

Bladder Scanner

AvantSonic Technology Co., Ltd

The Bladder Scanner manufactured by AvantSonic Technology Co., Ltd. provides a non-invasive bladder volume measurement by utilizing real-time ultrasonic imaging and measurement. The equipment consists of the main unit, 3D probe, battery and power adapter.

The equipment is designed for bladder volume measurement in medical units. It provides the basis for the implementation of clinical catheterization, and makes evaluation of residual urine volume after patients' voiding and assists in the diagnosis of the bladder and renal function diseases. This equipment also helps the disabled or persons who have lost the function of automatic micturition to know the time of urination.

Based on 12 sections of the bladder, the device can automatically identify the bladder wall, perform 3D modeling infinite calculus calculation, and is not affected by tumor foreign bodies in the bladder, accurately measuring the bladder volume value.

This equipment is designed and manufactured in strict accordance with: National Standard IEC 60601-1:2005“Medical electrical equipment Part 1: General requirements for safety” and IEC 60601-2-37:2007“Medical electrical equipment: Ultrasonic Diagnosis and Monitor Equipment Safety Specific Requirement”. The type of defense and protection against electric shock is Class II Type B.

Z5 Technical Specifications

- Probe: 3D mechanical sector MP2/2.5MHZ
- Standard ultrasonic frequency of operation: 2.5MHz
- Volume measurement range: 0ml - 999ml
- Volume measurement accuracy: $\pm 10\%$
- Volume display resolution: 1ml
- Scan time: 5 seconds
- Battery capacity: 2600mA
- Operation methods: touch keyboard
- Tissue Harmonic Imaging
- Information storage
- Information print
- Multicolored image display selection
- Multicolored screen style selection
- USB port: connecting PC and storing up user information
- Bluetooth module: wireless connecting PC
- Dimension of monitor: 8-inch TFT-LCD
- Consumption: 50W
- Dimension of equipment: 210*260*50 mm
- Weight: about 1500g (including the probe)
- Power at the state of charging: 30-120VA
- Power supplied by AC when battery is full or by the battery: 30-40VA
- Battery charging time: less than 2 hours
- Battery life: more than 4 hours

Z5



Z5 with trolley



Non-Recall Declaration

We hereby declare that we have no recall due to product quality reasons on our Bladder Scanner devices (Z5) in the past year.

Clinical Application Intended Use:

- (1) Bladder volume measurement;
- (2) Evaluation of residual urine volume after patients' voiding;
- (3) Diagnosis of the bladder and renal function diseases;
- (4) Helping the disabled or people who have lost the function of automatic micturition to know the time of urination.

Clinical application:

1. Department of Radiotherapy: Patients with postoperative pelvic tumors undergoing rounds of radiotherapy can cause urinary retention.
2. Obstetrics and Gynecology Patients with postoperative pelvic tumors or postpartum patients can lead to urinary retention or dysuria.
3. Department of urology: Patients overactive bladder (OAB), bladder outlet obstruction (BOO), benign prostatic hyperplasia (BPH), urinary retention.
4. Department of Rehabilitation: Patients with SCI can cause urinary retention and urinary incontinence.
5. Department of endocrinology: With the extension of the course of diabetes, the patient's micturition habits were changed, and bladder wall thickness and the residual urine volume which can increase the possibility of urinary tract infections were increased.
6. ICU: Patients with severe or unconscious diseases cannot autonomously control urination.

In clinical use, our bladder scanner can effectively identify foreign bodies in the bladder, and the measurement results are not affected by the occupied foreign bodies. The accuracy of measurement results is guaranteed. The following image shows a high-density shadow of a blood clot in the bladder.

