DOPPLER  
WITH WAVEFORM DISPLAY & PRINTER



- **HAND HELD BI-DIRECTIONAL DOPPLER WITH BACKLIT LCD & PRINTER**

Provides bi-directional velocity waveforms, numerical data & blood volume flow. Fetal heart rate & monitoring waveforms when used with 2MHz probe.

- **Hadeco DESIGNED SMART MICROPROCESSOR**

Fully automatic gain control & baseline adjustment. Various mode settings available with LCD menu & unique scroll button. 30 Waveform memory storage.

- **USB COMPUTER INTERFACE**

Optional communication cable & Smart-V-Link™ software are available. Stores waveforms & numerical data to computer for data analysis and filing. To input abbreviated site name & test names to enhance mobility.

- **OPTIONAL PPG, PV & TEMPERATURE PROBES**

Available for expanded arterial, venous testing & foot temperature testing.

- **2 PROBE CONNECTION AVAILABLE; FOR USER CONVENIENCE**

## PROBE SELECTION

Standard (Clinic)



Pencil



Fetal (2 MHz)



PPG / PV



Temperature

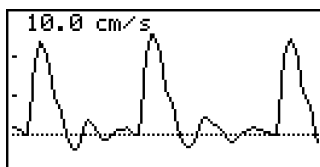


## CLINICAL APPLICATIONS

- Peripheral vascular procedures
- Blood pressure segmental studies
- Determination and monitoring of fetal heart rate (2MHz)
- Penile & digit systolic pressures
- Toe pressures (PPG)
- Venous reflux assessment (PPG)
- Arterial Pulse Volume studies (PV)
- Maximum Venous Outflow (PV)
- Foot Temperature

## DISPLAY SAMPLES

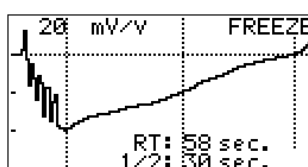
Blood velocity



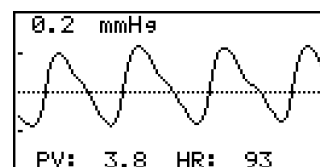
Blood velocity (Numerical Data)

S: 24.7 cm/s FREEZE  
 MN: 11.5 cm/s  
 D: 7.5 cm/s  
 MIN: 7.4 cm/s  
 RP: 0.69 SD: 3.29  
 PI: 1.50 HR: 67 BPM

PPG Venous Reflux



PV Arterial



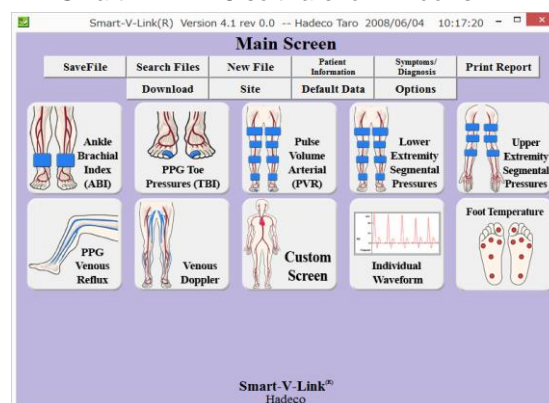
## SPECIFICATIONS

Power: Ni-MH rechargeable battery pack or AC adaptor  
 Full charge life: 2.5 hours or more with freeze mode  
 Automatic shut-off  
 Speaker output: 250 mW or more  
 Multi frequency: 2, 4, 5, 8, 10, 20 MHz  
 Waveform memory: 30 waveforms  
 LCD display: 128 x 64 dots, STN LCD  
 Paper: W 58 mm x L 25 m/roll, thermal  
 Print speed: 25 mm/sec  
 Interface ports: USB: For PC connection  
 Headset: Speaker cut off  
 Weight: Approx. 560 grams (including probe)  
 Electrical safety: Conforms to IEC60601-1

\* Specifications subject to change.

## OPTION

Smart-V-Link PC software for Windows



**Hadeco, Inc.**  
 Kawasaki, Japan  
 2-7-11, Arima, Miyamae-ku, Kawasaki, 216-0003 Japan  
 TEL: +81-44-877-4361 FAX: +81-44-855-7301  
 www.hadeco.co.jp/



SD45 080-00127-01  
 Printed in Japan