AtriCure

Ablation and Sensing Unit (ASU) and AtriCure Switch Box (ASB)

INDICATION FOR USE

5.1 The AtriCure Ablation and Sensing Unit (ASU) is designed to provide energy to various AtriCure RF ablation handpieces (pens and clamps) that are intedned for surgical ablation of cardiac tissue.

The AtriCure ASB Switch Matrix is a reusable accessory interface module that allows simultaneous connection of AtriCure® Isolator™ Transpolar™ ablative handpiece and pen devices to the ASU RF generator.

PRODUCT HIGHLIGHTS

Ablation Sensing Unit (ASU)

5.2 The ASU produces and delivers radiofrequency (RF) energy in a bipolar mode, at a frequency of approximately 460 kHz, with a maximum output power ranging from:

- 22.8 watts up to 28.5 watts for the Isolator clamps
- 12.0 watts up to 30.0 watts for the Isolator Transpolar pen or Coolrail linear pen devices depending on the mode of operation

The operating mode is a function of the hand pieces or pen and is set by the ASU. The ASU is designed to operate only with an AtriCure Bipolar Handpiece, AtriCure Isolator Pen, or AtriCure Coolrail linear pen. The footswitch is the input device used to activate RF energy delivery. Used in conjunction with the Ablation Switch Box (ASB), optimal algorithms maintain the balance of energy delivery with the impedance of the tissue. As the tissue temperature increases, impedance decreases. Power should be reduced to avoid overheating the tissue at the surface. As the cells begin to break down, impedance increases. Power should be increased to maintain the rate of work.

Ablation Switch Box (ASB)

5.5 The ASB is a reusable accessory interface module that allows simultaneous connection of AtriCure Isolator Transpolar ablative handpiece and pen devices to the ASU RF generator. Used in conjunction with the ASU, optimal algorithms maintain the balance of energy delivery with the impedance of the tissue. As the tissue temperature increases, impedance decreases. Power should be reduced to avoid overheating the tissue at the surface. As the cells begin to break down, impedance increases. Power should be increased to maintain the rate of work.

Features	Details
Frequency	460 kHz ±5%, Quasi-sinusoidal
ASU Maximum Power Output:	32.5 W at 100Ω
Size	32.5 cm × 34.4 cm × 15 cm maximum
Weight	9 kg maximum
Operational temperature	10 °C to 40 °C
Storage temperature	–35°C to +54°C
Electrical Specifications	9. 100-120V ~ 50/60 Hz 220-240V ~ 50/60 Hz
Fuses	100 -120V, 220-240V, ~50 / 60 Hz,: Replace fuses as marked: 1.25A/250V, T-lag, 5 × 20 mm, UL Recognized, IEC Approved
Footswitch Specifications	Moisture protection rating: IPX8
Equipment Type / Classification	Class 1
User interface	Liquid Crystal Display 5.3
Ablation power and time	Automatically controlled by tissue conductivity online measurement 5.4

PRODUCT ILLUSTRATION