## DIATERMO MB 122 AND MB 160 MONO-BIPOLAR - 120 W - 160 W



• 30538 DIATERMO MB 122 VALUE\* - mono-bipolar - 120 W

• 30540 DIATERMO MB 122 - mono-bipolar - 120 W • 30541 DIATERMO MB 160 - mono-bipolar - 160 W

MB 122 and 160 are HF electrosurgical units suitable to perform middle monopolar or bipolar electrosurgery.

By selection of the modes of operation they provide pure cut, coagulated cut, forced coagulation, soft coagulation and, with forceps, bipolar coagulation. The use of either split or normal neutral plate is allowed. MB 160 is recommended in case of damp operational fields, for instance mucous, with consequent need to have reserve of usable power. For these reasons, MB 160 is suggested for Gynecological and orthopedic surgery.

Leading-Edge Technology. This advanced concept device enables highly professional surgery intervention thanks to ergonomic and safety features derived from high power theatre apparatus. Complete safety. Open Circuit (OC) Alarm warns the user that connection into the neutral plate has not been made or that the cable is disconnected or the neutral plate is not in contact with the patient. The alarm is signaled by an intermittent beep together with a flashing red light on the front panel. In this case HF emission for cut and coagulation operation is switched off. OVT Alarm. The unit includes an internal circuit protection warning when the current delivery is exceeding.

### STANDARD ACCESSORIES

MB single-use two button handle

MB operative foot-switch 30577 (usable as alternative to handle) (30540-1 only) MB flat neutral plate with cable 30564 (30540-1 only) Power cable 2 m Kit of 6 (MB 122) or 10 (MB 160) short autoclavable electrodes, diam. 2.4 mm User manual: available in GB, ES, IT, FR, PL

\*Does not include foot switch and MB flat neutral plate with cable

TECHNICAL SPECIFICATIONS							
	MB1	22	MB1	60	Crest		
Minimum preselectable power	0		0		Factor		
Level step	1		1				
Maximum output power CUT (W)	120	250Ω	•	250Ω	1.5		
Maximum output power BLEND (W)	90	200Ω	120		2.1		
Maximum output power COAG FORCED (W)		150Ω	100		2.1		
Maximum output power COAG FORCED (W)  Maximum output power COAG SOFT (W)	60	100Ω	80	100Ω	1.7		
Maximum output power BIPOLAR (W)	40	100Ω	60	100Ω	1.7		
1 1	40 600 l		600		1.5		
Working frequency	7	КПZ	7	КПZ			
Weight kg Size LxHxD mm	•	110,200	•	.110,,265			
		110x265		(110x265			
Operating voltage (switchable)	115			-230			
Mains frequency (Hz)	50-6		50-6				
Fuses 230Vac (5x20) TIMED	2x 3.			.15A			
Fuses 115Vac (5x20) TIMED	2x 6.	3A	2x 6	.3A			
Electrical input power (VA)	300		350				
Electrical input current (230 Vac) (A)	1.3		1.5				
Electrical input current (115 Vac) (A)	2.6		3				
Five steps adjustable sound level							
(from 55- to 75dBA)	•		•				
Self-check	•		•				
Power accuracy output warning	•		•				
Split or not split patient plate allowed	•		•				
Last working condition storing	•		•				
Electrical Class (EN60601 - 1)	I CF		I CF				
MDD 93/42/EEC Class	II b		II b				
Patient circuit	F		F				

# MONOPOLAR ELECTROSURGERY UNIT - 50 W



## • 30516 DIATERMO 106 - 50W - monopolar

This HF electrosurgery unit is particularly suitable for small operations and is recommended for dentistry, first aid and dermatology work. It offers precision of cut and immediate coagulation and give excellent results in a wide range of applications: from uterine coagulation to microcoagulation in dermatology. The modes of operation, CUT, COAG or







**( ( 0**051

#### Output power: CUT 50 W/400 ohm COAG 40 W/400 ohm

45 W/400 ohm **BLEND** Working frequency: 600 kHz ±10%

Size: 180x180xh 100 mm Weight: 2.8 kg

Operating Voltage: 115/230 V - 50/60 Hz switchable Electric input power: 90 VA Fuse: 2x1 AT

Footswitch operating Alarm for overheating Norms: EN60601-1 Class I CF, EN60601-2-2 93/42/EEC (Class IIb)

Made in Italy Warranty: 12 months

### STANDARD ACCESSORIES

**TECHNICAL SPECIFICATIONS** 

KIRKY single-use handle without buttons Standard foot-switch (30577) Flat neutral plate with cable (30564)

Kit of 6 short autoclavable electrodes, Ø 2.4 mm, length 5 cm Power cable 2 m - Schuko plug

User manual: available in GB, IT, ES, FR

BLEND, can be easily selected by a switch on the front panel. The complete isolation between patient and the unit and strict respect of international norms guarantee total safety.

# MONO-BIPOLAR ELECTROSURGICAL UNITS 80W, 120W, 160W



**CASUALTY SURGERY** PEDIATRIC SURGERY\* PLASTIC SURGERY\* VASCULAR SURGERY **DERMATOLOGY** FIRST AID **OTORHINOLARYNGOLOGY UROLOGY\* GYNAECOLOGY** 

**DENTISTRY\*** \*Diatermo MB160 only \*Diatermo MB120 only

VETERINARY





- 30627 DIATERMO MB 80D mono-bipolar 80 W
- 30628 DIATERMO MB 120D mono-bipolar 120 W
- 30629 DIATERMO MB 160D mono-bipolar 160 W

Diatermo MB are high frequency electrosurgical units suitable for minor and medium surgery.

MB allow pure CUT, cut-coagulation BLEND, superficial coagulation FORCED COAG, deep coagulation in absence of necrosis SOFT COAG and, with forceps, BIPOLAR coagulation. The digital reading of delivered power and the monitoring of operative function by microcontroller guarantees absolute reliability of working conditions.

MB allow a highly professional surgery through ergonomic and safety features. The connection of neutral electrode is constantly monitored. Safety control of patient/plate contact using split neutral electrode.

Possibility to control the output functions and the delivery of output power by the handle, allows the surgical operation without diverting attention from the surgical field. Features:

- minimum invasive surgery
- possibility to use bipolar forceps
- possibility to use split neutral electrodes
- memorization of the last used settings
- power activation by pedal and/or handle
- digital adjustment and indication of the output power
- adjustment of the acoustic indicator intensity.







