## Our Technology, Your Health.

# JIANGSU BONSS MEDICAL TECHNOLOGY CO., LTD.

F6, building G21, North of Xinyang Road, East of Koutai Road, China Medical City Zone, Taizhou, Jiangsu 225316, China.

Building# 7, No. 898 China Medical City Avenue, Hailing District, Taizhou City, Jiangsu Province, 225316, China.

Tel: 0086-0523-86813258 Fax: 0086-0523-86813258 sales@plasma-surgical.com sales@bonss.com.cn

www.plasma-surgical.com www.BONSS.com.cn



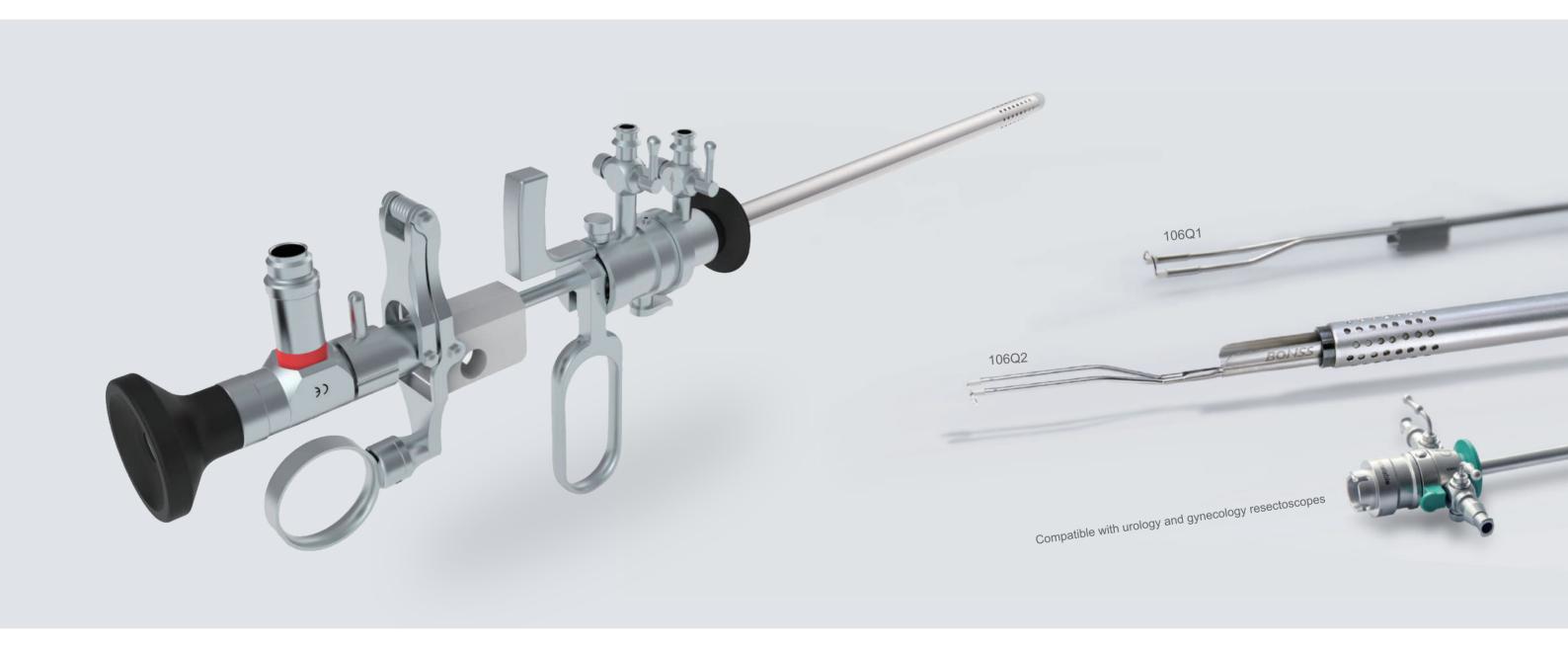




# **Urology PKRP and Gynecology PKRU**

Transurethral Plasma Kinetic Resection of Prostate and Transcervical Plasma Kinetic Resection of the Uterus, with its exemplary reliability and state-of-the-art performance have made it a bench mark tool.

Specialized in Minimally-invasive Radio Frequency Plasma Technology for Urology and Gynecology Surgeries.



Multiple Electrodes Designs
Reduce Risk for TURP Syndrome
Perfect Performance in Ablation
Minimal Nerve Block





#### LoopXS (106Q1)

Can produce larger tissue fragments with fewer cuts and faster speeds.

