

ELECTRO SURGICAL CAUTERY



MANUFACTURER & EXPORTER OF MEDICAL EQUIPMENTS



BRIEF INTRODUCTION

AYU ELECTRO SURGICAL CAUTERY

INTRODUCTION

AYU Electro Surgical Cautery is the application of a high-frequency (radio frequency) alternating polarity, electrical current to biological tissue as a means to cut, coagulate, desiccate, fulgurate and spray tissue.

The electro surgical unit (Cautery, or Surgical Diathermy unit) uses high-frequency electrical energy to cut tissue or coagulate bleeding. The preferential conduction of electrical energy by blood vessels facilitates coagulation. It is crucial to remove pooled blood and irrigation fluids from the operative field that may act as an insulator or disperse the cautery's energy, thereby diminishing its effectiveness.

Electro Surgical Cautery may be used in two different ways. In the bipolar mode, a tweezers-tip instrument is used to control bleeding vessels when the two tips complete the electrical circuit at the point of application. The advantage of bipolar cautery is its precise application of energy to small and delicate areas. This is particularly efficacious for microvascular surgery, micro neurosurgery, and plastic surgery procedures. Most bipolar units are operated by the surgeon through a foot-controlled switch.

In the Monopolar mode, a grounding pad is attached to the patient from the electro cautery unit, and an electro surgical "pencil" is used to complete a circuit through the patient when it touches bleeding tissues. This "pencil" has two buttons on its shaft that activate either a continuous application of electrical energy for cutting through tissue, or pulses that can coagulate specific sources of bleeding. Most units can produce a blend of cut and coagulation waveforms to combine the desired features of each.

The cut mode easily cleaves most tissue and does not penetrate very deeply into the surrounding tissue. It is not effective for coagulating bleeding.

In the coagulation mode, the metal blade or needle tip can be directly applied to the tissue or to an intermediary instrument, such as a clamp or forceps, that has been placed onto a bleeding vessel. It can also be used to coagulate a small blood vessel along its visible length before the vessel is transected. The coagulation mode penetrates deeply into the surrounding tissues and can cause thermal damage to unseen arteries, nerves, and other delicate tissues surrounding the cautery tip and vessel surface.

Applications

Urology TURP, Thoracic, Plastic Surgery, Micro Surgery, Neurosurgery, Laparoscopy, ENT, Spine, Ophthalmic, Onco Surgery, Hernia, Fatty Tissue, GI Endocut, Papillotomy, Polypectomy, Hysteroscopy etc.

SAFETY GUIDELINES

- Electro surgery uses high levels of continuous & pulsed radio frequency power. It presents some unique hazards.
- It generates sparks with the attendant ignition hazard.
- It generates Radio frequency interference that could obstruct monitoring.
- It can cause burns at inadvertent ground return paths if its return circuit is inadequate. Demodulation products could contain components that cause fibrillation or stimulation.
- DC monitoring currents can cause chemical burns.
- Capacitive or inductive coupling may occur.
- Active electrode or other applicators of electro surgical devices shall be properly secured, as recommended, when not in active use.
- If Cautery, electro surgery, or electrical equipment employing an open spark is to be used during an operation, flammable anesthetics shall not be used.
- Flammable germicides or flammable fat solvents shall not be applied for the preoperative preparation of the field.

OUR RANGE FOR ELECTRO SURGICAL UNITS

250 WATTS

- (1) AYU 250W ANL - ANALOG MODEL
- (2) AYU 250W ECO - DIGITAL MODEL

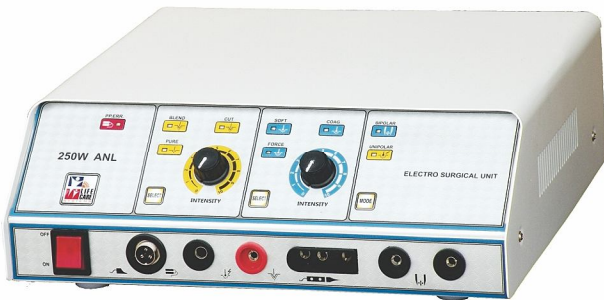
400 WATTS

- 1) AYU 42A – ANALOG MODEL
- 2) AYU 43AB – ANALOG MODEL
- 3) AYU 400W MICRO – DIGITAL MODEL
- 4) AYU 400W MAXI – DIGITAL MODEL
- 5) AYU 400W ALLIGATOR – DIGITAL MODEL

