# A Versatile, highly-adjustable electrosurgical unit that can easily keep pace with any dynamic operating room environment

The Avante Citadel X3 features a color touchscreen, where clinicians can easily navigate between themany settings of the ESU. The Avante Citadel X3 is suitable for a wide range of procedures including Plastic Surgery, ENT, Endoscopy, Laparoscopy, Ophthalmology, Urology, Gynecology and Thoracic procedures.

#### **Features:**

- A stable, highly-adjustable ESU with TFT color touchscreen panel for easy, flexible operation.
- Internet connectivity and data logging capabilities.
- Patient return electrode monitor increases patient safety by preventing electrode site burns.
- Remote power settings allow clinicians to adjust mode and power from the sterile area.
- Data logging stores the last 50 surgical cases in system memory.
- System can run self-demonstration mode to display modes and settings.
- 100 different combinations of operating modes for virtually any procedure.
- Two Vessel Sealing Modes for up to 7mm of tissue, with audio indication at completion. Alarm sounds if vessels are improperly sealed.
- Monopolar and bipolar capable with the appropriate accessories.
- Automatic tissue sensing starts and stops bipolar modes without footswitch activation.
- Audible feedback after completion of Bipolar coag reduces charring and sticking.
- Two simultaneous coagulation outputs with independent controls.
- Self-diagnostic protocols help to ensure all parts and accessories are properly functioning.
- Durable, Waterproof footswitches and pedals.
- Optional Timeout function automatically stops the HF output in the event of an unintended activation.
- Optional Citadel ESU mobile cart, argon beam coagulation, ultrasonic aspirator, smoke evacuator and suction irrigation module.





## Avante Citadel X3 Electrosurgical Unit

### Equipment for the way you operate

#### **Specifications:**

#### Dimensions

» Width: 16.5 in (42 cm)

» Depth: 17.7 in (45 cm)

» Height: 6.9 in (17.5 cm)

**»** Weight: < 16.53 lbs (7.5 kg)

#### Power

» Operating voltage: 180-265 V AC

» Max. Power input: 1000 VA

» Fuse: 4 A

» UPS Backup: 1.5 KVA

#### Monopolar Autocut

- » Seven modes, 390 kHz
- » Low Cut: Continuous output, 400 W at 300  $\Omega$ , CF 1.5, Low Volt
- **»** Pure Cut: Continuous output, 400 W at 300  $\Omega$ , CF 1.5
- **»** Blend1: Bursts at 29 kHz, 250 W at 300  $\Omega$ , CF 2
- » Blend2: Bursts at 29 kHz, 200 W at 300  $\Omega$ , CF 2.6
- **»** Endo1: Pulse output,  $400\,\mathrm{W}$  at  $300\,\Omega$ , CF 1.5 Low Pulse Intr.
- » Endo2: Pulse output,  $400\,\mathrm{W}$  at  $300\,\Omega$ , CF 1.5 High Pulse Intr.
- » Hydro: Continuous output, 400 W at 300  $\Omega$ , CF 1.5, Rapid

#### Monopolar Coag

- » Seven modes: 460 kHz
- » Soft: Continuous output, 300 W at 300  $\Omega$ , CF 1.5, Low Volt
- » Desiccate: Repetition frequency 83 kHz, 200 W at 500  $\Omega$ , CF 5.0
- » Swift: Repetition Frequency 53 kHz, 120 W at 500  $\Omega$ , CF 6.2
- » Force: Repetition Frequency 29 kHz, 120 W at 500  $\Omega$ , CF 7.0
- » Spray: Repetition Frequency 24 kHz, 120 W at 500  $\Omega$ , CF 8.0
- **»** Hi-Spray: Repetition Frequency 13 kHz, 70 W at 500  $\Omega$ , CF 10.0
- » Hydro: Repetition Frequency 29 kHz, 120 W at 500  $\Omega$ , CF 7.0

#### Saline Resection Mode

- » Four modes, 440 kHz
- » Low Cut: Continuous output 300 W at  $100 \Omega$ , CF 1.5,
- » Standard Cut: Continuous output 300 W at 100  $\Omega$ , CF 1.5 HV
- » Soft Coag: Continuous output 200 W at 100  $\Omega$ , CF 1.5 I V
- » Force Coag: Continuous output 200 W at 100  $\Omega$ , CF 1.5 HV

#### Bipolar Coag

- » Five modes, 440 kHz
- » Micro: Continuous output, 120 W at 100  $\Omega$ , CF 1.5, Low Volt
- **»** Standard: Continuous output, 120 W at 100  $\Omega$ , CF 1.5. Medium Volt
- » Force: Continuous output, 120 W at 100  $\Omega$ , CF 1.5, High Volt
- » Bip Cut: Continuous output, 120 W at 100  $\Omega$ , CF 1.5, Low Volt
- **»** Macro Cut: Continuous output, 120 W at 100  $\Omega$ , CF 1.5, High Volt

#### Vessel Sealing

- » Two modes, 440 kHz
- » Fine seal: Low Pulse output, 5 levels, 150 W at 100  $\Omega$ , CF 1.5
- » Rapid seal: High Pulse output, 5 levels, 150 W at 100 Ω, CF 1.5

#### Feedback System

- **»** 3 Microprocessor Controlled 6SENSETechnology with sampling rate about 4000 sense/second.
- » Maximum output power deviation < 15% or 5 watts, whichever is greater at any setting with PER-98

#### Leakage Currents

- » RF leakage current: Monopolar < 150 mA rms, Bipolar < 60 mA rms</p>
- Low Frequency leakage currents: Normal polarity

   intact ground < 10 μA, Normal polarity ground</li>
   open < 50 μA</li>