TECHNICA	AL SPECIFICAT	IONS	
	MB 80D	MB 120D	MB 160D
Max output power CUT	80 W-250 Ω	120 W-250 Ω	160 W-250 Ω
Max output power BLEND	60 W-250 Ω	90 W-200 Ω	120 W-200 Ω
Max output power FORCED COAG	50 W-150 Ω	80 W-150 Ω	100 W-150 Ω
Max output power SOFT COAG	40 W-100 Ω	60 W-100 Ω	80 W-100 Ω
Max output power BIPOLAR	30 W-100 Ω	40 W-100 Ω	60 W-100 Ω
Working frequency	600 kHz	600 kHz	600 kHz
Patient circuit	F	F	F
Selectable input voltage	115 - 230 Vac	115 - 230 Vac	115 - 230 Vac
Mains frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Electrical input power	230 VA	300 VA	350 VA
Size WxHxD mm	254x104x288	254x104x288	254x104x288
Weight	5 kgs	5 kgs	5 kgs
Controls: Patient/Plate circuit mo	nitoring, Outpu	ut power monit	toring,
Self check control			

EN60601-1, EN60601-1-2, EN60601-2-2, Electrical Class: I CF, Safetv:

MDD 93/42/EC Class: II b

### STANDARD ACCESSORIES

MB single use two button handle

Waterproof foot-switch 30577 (usable as alternative to handle)

MB flat neutral plate with cable (30564)

Kit of 10 short autoclavable electrodes, diam. 2.4 mm. Power cable: 2 m

**TECHNICAL SPECIFICATIONS** 

User manual: GB, IT, available on request FR, ES, PL

80 W-400 Ω

60 W-400 Ω

50 W-400 Ω

20 W-600 Ω

# MONOPOLAR ELECTROSURGERY UNITS 50W AND 80W



• 30625 DIATERMO 50 - monopolar • 30626 DIATERMO 80 - monopolar

DIATERMO 50 and 80 are radiofrequency electrosurgical units suitable for minor monopolar surgery.

Diatermo 50 through the function selection makes pure cut, cut coagulation (CUT 1 - CUT 2) and pure coagulation possible. Diatermo 80 has a multifunction selector which makes cutting (CUT), cut coagulation (BLEND), coagulation (COAG) and microcoagulation (MICRO) possible. The one-board microcontroller and digital display guarantee high safety and reliability under any conditions. They offer outstanding professional surgical results due to their ergonomic and superior safety features.





0051

50 W-400 Ω Max output power CUT Max output power CUT/COAG1 45 W-400 Ω 40 W-400 Ω Max output power CUT/COAG2 Max output power BLEND Max output power COAG 40 W-400 Ω Max output power MICRO Working frequency 600 kHz Patient circuit Selectable input voltage 50 - 60 Hz Mains frequency Electrical input power 200 VA Size WxHxD mm

700 kHz 115 - 230 Vac 115 - 230 Vac 50 - 60 Hz 230 VA 190x85x239 190x85x239

Weight 2.5 kg 2.5 kg Controls: Patient/Plate circuit monitoring, Output power monitoring, Self check control EN60601-1, EN60601-1-2, EN60601-2-2, Electrical Class: I CF,

MDD 93/42/FC Class: II b

## STANDARD ACCESSORIES

Single use handle Waterproof foot-switch (30577)

Safety:

MB flat neutral plate with cable (30564)

Kit of 6 short autoclavable electrodes, Ø 2.4 mm, length 5 cm (30501/2/4/7/9/10) see page 187

Power cable 2 m - Schuko plug

User manual: GB, IT, available on request FR, ES

# MONO-BIPOLAR ELECTROSURGICAL UNIT 200W



OUTPATIENT SURGERY
ENDOSCOPY
FIRST AID
GASTROENTEROLOGY
GENERAL SURGERY
GYNAECOLOGY
NEUROSURGERY
ORTHOPEDICS
OTORHINOLARYNGOLOGY
PEDIATRIC SURGERY
PLASTIC SURGERY
PNEUMOLOGY
UROLOGY
VASCULAR SURGERY
VETERINARY









## • 30630 DIATERMO MB 200D - 200 W

MB 200D is a high frequency electrosurgical equipment suitable for light and medium surgery, allows minimally invasive surgical procedure of resection, evaporation and coagulation.

MB 200D allows pure CUT, Cut-Coagulation BLEND, incision with reduced production of eschar ENHANCED, superficial coagulation FORCED COAG, deep coagulation in absence of necrosis SOFT COAG and BIPOLAR coagulation. Digital reading of delivered power and surveillance through microcontroller of the operational functions, assure absolute reliability of working conditions.

MB 200D allows a highly professional surgery through ergonomic and safety features. The connection of neutral electrode is constantly monitored. Safety control of patient/plate contact using split neutral electrode. Possibility to control the output functions and the delivery of output power by the handle, allows the surgical operation without diverting attention from the surgical field.

- patient-to-plate contact control
- split return electrode use

## STANDARD ACCESSORIES

MB two-button autoclavable handle (30536) Waterproof MB foot-switch (30577) MB flat neutral metal plate with cable (30564)

Kit 10 short standard electrodes, diam. 2.4 mm

3 needle + 3 blade + 3 ball electrodes 7 cm Power cable 5 m Manual: available in GB, IT - minimally invasive surgical treatment allowed

- monopolar and Bipolar indipendent output
- auto Start/Stop in Bipolar Coag
- working condition planning
- power delivery by pedal and/or handle
- digital regulation and indication of the output power
- sound level control
- adjustable power increment

## le ne output power

TECHNICAL SPECIFICAT	IONS
Maximum output power CUT	200W - 250Ω
Maximum output power ENHANCED	120W - 250Ω
Maximum output power BLEND	120W - 200Ω
Maximum output power FORCED COAG	150W - 150Ω
Maximum output power SOFT COAG	90W - 100Ω
Maximum output power BIPOLAR COAG	80W - 50Ω
Working frequency	600 kHz
Patient circuit	F
Mains voltage	115-230 Vac
Mains frequency	50-60 Hz

 Mains voltage
 115-230 Vac

 Mains frequency
 50-60 Hz

 Electrical input power
 350 VA

 Size WxHxD mm
 370x144x319

 Weight
 6 kgs

Controls: Patient/Plate circuit monitoring, Output power monitoring, Self check control

Safety: EN60601-1, EN60601-1-2, EN60601-2-2, Electrical Class: I CF, MDD 93/42/EC Class: II b

## DIATERMO MB 200 - MONO-BIPOLAR - 200W



### **DIATERMO MB 200 - STANDARD ACCESSORIES**

MB two-button autoclavable handle (30536)

MB waterproof foot-switch 30577 (usable in alternative to handle)

MB flat neutral metal plate with cable (30564) Kit 10 short standard electrodes, diam. 2.4 mm

Power cable 2 m Manual: available in GB. IT

**( E** 0051

## • 30542 DIATERMO MB 200 - 200 W

DIATERMO MB200 is a HF electrosurgical unit suitable to perform middle monopolar or bipolar electrosurgery. The available waveforms and peak voltage value, as well as the accurate HF leakage current operation for polypectomy, TURP, intrauterine resections, endometriosis excision, etc. The units allow the accurate preset of the output power with as low as 1 Watt resolution and to perform coagulation by high crest factor current, to get an elevated thermal effect, as well as with low voltage low crest factor current, to get coagulation in absence of carbonization. Ten different programs related to ten different operative conditions could be stored and easily recalled by the surgeon. The use of either split or normal neutral plates are allowed. A special electronic circuit (Skin Plate Electronic Control) continuously checks if the plate is safely connected to the patient and detects unwanted short circuit in the connecting cable. An over time warning (OVT) is provided to prevent excessive heating of the tissue around the surgical target due to too long current delivery time.