AYU 250W ELECTRO SURGICAL UNIT



AYU 250W ANL - ANALOG MODEL



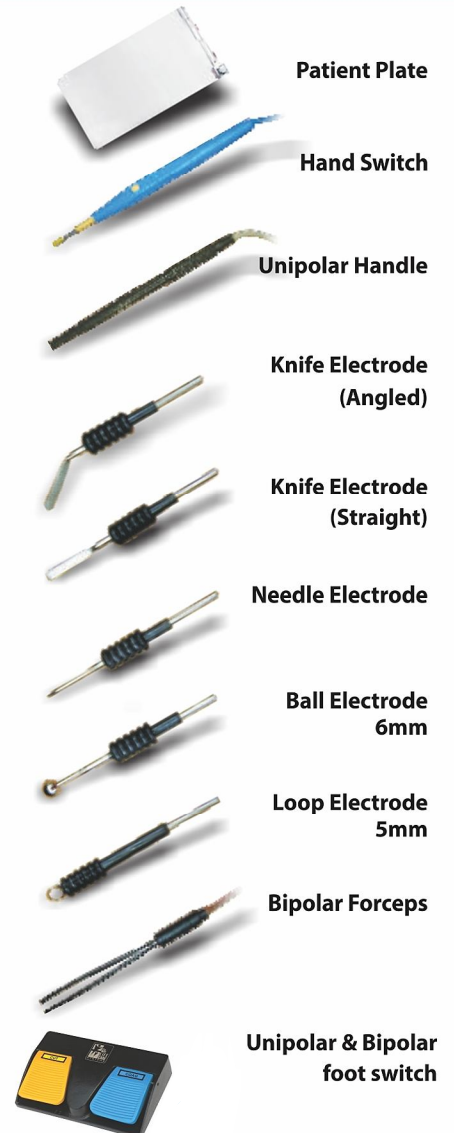
- Unit Size** – L x W x H - 33 x 35 x 11 cm
- Box Size** – L x W x H - 43 x 38 x 24 cm
- Net Weight** – 3.135 Kg
- Gross Weight** – 7.80 Kg

AYU 250W ECO - DIGITAL MODEL



- Unit Size** – L x W x H - 33 x 35 x 11 cm
- Box Size** – L x W x H - 43 x 38 x 24 cm
- Net Weight** – 3.14 Kg
- Gross Weight** – 7.76 Kg

STANDARD ACCESSORY



OUTPUT CHARACTERISTICS AYU ANL & ECO -250W

	MODE		RATED LOAD (OHMS)	MAXIMUM POWER (WATTS)	
	250W ANL	250W ECO		250W ANL	250W ECO
Monopolar Cut	PURE	PURE	300	250	250
	BLEND	BLEND	300	180	180
Monopolar Coag.	FORCE	DESICCATE	300	180	150
	SOFT	FULGURATE	300	150	180
Bipolar Cut	PURE	PURE	100	100	100
	BLEND	BLEND	100	70	70
Bipolar Coag.	FORCE	DESICCATE	100	70	50
	SOFT	FULGURATE	100	50	70

Light Weight

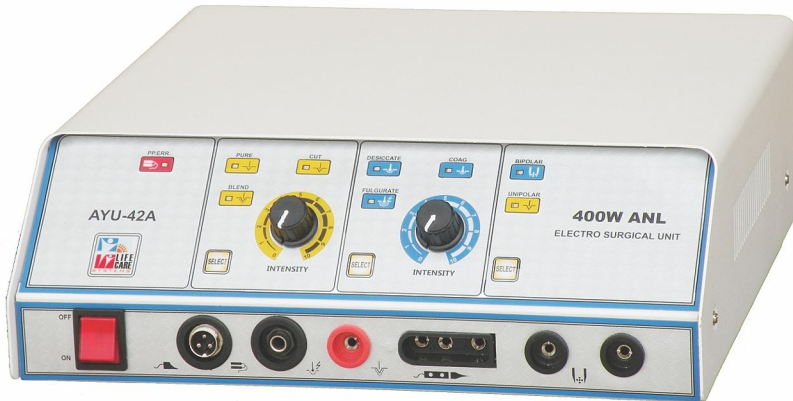
Elegant Design

Simple Operation

Reliable & Economical

AYU 42A - 400W ELECTRO SURGICAL UNIT

AYU 42A – ANALOG MODEL



Light Weight

Elegant Design

Simple Operation

Reliable & Economical

OUTPUT CHARACTERISTICS AYU 42A – 400W ANALOG

Unit Size
L x W x H - 33 x 35 x 11 cm

Box Size
L x W x H - 43 x 38 x 24 cm

Net Weight
3.28 Kg

Gross Weight
8.60 Kg

	MODE	RATED LOAD (OHMS)	MAXIMUM POWER (WATTS)
Monopolar Cut	PURE	300	450
	BLEND	300	300
Monopolar Coag.	DESICCATE	300	150
	FULGURATE	300	250
Bipolar Cut	PURE	100	100
	BLEND	100	70
Bipolar Coag.	DESICCATE	100	50
	FULGURATE	100	70

