



## bt uricell 1680

### AI-Libre Urinalysis Analyzer

- 300 T/H for chemistry analysis
- 120 T/H for sediment analysis
- 120 T/H for both chemistry and sediment analysis

Compact, all in one design

AI technology (CNN, deep learning)

Real strip image display

Innovated formed element video replay



**BİLİMSEL TIBBİ ÜRÜNLER**  
Pazarlama Sanayi ve Ticaret Limited Şirketi

9 Eylül Mahallesi 312/1 Sokak No:12  
Gazlemir - İzmir - TÜRKİYE  
Tel: +90 232 262 6083 Fax: +90 232 250 6123  
E-mail: export@bilimseltip.com info@bilimseltip.com  
www.btpproducts.com.tr

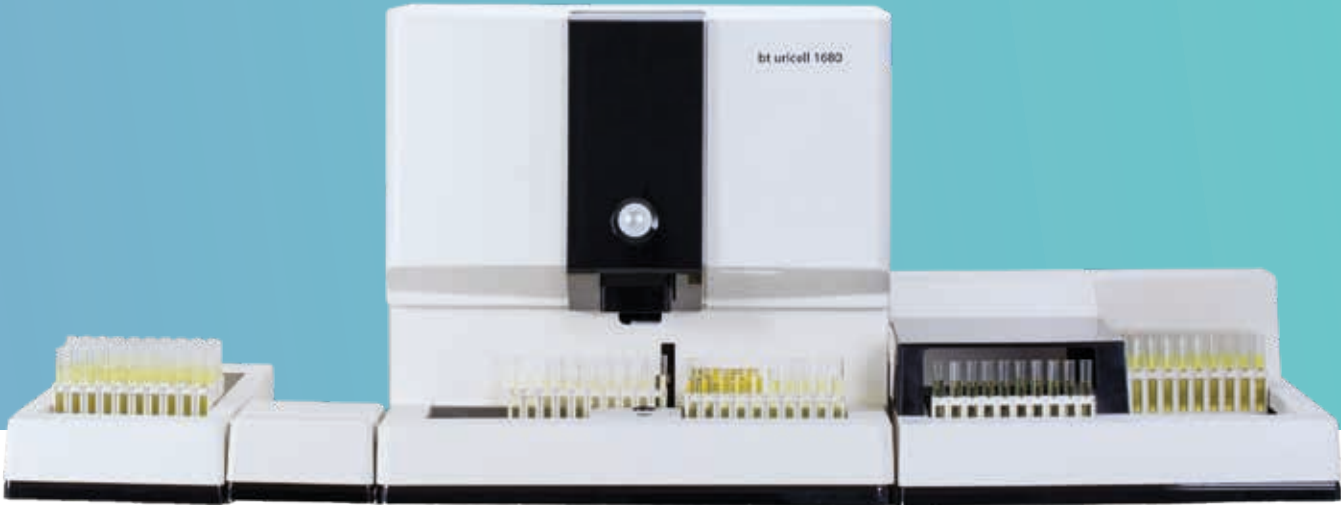
Rev: 202502-001 (20250223)



**bilimsel**

# bt uricell 1680

## AI-Libre Urinalysis Analyzer

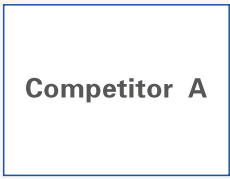


### Smallest All-in-one Urinalysis Analyzer

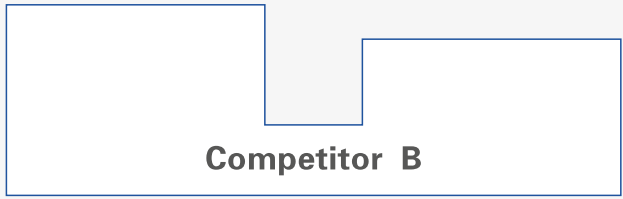
- 640mm by length only
- Save valuable laboratory space



640mm



800mm



2200mm



### All in One

- Chemistry, sediment and physical analysis in one analyzer
- One aspiration, complete results
- Robust yet compact



### Less is More

- Routine consumption: sheath liquid and strip only
- Minimum sample volume 1.5~2.0mL
  - Chemistry analysis: 1.5mL
  - Sediment analysis: 2.0mL
  - Both analysis: 2.0mL



### New Highlights

- Piercing tube function to prevent the infection
- New physical parameters: conductivity and osmolality



### Good and Better

- Optional extension pre-storing and reclaiming tray to extend the sample capacity to 260
- Optional refractometer to provide more physical parameters (SG, Turbidity, Color)
- Optional ST module to utilize sample pretreatment for higher workload lab



### Smart and Smarter

- DIY print template modification software integrated
- Intelligent abnormal sample flag
- Bi-directional LIS to follow LIS order to test chemistry, sediment or both flexibly
- Automatic QC function