Suitable for large prostate resection, bladder tumor, urethral stricture, myomectomy, endometrial polyp, residual embryonic tissue after abortion, and cyst surgery.



#### **LoopXL (106Q2)**

The wider electrode loop can provide more effective hemostasis than a conventional electric loop during cutting. Suitable for large prostate resection, bladder tumor, urethral stricture, myomectomy, endometrial polyp, residual embryonic tissue after abortion, and cyst surgery.



#### Needle (106Q3)

Applicable to cavity stenosis.



## **Spring (106Q4)**

Applicable to cavity stenosis.



## Hook (106Q5)

Applicable to narrowing of the lumen, dissection of the cyst, and slitting surgery.



## VapButton (106Q6)

Applicable to cystic ablation, large-area tissue vaporization and hemostasis.



## Roller (106Q7)

Applicable to cystic ablation, large-area tissue vaporization and hemostasis.



## VapBall (106Q8)

Applicable to cystic ablation, large-area tissue vaporization and hemostasis.



## SawRoller (106Q9)

Applicable to cystic ablation, large-area tissue vaporization and hemostasis.



## ShovelLoop (106Q10)

Applicable to prostate resection, bladder tumor, urethral stricture, cyst ablation, large area tissue vaporization and hemostasis.



# **EBLATOR ARS Radio Frequency** Plasma Surgical System







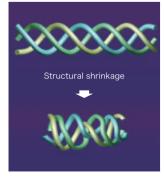






#### How does it work





#### **ABLATE**

The Radio Frequency energy flows through the active electrode and returns electrode, and by the conductive saline solution, it generates precisely focused plasma sheath around the electrodes. The plasma sheath consists of massive charged practices which can generate sufficient energy of strong oxidizing when accelerated by the electric field. The generated energy is powerful enough to break the organic molecular bonds within the tissue, and make the tissue rapidly dissolved into molecular and atoms level at a relatively low temperature of 40-70 °C. The device provides rapid and efficient ablation and resection capabilities of soft tissues in relatively low temperatures.

#### Radio Frequency & Plasma Effects

The serious blood loss during procedure blocks the surgical visions and causes high potential risk, which would increase the difficulties and time of the surgical procedures. One of the solutions is BONSS Radio Frequency Plasma Surgical System. The double effects of Radio Frequency and Plasma have the advantage as below.

- The blood vessels or the bleeding points are coagulated before resection, thus less blood loss during procedure is achieved.
- The blood vessels are sealed during surgical procedure, to ensure the ablation and resection process with less blood loss, and to ensure a clear surgical field.
- In one versatile single-use plasma electrode, it provides resection, ablation, coagulation and hemostasis capabilities for simple surgical process.

BPH(Benigh Prostatic Hyperplasia), Bladder Tumor Gynecology Hysteromyoma Endometriosis, Function Uterine Bleeding and More......

### Exllent Performance





#### Low-frequency Super Pulse Plasma Technology(LSP)

It uses the low frequency of 100khz. Compared with the technology of higher frequency over 200khz, the Low-frequency Super Pulse Plasma Technology (LSP) provides more precise resection and ablation, and lower working temperature.

Features: Lower working temperature, Reduced thermal damage, No edema period, Short

Precise resection, and ablation by RF Plasma energy, Similar operation and effect to laser enucleation.

#### **Systematic Working Mode**

Two working modes:

ABLATE for resection and ablation at Yellow control panel and Yellow foot pedal. COAG for coagulation and hemostasis active at Blue control panel and Blue foot pedal.

### **Intelligent Control System**

Designed with automatic identification of electrodes, foot switch and power supply, which are displayed respectively on the device control panel, and automatic default power output value for different electrodes designs.

#### **Endoscopic ABLATION and COAGULATION Functions**

Bonss ARS Radio Frequency Plasma Surgical System can support endoscopic resection, ablation, coagulation and hemostasis, such as resectoscope. Product safety has been approved by the health authority to meet the standard of endoscopic surgery. The features include accurate and precise endoscopic resection, no risk of obturator neural reflex, no risk of post-TURP edema.

#### **Automatic Protection**

The electrical circuit system can constantly monitor power output and automatically suspend power output when there is an instantaneous peak current, For example, it will automatically suspend radio frequency output when electrode contacts or is close to metal, and automatically resumes work after the electrode has returned to the proper distance.