STANDARD ACCESSORY

Patient Plate



Hand Switch



Unipolar Handle



Knife Electrode (Angled)



Knife Electrode (Straight)



Needle Electrode



Ball Electrode 6mm



Loop Electrode 5mm



Bipolar Forceps



Unipolar & Bipolar foot switch



AYU 43AB - 400W ELECTRO SURGICAL UNIT



AYU 43AB – ANALOG MODEL

Light Weight

Elegant Design

Simple Operation

Reliable & Economical



OUTPUT CHARACTERISTICS AYU 43AB – 400W ANALOG

	MODE	RATED LOAD (OHMS)	MAXIMUM POWER (WATTS)
Monopolar Cut	PURE	300	400
	BLEND-1	300	300
	BLEND-2	300	200
Monopolar Coag.	DESICCATE	300	150
	FULGURATE	300	250
	SPRAY	300	120
Bipolar Cut	MACRO	100	100
	MICRO	100	70
Bipolar Coag.	MACRO	100	70
	MICRO	100	50

Unit Size

L x W x H - 33 x 35 x 11 cm

Box Size

L x W x H - 43 x 38 x 24 cm

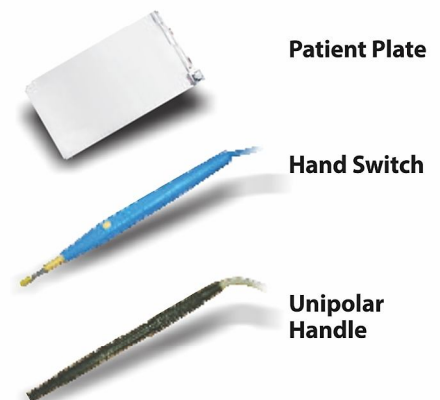
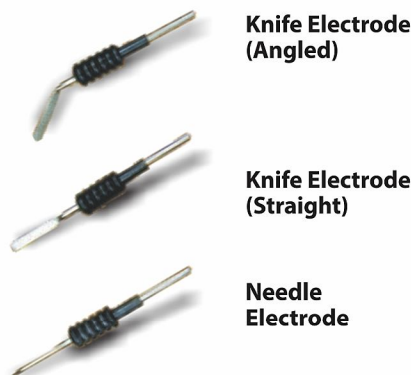
Net Weight

3.28 Kg

Gross Weight

8.7 Kg

STANDARD ACCESSORY



AYU - 400W MICRO & MAXI ELECTRO SURGICAL UNIT

STANDARD ACCESSORY

Patient Plate

Hand Switch

Unipolar Handle

Knife Electrode
(Angled)

Knife Electrode
(Straight)

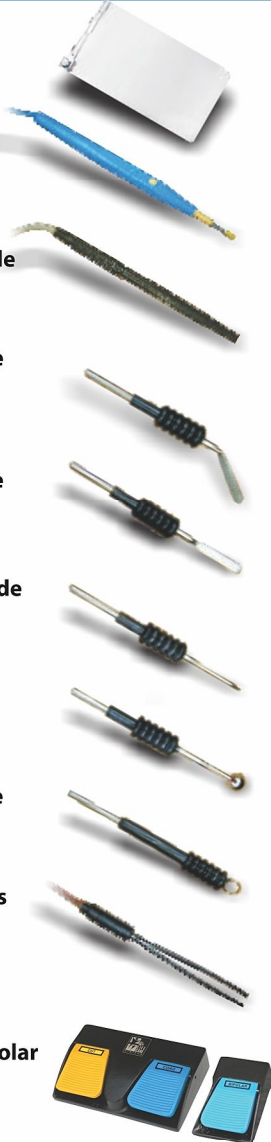
Needle Electrode

Ball Electrode
6mm

Loop Electrode
5mm

Bipolar Forceps

Unipolar & Bipolar
foot switch



AYU 400W MICRO – DIGITAL MODEL



- Unit Size** – L x W x H - 33 x 35 x 11 cm
- Box Size** – L x W x H - 43 x 38 x 24 cm
- Net Weight** – 3.23 Kg
- Gross Weight** – 8.54 Kg