TECHNICAL SPECIFICATIONS							
			Crest factor	Weight kg	8		
Maximum output power CUT (W)	200	250Ω	1.5	Size LxHxD mm	360x150x265		
Maximum output power CUT 90% (W)	200	250Ω	1.6	Selectable mains power(Vac)	115 -230		
Maximum output power CUT 80% (W)	200	250Ω	1.7	Mains frequency (Hz)	50-60		
Maximum output power CUT 70% (W)	200	250Ω	1.8	Fuses 115Vac - 230Vac (5x20) TIMED	2x 6.3A - 2x 3.15A		
Maximum output power BLEND (W)	120	200Ω	2.1	Power accuracy output warning system	•		
Maximum output power COAG FORCED (W)	150	150Ω	2.0	Split or not split patient plate allowed	•		
Maximum output power COAG SOFT (W)	90	100Ω	1.7	Electrical Class (EN60601 - 1)	I CF		
Maximum output power BIPOLAR COAG (W)	100	100Ω	1.5	MDD 93/42/EEC Class	II b		
Maximum output power BIPOLAR CUT (W)	120	250Ω	1.5	Patient circuit	F		
Working frequency	600 kHz	<u> </u>		Duty cycle (action/pause) in seconds	10/30		

OUTPATIENT SURGERY
DERMATOLOGY
VASCULAR SURGERY
GYNECOLOGY
DENTAL\*
OTORHINOLARYNGOLOGY
PEDIATRIC SURGERY\*\*
FIRST AID
PLASTIC SURGERY\*\*
ENDOSCOPY
OPHTHALMOLOGY
NEUROSURGERY\*\*
PODIATRY\*\*

PNEUMOLOGY\*\*
UROLOGY\*\*
VETERINARY

GASTROENTEROLOGY ORTHOPEDICS\*\* \* Diatermo MB 120 only

\*\*Diatermo MB 200 only

# MONOPOLAR AND BIPOLAR ELECTROSURGICAL UNITS 120W AND 200W



- 30631 DIATERMO MB 120 FLASH
- 30633 DIATERMO MB 200 FLASH

MB FLASH are a High Frequency ElectroSurgical equipment suitable for precision monopolar and bipolar surgery and micro-surgery without tissue alterations.

MB FLASH allow surgical treatments with programmable timer operations up to milliseconds or with traditional mode.

MB FLASH allow pure CUT, cut-coagulation BLEND, incision with reduced production of eschar ENHANCED, superficial coagulation FORCED COAG, deep coagulation in absence of necrosis SOFT COAG and BIPOLAR coagulation. Digital reading of delivered power and the surveillance through microcontroller of the operational functions, assure absolute reliability of the working conditions.

MB FLASH allow a highly professional surgery through ergonomic and safety features.

**TECHNICAL SPECIFICATIONS** 

**MB 120F MB 200F** 120 W-250 Ω 200 W-250 Ω Max output power CUT 90 W-200 Ω 120 W-200 Ω Max output power BLEND Max output power ENHANCED 90 W-250 Ω 120 W-250 Ω Max output power FORCED COAG 80 W-150 Ω 150 W-150 Ω Max output power SOFT COAG 60 W-100 Ω 90 W-100 Ω Max output power BIPOLAR COAG 60 W-50 Ω 80 W-50 Ω Working frequency 600 kHz 600 kHz RF power pulse emission time 10ms - 30sec 10ms - 30sec RF power pulse interval 1 - 9 1 - 9 Patient circuit Selectable input voltage 115 - 230 Vac 115 - 230 Vac 50 - 60 Hz Mains frequency 50 - 60 Hz 300 VA 350 VA Electrical input power 370x144x319 Size WxHxD mm 370x144x319 Weight 6 kg 6 kg Controls: Patient/Plate circuit monitoring, Output power monitoring, Self check control

Connection of neutral electrode is constantly monitored.

Safety control of patient/plate

contact using split neutral electrode. Possibility to control the output functions and the delivery of output power by handle, allows surgical operation without diverting attention from the surgical field.

### Features:

- patient to plate contact control
- split return electrode use allowed
- minimally invasive surgical treatment allowed
- Monopolar and Bipolar independent output
- auto Start/Stop in Bipolar Coag
- working condition planning
- power delivery by pedal and/or handle
- digital regulation and indication of the output power
- sound level control
- adjustable power increment
- RF power pulse emission time setting
- RF power pulse interval setting

## STANDARD ACCESSORIES

MB two-button autoclave handle (30536) Waterproof MB footswitch (30577) MB flat neutral plate with cable (30564) 2 disposable ground pads (30562) Kit 10 short standard electrodes Ø 2.4 mm 3 needle + 3 bladle + 3 ball electrodes 7 cm Power cable 5m Microsurgery handle (30552) Microsurgery needles 10 pieces



30633

Manual: GB, IT



# ELECTRODEPILATOR

Safety: EN60601-1, EN60601-1-2, EN60601-2-2, Electrical Class: I CF,

## • 28340 ELECTRO-DEPILATOR 400

MDD 93/42/EC Class: II b

This device ensures a definitive depilation with thermolitic method. It delivers a current of radiofrequency to cause the heating and consequent coagulation of the papilla, reached through the introduction of a needle into the follicle of the hair. Provided with highly reliable electronic integrated components, with RF intensity adjustable with continuity and luminous working signal.

It comes complete with footswitch, handpiece for depilation, depilation needle and power cable (2 m).

### **TECHNICAL SPECIFICATIONS**

RF output frequency: 1.9 ±10% MHz

Modulation: sinusoidal

Maximum output power: 7 ±2Watt

Size: 260x265xh 110 mm Weight: 4 kg Operating voltage: 115/230 V - 50/60 Hz switchable

Norms: CEI 62-39 Class: I-BF

## 30552 HANDPIECE FOR DEPILATION

## • 30577 FOOTSWITCH

Depilation or microsurgery needles see page 187



# HOSPITAL HF ELECTROSURGICAL UNITS 240 AND 380 WATT



30690

CONTEMPORARY DUAL MODE MB 240 and 380 can be used in the same time in monopolar mode (by handle) and bipolar mode (by footswitch)

- 30690 DIATERMO MB 240
- 30692 DIATERMO MB 380



These HF electrosurgical units can be used to execute monopolar and bipolar surgery when high precision and reliability are essential, as in the endoscopic surgery. **EASY TO USE** 

Graphic icons allow an easy selection of the operation mode. All operating conditions and selected output controls are represented by bright digital indications.

