

# BladderScan® BVI 3000

## Bladder Volume Instrument



### BladderScan®

#### The Standard of Care for Bladder Volume Measurement

The BladderScan® family of products consists of portable ultrasound instruments that measure bladder volume. They provide quick, accurate and reliable results.

Because they are noninvasive and easy to use, BladderScan® instruments are an excellent alternative to diagnostic urinary catheterization and a perfect tool to help healthcare providers noninvasively diagnose, manage and treat urinary outflow dysfunction.

#### BladderScan® Benefits

- Prevents unnecessary catheterization
- Helps prevent undiagnosed urinary retention
- Reduces rates of urinary tract infection
- Helps caregivers manage and treat incontinence
- Eliminates unnecessary trauma to patients, preserves their dignity and helps improve patient care
- Cost effective - saves staff time and improves job satisfaction

#### BladderScan® BVI 3000

- The LCD screen displays bladder position and volume. A unique aiming icon guides the operator to optimal probe placement.
- Comprehensive 3-dimensional display shows the bladder in two cross-sectional images to verify that a complete scan has been achieved.
- It's easy to print the results of any scan for patient records or reimbursement procedures.
- The BladderScan® documents cost savings and number of catheterizations prevented based on your institution's statistical input.

UROLOGY	ACUTE CARE
<p>For the urologist, BladderScan® applications assist in:</p> <ul style="list-style-type: none"> <li>• Diagnosis of severe bladder outlet obstruction (BOO), lower urinary tract symptoms (LUTS), overactive bladder (OAB), and prostatitis</li> <li>• Monitoring post-operative recovery</li> <li>• Measurement of post-void residual bladder volume (PVR)</li> <li>• Evaluation of urinary retention</li> </ul>	<p>BladderScan® minimizes catheterization and dramatically lowers the incidence of nosocomial urinary tract infection (NUTI) at your facility.</p> <p>National statistics (U.S.A.) show that NUTI:</p> <ul style="list-style-type: none"> <li>• Increases the cost of care for hospitals and rehabilitation centers</li> <li>• Lengthens hospital stays by 1- 3 days</li> <li>• Can be life-threatening for patients</li> </ul>
PRIMARY CARE	EXTENDED CARE
<p>BladderScan® aids in the diagnosis and treatment of:</p> <ul style="list-style-type: none"> <li>• Benign prostatic hyperplasia (BPH)</li> <li>• Bladder outlet obstruction (BOO)</li> <li>• Prostatitis</li> <li>• Overactive bladder (OAB)</li> </ul> <p>As a Primary Care physician, the BladderScan® will provide you with the information you need to more easily evaluate urological conditions, so you can prescribe appropriate treatment sooner.</p>	<p>When utilized as part of a comprehensive incontinence management program, the BladderScan®:</p> <ul style="list-style-type: none"> <li>• Minimizes incontinent episodes</li> <li>• Reduces infection rates (UTI)</li> <li>• Improves residents' quality of life</li> <li>• Saves staff time and increases job satisfaction</li> <li>• Reduces the cost of care</li> </ul>

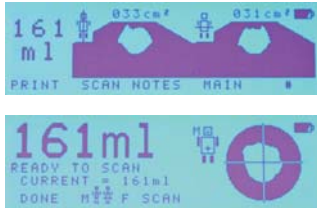
Noninvasive, Accurate, Reliable, & Easy to Use



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## Bladder Volume Instrument

### How BladderScan® Works



The BladderScan® calculates bladder volume using patented V<sub>MODE</sub>® technology. V<sub>MODE</sub>® ultrasound is easy to use and comfortable for the patient. When you press the scan button, within seconds, the V<sub>MODE</sub>® technology measures ultrasonic reflections on multiple planes inside the body and produces a 3-dimensional image. Based on this image, the BladderScan® calculates and displays the bladder volume.

Volume measurements made with V<sub>MODE</sub>® ultrasound are more accurate than those from conventional 2-dimensional ultrasound, as they are based on a more complex, 3-D image of the bladder.



By implementing the BladderScan® BVI 3000, you can improve the quality of care for patients with urinary problems.

### DIAGNOSE

- Measure post-void residual (PVR)
- Differentiate urological problems more efficiently
- Diagnose urinary retention
- Identify blocked Foley catheter
- Verify empty bladder
- Determine hydration status
- Differentiate between types of incontinence to determine appropriate care

### MANAGE AND TREAT

- Establish volume (vs. time) based intermittent catheterization protocols
- Discontinue Foley catheter use
- Evaluate need to catheterize after Foley catheter removal
- Establish voiding trials
- Evaluate need to catheterize during intermittent catheterization
- Establish voiding schedules
- Assist in bladder retraining (biofeedback)

### PREVENT

- Eliminate unnecessary catheterization
- Reduce rates of nosocomial UTI
- Minimize antibiotic use associated with UTI
- Minimize catheter-related damage to upper urinary tract
- Prevent undiagnosed (chronic) urinary retention
- Prevent post-operative (acute) urinary retention
- Prevent bladder overdistension
- Reduce incontinent episodes

### Specifications - BVI 3000

Range:	Bladder volume range 0 to 999 ml	Resolution:	Axial Resolution: 1.55mm, Radial Resolution: 2 degrees
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	Ultrasound Output 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)
Scan Time:	Less than 5 seconds	Operating Conditions:	Temperature: +10° C to +40° C Humidity: 30% to 75%, non-condensing
Weight:	Less than 5 lbs.		
Power:	7.2v NiMH battery pack (2 supplied). Six hours continuous use on one charge. Battery low message		
Dimensions:	Width: 9.0" (23cm), Length: 11.25" (32cm), Height: 2.75" (7cm)		
Display:	Liquid crystal		

The BladderScan® BVI 3000 is CE Marked in accordance with the Medical Device Directive and the Verathon® quality system is Quality System Certified to ISO 13485:2003 standards. US Patent No. 4926871, 5235985. INTL Patents Pending. BladderScan®, V<sub>MODE</sub>®, Verathon® and Verathon Medical® are either registered trademarks or trademarks of Verathon Inc. in the USA and/or other countries. Copyright ©2007. All rights reserved.



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