AYU 400W MAXI – DIGITAL MODEL



- Unit Size** – L x W x H - 33 x 35 x 11 cm
- Box Size** – L x W x H - 43 x 38 x 24 cm
- Net Weight** – 3.20 Kg
- Gross Weight** – 8.54 Kg

OUTPUT CHARACTERISTICS AYU MICRO & MAXI – 400W DIGITAL

	MODE	RATED LOAD (OHMS)		MAXIMUM POWER (WATTS)	
		MICRO	MAXI	MICRO	MAXI
Monopolar Cut	PURE	300	300	400	400
	BLEND	300	300	300	300
	ENDOCUT	-	300	-	200
Monopolar Coag.	DESICCATE	300	300	150	150
	FULGURATE	300	300	250	250
	SPRAY	-	300	-	120
Bipolar Cut	CUT	100	100	100	120
	COAG	100	100	70	100

Light Weight

Elegant Design

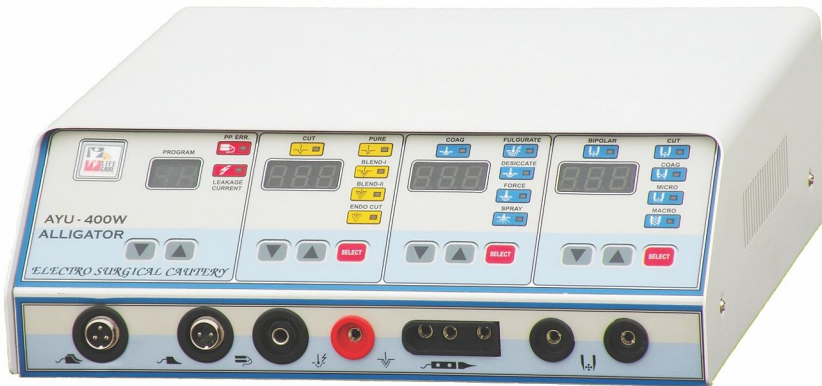
Simple Operation

Reliable & Economical

AYU - 400W ALLIGATOR ELECTRO SURGICAL UNIT



AYU 400W ALLIGATOR - DIGITAL MODEL



Light Weight

Elegant Design

Simple Operation

Reliable & Economical

OUTPUT CHARACTERISTICS AYU ALLIGATOR – 400W DIGITAL

	MODE	RATED LOAD (OHMS)	MAXIMUM POWER (WATTS)
Monopolar Cut	PURE	300	400
	BLEND-1	300	300
	BLEND-2	300	250
	ENDOCUT	300	200
Monopolar Coag.	DESICCATE	300	150
	FULGURATE	300	250
	FORCE	300	200
	SPRAY	300	120
Bipolar	CUT	100	120
	COAG	100	100
	MACRO	100	70
	MICRO	100	50

Unit Size

L x W x H - 33 x 35 x 11 cm

Box Size

L x W x H - 43 x 38 x 24 cm

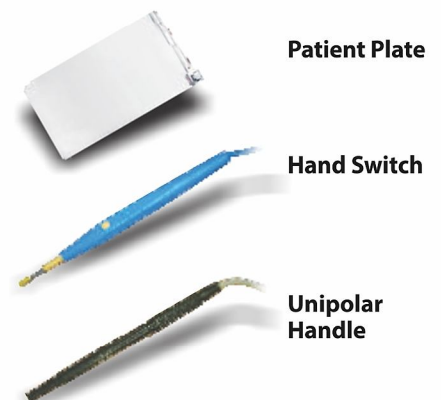
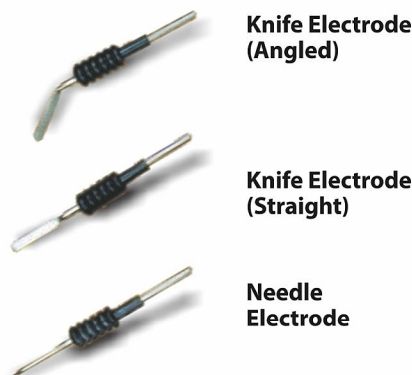
Net Weight

3.23 Kg

Gross Weight

8.54 Kg

STANDARD ACCESSORY





- 📍 57, IPS Industrial Estate, Meerut Road, Merta, Ghaziabad-201003
- ☎ +91 9643209901 / 02 / 03
- 📞 +91 - 9312247417, +91 - 9654875195, +91 - 9717493666
- ✉ anil.singhal22@gmail.com, sales@lcsindia.com, info@lcsindia.com
- 🌐 www.lcsindia.com, www.physiotherapyequipments.com