CUT The monopolar cut can be performed by pure sine current to obtain an incision with a minimum damage for the adjacent tissues and sure recovery for first intention.

Two different modes of modulation allow to reduce bleeding during monopolar cut. In the bipolar mode the cut can be effected by pure sine current.

### **HEMOSTASIS**

When the surgical action requires the obliteration of a blood vessel the availability of currents with different coagulative powers enables this type of work both with monopolar and bipolar surgery.

## **FULGURATION**

When it is necessary to cause a superficial necrosis of wide areas, protecting the deeper tissues, a special coagulant current that dehydrates the superficial layer of the tissue and reduces the possibility to damage those beneath is available for the operation.

## **OUTPUT CONTROL**

Output power levels are adjustable through incremental

A special electronic circuit (Skin Plate Electronic Control) continuously warns the plate to patient contact safety and unwanted short circuit in the connecting cable

encoders that allow the exact pre-sets and repetition of the values. The output function is linearized and controlled by ultra-modern electronic micro-controllers which will interrupt power if any alarm condition happens.

## SAFETY OF USE

Circuits dedicated to the safety of operator and patient are the priority. This ensure the leakage current is kept well under the international requirements values, whatever the output condition. Monopolar and bipolar output circuits are completely floating and the use of the defibrillator is allowed while the reference plate patient is connected.

### **RFI IABII ITY**

DIATERMO MB uses all solid state electronic circuits and is made with interchangeable units for a fast and effective maintenance. Automatic control circuits protect the units from damage also in case of repeated improper use.



**TECHNICAL SPECIFICATIONS DIATERMO MB 240/DIATERMO MB 380** 

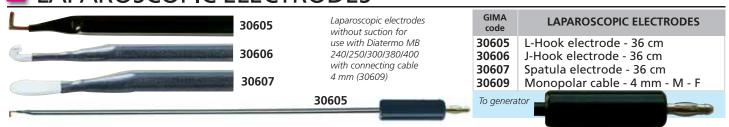
#### **Activation devices** Bipolar: footswitch Dual: bipolar - footswitch Working Peak to peak Load Max power monopolar - manual frequency 475 kHz 240/MB 380 resistance voltage Monopolar output Monopolar: footswitch manual Mains: 115/230 Vac 50-60 Hz Cut output 250W/375W 1.4 kV 300 Ohm Cut/coag 1 output Cut/coag 2 output Coag 1 output 1.4 kV 1.4 kV 1.4 kV 300 Ohm 300 Ohm 225W/340W Absorption: 800 VA Class I CF 200W/300W 300 Ohm 150W/225W Weight: 15 kg Size: 370x470xh 150 mm Coag 2 output Coag 3 output (spray) 100W/150W 80W 1.4 kV 4.2 kV 300 Ohm 2000 Ohm Warranty: 12 months Bipolar output 525 kHz (accessories not included) 100 Ohm 90W Cut output Norms: IEC 601-2-2 - IEC 601-1 CE, 93/42/EEC Coag output

### STANDARD ACCESSORIES

- 1 Power supply cord SIEM-CEE 5 m
- Two-button autoclavable handle (30536) Two-button single use handle
- 1 Cable for disposable plate 5 Disposable plate
- 1 Water proof double foot switch3 Short, general surgery blade electrode
- 3 Long, general surgery blade electrode
  3 Short, general surgery needle electrode
  3 Short, general surgery ball electrode
  1 User manual (IT, GB, ES)

- 1 Service manual (IT, GB)

# LAPAROSCOPIC ELECTRODES



# HIGH POWER ELECTROSURGICAL UNITS 300 AND 400 WATT









- 30634 DIATERMO MB 300D
- 30635 DIATERMO MB 400D

DIATERMO MB300D and MB400D are high frequency electrosurgical equipments suitable to deliver current for monopolar cut and coagulated cut (with different levels of coagulation), bipolar cut and coagulation.

### TWIN OPERATIVE ACTIVITY

- two output channels for monopolar cutting
- two independent setting and output channels for the most frequent monopolar coagulation

## **CONTROLLED CUTTING PROCEDURES**

- enhanced cutting current for eschar free incision
- cutting current with selectable coagulating property for bleeding controlled dissection
- low capacitive coupling by slow BLEND current for endoscopic procedures

## TWIN CONTROLLED COAGULATION PROCEDURES

- SPEEDY coagulation and DEEP coagulation available to two operators
- SPRAY coagulation by hand switch or foot switch controls **EXTENSIVE BIPOLAR FEATURES**
- bipolar cutting current with selectable bleeding control
- slow BLEND cutting current

- automatic Start/Stop coagulation functions **SURGEON AND PATIENT TOTAL SAFETY** 

- acceptability of contact impedance between patient body and return electrode continuously monitored by Skin Plate Electronic Control (SPEC)
- H.F. Leakage currents continuously monitored
- mains fluctuation automatically compensated before delivery of HF power

### PERSONALIZED PROCEDURES

- independent choice of coagulation currents and power levels by each of two operators
- up to 10 procedures can be configured and re-called

## **EXTENSION DRIVER AND INTERLOCK SIGNALS**

- driven output connection to external Argon Plasma unit and Smoke Evacuator unit

### **AUTOMATIC SELF DIAGNOSIS**

- automatic diagnostic control of the complete functionality of electronic unit and connected accessories with coded report of failures

SUITABLE IN:
OUTPATIENT SURGERY
GENERAL SURGERY
PAEDIATRIC SURGERY
PLASTIC SURGERY
THORAX SURGERY VASCULAR SURGERY DERMATOLOGY ENDOSCOPY GASTROENTEROLOGY GYNAECOLOGY NEUROSURGERY ORTHOPEDICS OTORHINOLARINGOLOGY PNEUMOLOGY UROLOGY VETERINARY