#### Throughput

120~300 T/H  
• 300 T/H for chemistry analysis  
• 120 T/H for sediment analysis  
• 120 T/H for both chemistry and sediment analysis

#### Sample

• Nature urine  
• Body fluid (optional): Cerebrospinal fluid/ Hydrothorax and ascite/ Vaginal secretions

#### Minimum Sample Volume

1.5mL for chemistry analysis;  
2mL for sediment/ both chemistry and sediment analysis

#### Sample Position

Stand-alone: 60; With expanding tray: 260; With ST module: 200

#### Display & OS

22-inch screen, Windows 10

#### Results Storage

≥400,000

#### Communication

LAN, USB, RS-232, PS/2, VGA

#### Working Temperature

5~40℃

#### Power Supply

100V~240V~, 50/60Hz

#### Dimension

640 mm(L) x 705 mm(W) x 618 mm(H)

#### Weight

82.5 kg



# bt uricell 1680 Chemistry Analysis Part



## Advanced CIS Imaging System

- High accuracy and high efficiency
- Real strip image display
- 5 wavelengths detection guarantees precise and confident results



## Physical Module

- Redesigned SG module to compensate temperature influence
- Improve test accuracy of urine specific gravity, turbidity and color



## 14 Items Strips

- 14 test items including VitC, CR, MA and CA
- Albumin-to-Creatinine Ratio (ACR) helps to screen early kidney disease
- Compensation pad can eliminate urine color interference



## High Speed

- 300 T/H for chemistry analysis only
- 120 T/H for both chemistry and sediment analysis



## Bar code Scanning Function

- High rate bar code scanning identification
- Shift test mode by scanning bar code through bi-directional LIS



## Liquid Level Sensing

- Liquid level sensing function to reduce the contact area between sample probe and urine
- Minimize the cross contamination interface

### Principle

CIS color detecting system, 5 wavelengths colorimetry method, refraction method

### Parameters

Strip parameters:

- 11FA: LEU, KET, NIT, URO, BIL, PRO, GLU, SG, BLD, pH, VitC
- 12FA: LEU, KET, NIT, URO, BIL, PRO, GLU, SG, BLD, pH, MA, CRE
- 14FA: LEU, KET, NIT, URO, BIL, PRO, GLU, SG, BLD, pH, VitC, MA, CRE, CA

System parameters: ACR(12FA, 14FA), COLOR, TURBIDITY

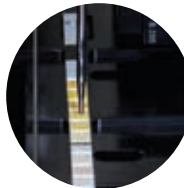
Physical parameters: Color, Turbidity, SG, Osmolality, Conductivity

### Strips

11FA, 12FA, 14FA

### Strip Cabin Capacity

500





# bt uricell 1680

## Sediment Analysis Part



### Urine Sediment Analysis

- Flowcell digital imaging automatic identification
- 2000 frames image capture
- High speed data acquisition card



### High Speed & Reliability

- 120 T/H constant speed for sediment analysis
- To be fast but never compromising on high resolution pictures and reliable results



### High Resolution Pictures

- Innovated formed element video replay for each sample
- 400 times magnified image
- Guarantee the recognition accuracy rate



### AI Technology

- Deep learning system
- Multi-layer neural network (CNN), more intelligent
- Expanded learning and migration learning technology, more compatible



### Consolidation of Urine Work Area

- New generation report interface
- Full report covers physical examination results, dry chemistry results, formed element results, RBC phase information and real strip image

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Principle                | AI recognition technology, flat sheath flow technology, digital imaging technology                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Parameters               | <b>Urine formed elements</b><br>RBC, DRBC (G1, Coin, Ghost, Big RBC cells, Small RBC cells), WBC, Phagocyte, WBCC, SQEP, NSE (TREP, REP), HYA, PAT (GRAN, WAXY, CELL, BLOOD, MIX), CAOX (CaOxm, CaOxd), URIC, STRUVITE, AMOR, OTCRY (CaPh, MUCR, CYCY, LECR, CHCR), BACT (Cocci, Scoccus, Bacilli), YST, Hyphae, OTFNG (FUSA), MUCS, SPRM, LIP, BUBLE, OTHER and more are coming soon...<br><b>RBC phase detection</b><br>MCV, RDW, abnormal RBC ratio<br><b>Integrate urine dry chemistry results</b> |
| *Body fluid (optional)   | Cerebrospinal fluid (CSF) / Hydrothorax and ascite / Vaginal secretions<br>RBC, WBC, EC, BACT, etc.                                                                                                                                                                                                                                                                                                                                                                                                    |
| Video replay             | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Pictures for each sample | 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Lens                     | 40X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Report Unit              | xx/uL, xx/HPF, xx/LPF, plus system                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