#### **Integrated Function**

In one versatile single-use electrode, it provides ABLATE for resection and ablation. Coag for coagulation and hemostasis capabilities. The integrated electrode enhances surgical vision, controlled resection for rapid removal of soft tissues.

#### **Foot Switch (For Option)**

The water-proof, pressure-resistant, and convenient foot switch have two working modes of ABLATE and COAG, each identified in different colors and working sounds.

The ABLATION power setting level can be adjusted on the foot





## Minimally-Invasive Surgery

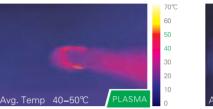
## The Minimally-Invasive Solution at Your Hand

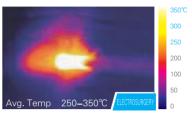
No risk of TURP Syndrome (Water Intoxication)	By the bipolar radio frequency plasma surgery under normal saline solution, there is no risk of TURP Syndrome (Water Intoxication), which is a normal post-operative syndrome by TURP (Transurethral Resection Prostate by traditional electrosurgery).		
Safe Operation	The features of low working temperature and low thermal damage provide protection of erectile nerves. Thanks to the bipolar technology, the electricity does not flow through human body or the working element, to ensure the safety of both patients and surgeons. The bipolar plasma energy circuit is generated at the electrode tip, which reduces the irrigation of the obturator nerve. No need to seal the nerves or use the muscle relaxant. It can support the enucleation, to provide the protection of urethral sphincter.		
Convenient Operation	In one versatile single-use plasma electrode, it provides resection, ablation, coagulation and hemostasis capabilities for simple surgical process. The effective resection and ablation capabilities shorten the operation time and reduce the surgeon's workload.		
Precise Operation	The precise resection and ablation have no injury on the capsule, which is very important for TUR-BT (Bladder Tumor), and alsogreatly lower the risk of the uterine perforation.		
Fast recovery	The feature of low working temperature, reduced thermal damage, and the pseudomembrane generated after resection and ablation, ensures a fast recovery.		
Reduced Complications	Reduced post-operative urethral thermal injury, sphincter injury and stenosis.  Reduced post-operative urinary tract infection and irritation.  Reduced post-operative bladder irritation, transient urinary incontinence, erectile dysfunction and more.		
Integrated Multifunction	In one versatile radio frequency plasma surgical system, it provides bipolar capability, urology and gynecology applications.		

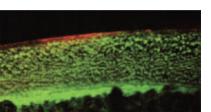
The Radio Frequency Plasma Surgical System provides a minimally-invasive solution for resection of the prostatic hyperplasia and Uterine cavity disease under the endoscope. Not necessary for open surgery, minimal trauma, less bleeding, lighter pain and quicker recovery.

Bonss Radio Frequency Plasma Surgical System provides the transurethral plasma resection of the prostate and Uterine cavity disease under normal saline solution with following advantages:

## Low Working Temperature Less Thermal Damage



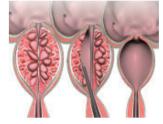




Temperature Contrast by Plasma and Electrosurgery

Reduced Thermal Damage

Plasma Surgery		Electrosurgery
Plasma Energy		Arc
Break Molecular Bonds		Cells Evaporation
40-50℃		250-350℃
0.9% Normal Saline Solution		5% Mannitol
Multipolar/Bipolar, No Patient Plate		Monopolar, Requires Patient Plate
Reduced Thermal Damage		High Thermal Damage
No Carbonization		Carbonization

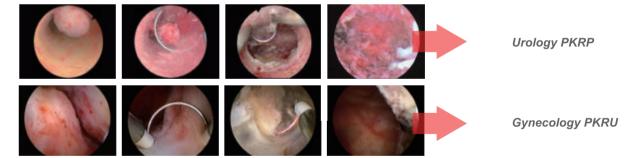




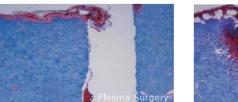
Urology PKRP

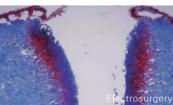
**Gynecology PKRU** 

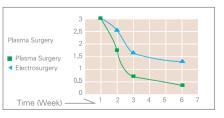
#### Less Blood Loss



## Reduced Thermal Damage, Fast Recovery







Injury Contrast by Plasma Surgery and Electrosurgery

Post-op Inflammatory Response by Plasma and Electrosurgery

## Shortened Hospital Stay Time

The hospital stay for patients treated by plasma technology can be shortened by 2–4 days, compared to that by conventional surgical methods.