## TECHNICAL SPECIFICATIONS MR300/MR400

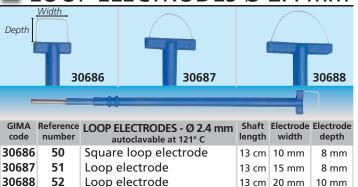
TECHNICAL SPECIFICATIONS IN	D3UU/ IVI D4UU	
	MB 300	MB 400
Maximum out power monopolar pure CUT	300 W - 300 Ω	400 W - 300 Ω
Maximum out power monopolar cut-coag CUT80%	250 W - 300 Ω	350 W - 300 Ω
Maximum out power monopolar cut-coag CUT60%	200 W - 300 Ω	250 W - 300 Ω
Maximum out power monopolar cut-coag CUT40%	150 W - 300 Ω	200 W - 300 Ω
Maximum out power monopolar cut ENHANCED	200 W - 500 Ω	250 W - 500 Ω
Maximum out power monopolar cut-coag BLEND	200 W - 300 Ω	250 W - 300 Ω
Maximum out power monopolar coag SPEEDY	100 W - 500 Ω	120 W - 500 Ω
Maximum out power monopolar coag DEEP	100 W - 200 Ω	120 W - 200 Ω
Maximum out power monopolar coag SPRAY	70 W - 2000 Ω	100 W - 2000 Ω
Maximum out power monopolar coag SPRAY ARGON	70 W - 2000 Ω	100 W - 2000 Ω
Maximum out power bipolar CUT	95 W - 150 Ω	95 W - 150 Ω
Maximum out power bipolar cut-coag CUT80%	95 W - 150 Ω	95 W - 150 Ω
Maximum out power bipolar cut-coag CUT60%	95 W - 150 Ω	95 W - 150 Ω
Maximum out power bipolar cut-coag CUT40%	60 W - 150 Ω	60 W - 150 Ω
Maximum out power bipolar cut-coag BLEND	90 W - 150 Ω	90 W - 150 Ω
Maximum out power bipolar cut-coag BLEND	70 W - 100 Ω	70 W - 100 Ω
Working frequency monopolar / bipolar	425 kHz / 525 kHz	425 kHz / 525 kHz
Patient circuit	F	F
Selectable input voltage	115-230 Vac	115-230 Vac
Mains frequency	50-60 Hz	50-60 Hz
Electrical input voltage	1000 VA	1000 VA
Size WxHxD mm	470x150x400	470x150x400
Weight	17.5 Kgs	17.5 Kgs
Controls: Patient/Plate circuit monitoring, Output power monito	ring, Self check control	

Safety: EN60601-1, EN60601-1-2, EN60601-2-2, Electrical Class: I CF, MDD 93/42/EC Class: II b

STANDARD ACCESSORIES

- 1 Power supply cord 5 m
- 1 Two-button autoclavable handle (30536)
- 5 Two-button cold sterilizable handle (30551)
- 1 Cable for flat plate (30559)
- 5 Rem disposable ground pads (30493)
- 2 HP double Water proof foot switch
- 3 Short, general surgery blade electrode 7 cm
- 3 Long, general surgery blade electrode 16 cm
- 3 Short, general surgery ball electrode Ø 4 mm, 6 cm
- 1 Electrode brush
- 1 User manual (IT, GB)
- 1 Service manual (IT, GB)





# LOOP ELECTRODES Ø 2.4 mm 📕 ELECTRODES AND HANDLE Ø 4 mm

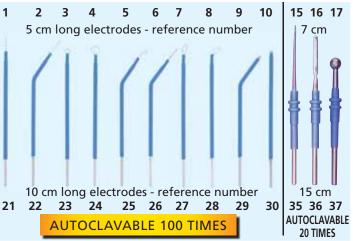


- 30480 AUTOCLAVABLE MB HANDLE Ø 4 mm 100 times Autoclavable handle up to 100 times for Ø 4 mm shaft electrodes with 3 m silicone cable and blade electrode.
- 30482 NEEDLE ELECTRODE Ø 4 mm
- 30483 BLADE ELECTRODE Ø 4 mm
- 30484 BALL ELECTRODE Ø 4 mm

S/S electrodes autoclavable 100 times. Sold in box of 5. Length 5.5 cm.

# AUTOCLAVABLE ELECTRODES Ø 2.4 mm

	101	O CL/ (V/ (DLL LLL	, •	· • •
GIMA code	Reference number	AUTOCLAVABLE ELECTRODES Ø 2.4 mm	Reference number	GIMA code
lengt	th 5 cm	minimum order: 6 pcs.	length	10 cm
30501	1	Electrode wire 0.2 - straight	21	30521
30502	2	Electrode wire 0.2 - angled 45°	22	30522
30503	3	Electrode bend - Ø 4 - straight	23	30523
30504	4	Electrode bend - Ø 8 - straight	24	30524
30505	5	Electrode hook - angled 45°	25	30525
30506	6	Electrode wire 1 mm angled 45°	26	30526
30507	7	Electrode straight slip-knot - straight	27	30527
30508	8	Electrode angled slip-knot - straight	28	30528
30509	9	Electrode ball point - Ø 3 mm - angled 45°	29	30529
30510	10	Electrode ball point - Ø 3 mm - straight	30	30530
30500	SET	Set of 10 electrodes	SET	30531
lengt	h 7 cm	minimum order: 10 pcs.	length	15 cm
30511	15	Needle electrode	35	30532
30512	16	Blade electrode	36	30533
30513	17	Ball electrode	37	30534





# SINGLE USE STERILE ELECTRODES Ø 2.4 mm

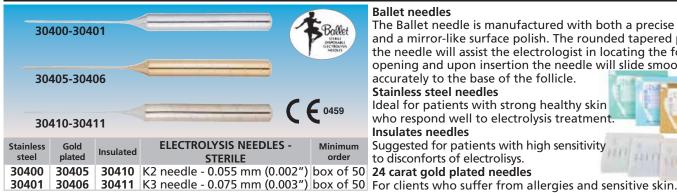
GIMA code	Reference number	SINGLE USE ELECTRODES Ø 2.4 mm	Reference number	GIMA code	
lengt	h 7 cm	Sterile electrode - box of 24	length	15 cm	
30670	13	Needle electrode - sterile electrode	33	30674	
30671	11	Blade electrode - sterile	31	30675	
30672	12	Ball Ø 4 mm electrode - sterile	32	30676	
		Sterile electrode - box of 10	length	13 cm	
-	-	Loop electrode - 15 mm x8 mm	34	30678	



# NON-STICK SINGLE USE STERILE ELECTRODES Ø 2.4 mm

GIMA code	NON-STICK SINGLE USE ELECTRODE Ø 2.4 mm	Length	30420
30420	Blade electrode - sterile	7 cm	30422
30422	Blade electrode - sterile	10 cm	
30425	Needle electrode - sterile	10 cm	30425
30429	Ball electrode - sterile	13 cm	30429

## BALLET STERILE DISPOSABLE ELECTROLYSIS NEEDLES



## **Ballet needles**

The Ballet needle is manufactured with both a precise point and a mirror-like surface polish. The rounded tapered point of the needle will assist the electrologist in locating the follicle opening and upon insertion the needle will slide smoothly and accurately to the base of the follicle.

## Stainless steel needles

Ideal for patients with strong healthy skin who respond well to electrolysis treatment.

## Insulates needles

Insulates needles
Suggested for patients with high sensitivity

# 3-PIN MONOPOLAR HANDLES FOR ELECTRODES Ø 2.4 mm

VALLEYLAB CONNECTOR HANDLES with 2 "click" push-buttons GIMA autoclavable electrosurgery pencils with CUT-COAG switch have been studied and tested to offer maximum reliability and functionality to the operator. MB handles are provided with a 3 Pin plug Valleylab type fitting all Gima mono-bipolar Diatermo MB (120, 122, 132, 160, 200, 202, 240, 250, 380, 400) and most of bipolar electrosurgical units: Aspen Lab, ES Generator, EMC Statome, Danieli, Braun, Berchtold, Ohmeda, Ritter, Conmed, Eschmann, Bovie, Martin, Kontron, Bard, Birtcher 771, Cobi, Valleylab, Led, Erbe...

