



# BladderScan BVI 3000

BLADDER VOLUME INSTRUMENT



*The BladderScan® BVI 3000 is a portable, 3D ultrasound instrument that quickly, accurately, and noninvasively measures urinary bladder volume and post-void residual (PVR).*

## BladderScan BVI 3000 Benefits

- Noninvasively measures bladder volume and post-void residual (PVR)
- Helps assess urinary retention and postoperative urinary retention (POUR)
- Helps prevent unnecessary catheterization and unnecessary trauma to patients
- Helps reduce rates of catheter-associated urinary tract infection (CAUTI)
- Helps evaluate many common urological conditions:
  - Benign prostatic hyperplasia (BPH)
  - Bladder outlet obstruction (BOO)
  - Overactive bladder (OAB)
  - Lower urinary tract symptoms (LUTS)
- Helps differentiate between types of incontinence
- Helps monitor intermittent catheterization
- Improves efficiency of health care professionals by reducing costs and saving staff time

## BladderScan BVI 3000 Features

- LCD screen displays bladder position and volume; aiming icon assists in proper probe placement
- 3D display shows the bladder in 2 cross-sectional images to verify an accurate scan
- Easy-to-print exam results for patient records or reimbursement procedures
- Helps document cost savings and catheterizations-prevented based on user-determined statistical input



### BladderScan BVI 3000 Technology

The BladderScan BVI 3000 calculates bladder volume using patented V<sub>MODE</sub><sup>®</sup> ultrasound technology. A BVI 3000 exam is quick, easy, and comfortable for the patient. When you press the scan button, within seconds, the instrument measures ultrasonic reflections on multiple planes inside the body producing a 3D image. Bladder volume measurements made with V<sub>MODE</sub> ultrasound are more accurate than those from conventional 2-dimensional ultrasound, as they are based on this more complex, 3D image.



Console

Cart (optional)

### BladderScan BVI 3000 Helps

#### Diagnose

- Measure post-void residual (PVR) and verify an empty bladder
- Differentiate urological problems more efficiently
- Assess postoperative urinary retention (POUR)
- Identify blocked Foley catheters

#### Manage and Treat

- Evaluate need to catheterize
- Discontinue Foley catheter use
- Establish voiding schedules and assist in bladder retraining

#### Prevent

- Avoid unnecessary catheterization and reduce rates of CAUTI
- Reduce incontinent episodes

### BladderScan BVI 3000 System Includes

- Compact console with easy-to-read LCD screen
- Two NiMH rechargeable batteries
- Battery charger
- Onboard printer for patient records or reimbursement
- Ultrasound gel
- User's Manual, Quick Reference Guide and Quick Reference Cards
- Optional medical cart with locking wheel

Batteries and charger



The CPT/HCPCS Code for post-void residual (51798) is approved for reimbursement by Medicare.

### Specifications

BladderScan Bladder Volume Instruments are CE marked in accordance with the Medical Device Directive, and the Verathon Inc. quality system is Quality System Certified to ISO 13485:2003 standards. US 6,884,217 and other patents pending.

**Bladder Volume Range:** 0 to 999 ml

**Accuracy:** The following accuracy specification assumes usage per instructions, scanning a Verathon Inc. Tissue Equivalent Phantom:  
0 to 699 ml ± 20%, ± 20 ml; 700 to 999 ml ± 25%, ± 25 ml

**Scan Time:** Less than 5 seconds

**Weight:** Less than 5 lb

**Power:** 7.2v NiMH battery pack (2 supplied); six hours continuous use on one charge; battery low message

**Display:** Liquid Crystal

**Dimensions:** Width: 9.0" (23 cm), Length: 11.25" (32 cm), Height: 2.75" (7 cm)

**Ultrasound Parameters:** Temporal Average Power: 1 mW maximum  
Focal 20 dB Beam-Area: 1.4 cm<sup>2</sup>  
Transducer Dimension: 3 mm diameter  
Working Frequency: 2 MHz  
Peak Instantaneous Intensity: 14 W/cm<sup>2</sup> maximum  
Pulse Repetition Frequency: 180 pulses/second  
Scan angle: 120 degrees  
Mode: V<sub>MODE</sub> (multiple, aligned B-mode images)

**Operating Conditions:** Temperature: +10° C to +40° C  
Humidity: 30% to 75%, non-condensing

\*SPTA = Spatial temporal average  
SPPA = Spatial peak pulse average