### **AUTOCLAVABLE HANDLES**

- 30554 MB AUTOCLAVABLE HANDLE 100 times Autoclavable handle with 2 large "click" push-buttons, provided with a 3 meter long silicone cable and a blade electrode. It can be autoclaved up to 100 times (electrode 20 times).
- 30545 MB AUTOCLAVABLE HANDLE 100 times Same as code 30554 but with a 5 m long silicone cable
- 30550 PRIMA MB AUTOCLAVABLE HANDLE 60 times Autoclavable handle with 2 large "click" push-button, provided with a 3 meter long silicone cable and a blade electrode. It can be autoclaved up to 60 times.
- 30548 STAR AUTOCLAVABLE HANDLE 30 times Same as code 30554 but autoclavable up to 30 times (electrode is autoclavable up to 20 times).
- 30539 ORION PLUS AUTOCLAVABLE HANDLE 100 times Same as 30554, but with a screw clamp locking system ensuring a safe contact and adapting to slightly different electrode diameters. High insulation to prevent liquid damage.
- 30536 SURGEON AUTOCLAVABLE HANDLE 100 times Autoclavable, waterproof handle with ergonomic grip. Coloured ring that indicates CUT and COAG push buttons. Provided with 3 m cable and blade electrode.

### SINGLE USE HANDLE

- 30551 KIRKY SINGLE-USE HANDLE STERILE Single-use handle with "click" push-buttons for cut and coag. Includes blade electrode.
- 30553 GIMA SINGLE-USE HANDLE STERILE Same as 30551 with 3 m cable.



# 1-PIN MONOPOLAR HANDLES FOR ELECTRODES Ø 2.4 mm

30415

## 1 pin plug HANDLES for diatermo 50, 80, 106, 108

These handles are provided with a 1 Pin socket (4 mm) fitting all Gima Diatermo and most of electrosurgical units in the market. These handles do not have push-buttons.

- 30515 SURGEON 1 PIN AUTOCLAVABLE HANDLE 100 times Autoclavable, waterproof handle with ergonomic grip. Provided with 3 m cable and blade electrode
- 30519 AUTOCLAVABLE 50-80-106-108 HANDLE Autoclavable handle without buttons, provided with a 3 meter long cable and a blade electrode. It can be autoclaved up to 50 times.
- 30518 KIRKY SINGLE-USE 50-80-106-108 HANDLE STERILE Single-use handle without button with blade electrode with 4 mm PIN connection.



# HANDLES FOR ELECTROLYSIS NEEDLES

Needle handles for all GIMA Diatermo and electro-depilators

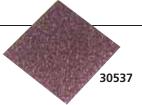
- 30552 HANDLE for electrolysis needles
- 30415 PROFESSIONAL HANDLE for electrolysis needles see electrolysis needles at page 187



# ELECTRODE BRUSHES

• 30537 ELECTRODE BRUSH - 50x50 mm

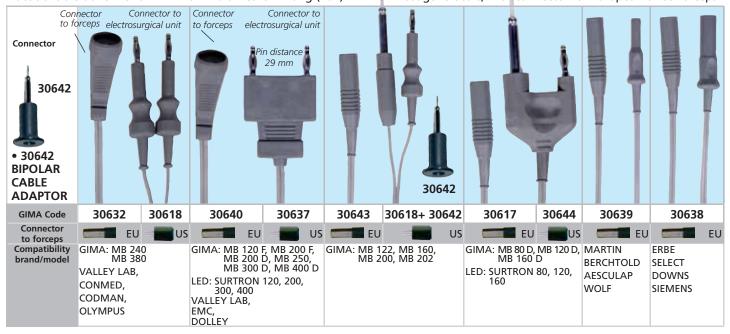
Disposable sterile radiopaque abrasive tip cleaner pad. Box of 100



# BIPOLAR CABLES FOR MAJOR BRANDS

 $\epsilon$ 

Quality highly flexible silicone bipolar cables. Autoclavable at 134°C for minimum 20 times. 3 m long (10"). Recommended ETO sterilizion for max extended life. Suitable for most generators, with connector for European or US forceps.



SINGLE USE, METAL AND RUBBER PLATES



- 30563 (cable)
  30575 (cable)
  30564 (metal plate)
  30573 (rubber plate 20x15 cm)
  30574 (rem rubber plate)
- 30492 DISPOSABLE GROUND PADS WITH SOLID GEL adult
- 30490 DISPOSABLE GROUND PADS WITH SOLID GEL pediatric
- 30493 REM DISPOSABLE GROUND PADS WITH SOLID GEL adult Adult ground plate with solid gel. Single use plate individually packed
- 30563 CABLE FOR PLATES 5 m

Universal cable to connect plates (30490-30495) to diatermo. Safety lock with universal connection - bipolar Ø 6.3 mm plug.

- 30494 DISPOSABLE NON WOVEN GROUND PADS adult/ped
- 30495 REM DISPOSABLE NON WOVEN GROUND PADS adult/ped

- 30573 RUBBER PLATE 20x15 cm without cable
- 30574 REM RUBBER PLATE 20x15 cm without cable
- 30575 CABLE FOR RUBBER PLATES
- 30566 METAL PLATE without cable
- 30563 CABLE FOR PLATES 5 m
- 30559 CABLE FOR PLATES 2.5 m
- 30564 SURGEON NEUTRAL PLATE 16x12 cm with cable
- 30561 ROD NEUTRAL PLATE with cable

# 3M ELECTROSURGICAL GROUNDING PADS WITH SAFETY RING

- 30496 3M 9160 SPLIT GROUNDING PAD box of 100
- 30497 3M 9160F SPLIT GROUNDING PAD box of 200 (40 pouches of 5 pieces)
- 30498 3M 9165 SPLIT GROUNDING PAD precorded box of 40 The 3M 9160, and 9165 Universal Grounding Pads all have a conductor area of 15 square inches and come with the patented 3M Green Safety Ring technology which allows them to perform the same as grounding pads that are up to 33% larger in conductor area. Green Ring allows adult and pediatric use.

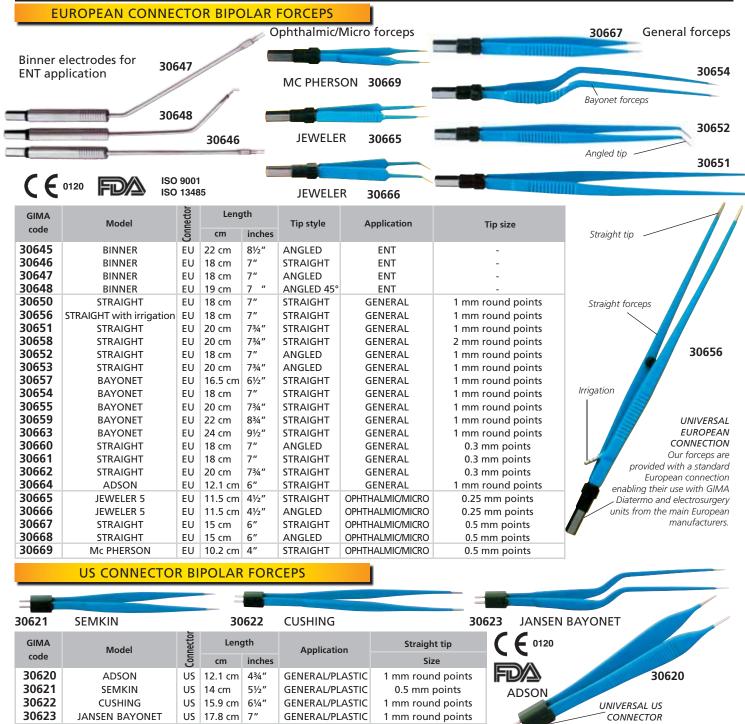
In addition, they have fluid resistant, non-woven backing which allows heat to pass through up to 25% faster than foam, and they have no minimum age or weight limit.



**30498** (3M 9165)



# UNIVERSAL HIGH QUALITY INSULATED BIPOLAR FORCEPS



## EUROPEAN NON-STICK BIPOLAR FORCEPS

## NON-STICK BIPOLAR FORCEPS

Thanks to new Ag-Tech non-stick technology, the forceps stay clean, virtually eliminating the need for cleaning during

	-	-			-			
GIMA code		Model	Model	Connector	Len	gth	Tip style	Tip size
	coue		Š	cm	cm inches			
	30460	STRAIGHT	EU	15	6"	STRAIGHT	1 mm	
	30461	STRAIGHT	EU	18	7"	STRAIGHT	1 mm	
	30462	STRAIGHT	EU	20	7¾"	STRAIGHT	1 mm	
	30464	STRAIGHT	EU	18	7"	ANGLED	1 mm	
	30465	STRAIGHT	EU	20	7¾"	ANGLED	1 mm	
	30468	BAYONET	EU	18	7"	STRAIGHT	1 mm	
	30469	BAYONET	EU	20	7¾"	STRAIGHT	1 mm	
	30472	JEWELER	EU	11.5	4.5"	STRAIGHT	0.7 mm	
	30473	JEWELER	EU	11.5	4.5"	ANGLED	0.7 mm	
	30474	ADSON	EU	12.1	4¾"	STRAIGHT	1 mm	

coagulation. A tip material with excellent thermal properties prevents the sticking of tissues. The non-stick effect is permanent and will not reduce with the use of forceps.



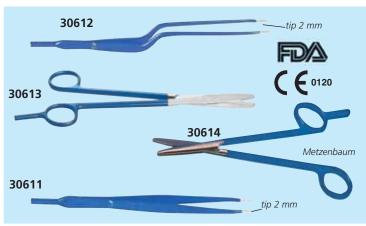
## FOOTSWITCHES AND BOARDS

GIMA code	FOOTSWITCHES FOR 50, 80, 106, MB 120, 122, 132, 160, 200, 202
30577 30578	Waterproof MB footswitch - 2m cable Waterproof MB footswitch - 3m cable
	ANTIEXPLOSION FOOTSWITCH FOR MB 120, 122, 132, 160, 200, 202
30602	Double antiexplosion, water proof MB footswitch
	ANTIEXPLOSION FOOTSWITCHES FOR MB 240, 250, 300D, 380, 400, 400D
30603 30604	Double antiexplosion, water proof footswitch - MB240-380 Double antiexplosion, water proof footswitch - MB250-400-300D-400D
	MAIN BOARD
30557 30558	Main board - specify model and serial number of diatermo with order Output board for MB 240, 250, 380, 400 - specify as above



It allows selection from pedal of CUT and COAG functions Antiexplosion and waterproof.

# MONOPOLAR FORCEPS, SCISSORS AND CABLES





Monopolar forceps and scissors are provided with a 4 mm connection for standard monopolar cables. These can be used with all Gima, LED, Erbe and many other electrosurgical units in the market.

GIMA code	INSULATED MONOPOLAR INSTRUMENTS
30610	Monopolar cable - 4 mm pin
30611	Mc INDOE straight monopolar forceps 15 cm (6")
30612	Bayonet monopolar forceps - 20 cm (7 1/2")
30613	Monopolar scissors - straight - 18 cm (7")
30614	Metzenbaum monopolar scissors - straight - 18 cm (7")
30615	Metzenbaum monopolar scissors - curved - 18 cm (7")

# ELECTROSURGERY SMOKE EVACUATOR

## • 30450 SMOKE EVACUATOR

An aspiration and filtering system for the smokes produced during the surgical procedures.

The smokes, generated during the surgical procedures, have a bad, strong and persistent smell. These smokes consist of water vapour, organic gas, visible or invisible solid particles and viral parts. So a good aspiration and filtration eliminates bad smells, reduce the bacteriological and/or viral risks, and improves vision of the zone of the operation area during the laparoscopic procedures.

Activation of the aspiration can be:

- **Automatic**, through the remote electronic system of automatic survey of the activation of the high frequency electrosurgical unit
- Manual
- Through a foot switch (optional)

The aspiration flow can be adjusted to suit the specific needs. For laparoscopic procedures there is a specific function L,

## TECHNICAL SPECIFICATIONS

Mains voltage 230 V (115 V on request) 50/60 Hz Mains frequency 800 VA Electrical input power 1000 LPM (35 CFM) Max vacuum flow rate Max static suction 250 mbar (83 in H O) ULPA with active carbons Filter type Filter efficency 99.999% Particles diameter 0.12 micron 370x144x319 mm Size Weight 4 kg

## STANDARD ACCESSORIES

ULPA filter (5 hours) blue

Aspiration kit ( filter + pipe Ø 22 mm, length 2.4 m)

4 handle aspiration kit ( adapter 10 mm / 22 mm , pipe Ø 10 mm, length 1.8 m, clip to fix the pipe to the handle, adapter to the handle)

Power cable

quickly selectable. Smoke evacuator has an electronic control of the aspiration with the indication of the wearing status of the filters. There are two different kinds of quickly replaceable ULPA type filters, with active carbons: the BLUE filter is the first filter and it is included with the unit for an initial time of use (5 hours), the RED filter is an optional spare part, developed for a long time use (20 hours).

They have connector of 7/8".

- 30452 ULPA FILTER (20 hours) RED spare
- 30453 ASPIRATION KIT box of 6
- 30454 HANDLE ASPIRATION KIT sterile box of 12
- 30577 WATERPROOF MB FOOTSWITCH 2 m





# I CHANGE-A-TIP™ CAUTERIES WITH HIGH TEMPERATURES

VASECTOMY

## **BOVIE CAUTERIES**

- interchangeable sterile tips
- replaceable batteries
- reusable handles

**GIMA** 

code

30590

30593

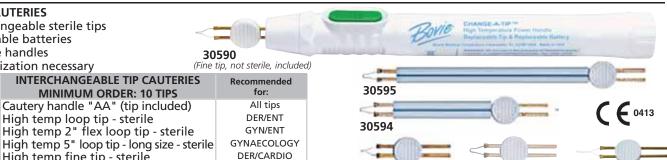
30594

30595

30596

30597

no sterilization necessary



30596

# REUSABLE HIGH TEMPERATURE CAUTERY WITH REPLACEABLE TIP

## CAUTERIES - 1,200°C (2,200°F) - made in Italy

- interchangeable tips with nickel-chrome wire

High temp loop tip - sterile

High temp fine tip - sterile

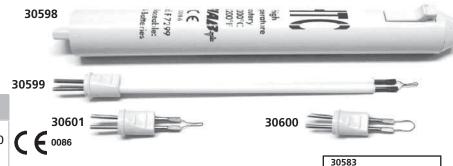
High temp elongated tip - sterile

**MINIMUM ORDER: 10 TIPS** 

- replaceable batteries
- reusable handles

Wide application in gynaecology, orthopedy, ear/nose/throat, dermatology, plastic and reconstruction surgery.

GIMA	INTERCHANGEABLE TIP CAUTERIES
code	MINIMUM ORDER: 10 TIPS
30598	Cautery handle "AA" (tip not included)
30599	High temp long fine tip - sterile - box of 10
30600	High temp large tip - sterile - box of 10
30601	High temp fine tip - sterile - box of 10



30593

# HIGH TEMPERATURE ELECTROCAUTERIES

• 30580 ELECTROCAUTERY - 1,200 °C - fine tip - made in Italy Electrocautery is a sterile bipolar battery operated disposable device for the cauterization of small vessels; the temperature of the tip

is 1,200°C. With a fine tip required in most of the surgeries.

• 30582 GYNAECOLOGY CAUTERY - 1,200°C - fine tip Same as 30580 but with the tip fixed on a 12 cm long shaft.

• 30581 ELECTROCAUTERY - 600 °C - fine tip Same as 30580 but with lower temperature = 600°C. Expecially designed for ophthalmology.

• 30583 EMERGENCY ELECTROCAUTERY - 800°C - Thick tip Same as 30580 but with "thick tip" for the perforation of nails in case of haematoma.



## CARTS FOR ELECTROSURGICAL UNITS

Trolley designed to hold and carry electrosurgical units (including Argon units). Ergonomics has been particularly considered for the design, for example the height of 900mm with inclined top shelf allows easy reading of the unit's display.

The trolley is provided with a second shelf with antiskid raised edges, two drawers placed at the base and a rear space with securing straps to hold two Argon cylinders. The upright stands holding the shelves are designed to take possible optional accessories. All parts of the trolley are made of epoxy-painted, tempered steel and aluminum.

Available version with 4 socket group, fuses box, independent grounding plug, power cable 3m.

### TECHNICAL SPECIFICATIONS

- Inclined shelf 50 kg Load capacity: Total load 200 kg 50x50 cm (27865/7) Inclined shelf: 42x45 cm (27864/6) Drawers and shelf: 42x31 cm (27864/6) 50x36 cm (27865/7)

GIMA code	CARTS FOR ELECTROSURGICAL UNITS
27864	DIATERMO CART - medium
27865	DIATERMO CART - large

27866 DIATERMO CART with power - medium 27867 DIATERMO CART with power - large



30580 30581

30582

# HISTOFREEZER® CRYOSURGICAL SYSTEM

- 30591 HISTOFREEZER® kit with applicator 2 mm Two 80 ml aerosol bottles and 60 applicators 2 mm.
- 30592 HISTOFREEZER® kit with applicator 5 mm Two 80 ml aerosol bottles and 52 applicators 5 mm.
- 30589 HISTOFREEZER® large kit mixed applicators Two 80 ml aerosol bottles, 24 applicators 2 mm, 36 applicators 5 mm.
- 30585 HISTOFREEZER® mini kit mixed applicators One 80 ml aerosol bottle, 16 applicators 2 mm, 16 applicators 5 mm.

The Histofreezer® portable cryosurgical system is a low cost, highly effective cryosurgical agent that provides safe and effective treatment for warts and other common benign skin lesions.

This therapeutic treatment makes use of local freezing for the controlled destruction or removal of living tissue. Suitable for adults and children

Effective use on 9 benign lesion types

- Verruca Vulgaris (Common Warts) - Verruca Plantaris (Plantar Warts)
- Molluscum Contagiosum
- Lentigo (Age Spots)
- Condyloma(Genital Warts)
- Seborrheic Keratosis
- Acrochordon (Skin Tags)
- Verruca Plana (Flat Warts)
- Actinic keratosis (Facial and Non-Facial)

% of resolution 94% 86% 100%

100% - facial 99% - non facial

89% 95% 100%

93% 91% - facial 87% - non facial

\*Summary of resolution rates by type of lesion from a number of clinical trials obtained with histofreezer + post-treatment of 27% salicylic acid / 17% lactic acid Supplied with box and manual in: GB, FR, IT, DE, ES, NL, PL. From web you can download: GR, PT, TH, Arab.

Saturated 2 mm applicators will stay cold for 90 seconds.



Saturated 5 mm applicators will stay cold for 120 seconds.







Histofreez

30591





2 mm disposable applicator for small lesions 5 mm disposable applicator for large lesions



**CHARGE** custom applicator press valve until droplets start to form.



**INVERT** canister for 15 seconds for optimal freezing temperature.



**APPLY** a frozen applicator to lesion for 15-40 seconds

# **BIOLOGICAL MICROSCOPES - MAGNIFICATION 40X-1600X**

- 31002 LED BIOLOGICAL MICROSCOPE 40X to 1600X High level microscope with high resolution and transmission Main features:
- infinite optical system
- wide field eyepiece WF 10X/20
- infinite semi-plan achromatic objectives 4X, 10X, 40X, 100X
- Abbe condenser
- backward quadruple nosepiece
- double layers mechanical stage (size: 150x139 mm, move range 75x52 mm)
- adjustable brightness
- power supply: switchable 110-220 V, 50 Hz

- 31000 BIOLOGICAL MICROSCOPE 40X to 1000X
- 30° compensation free binocular head
- eyepiecė 10X (Field 18 mm)
- achromatic objectives 4X, 10X, 40X(S), 100X (S, oil)
- semi plan achromatic objective 40X, 100X, 400X, 1000X,
- interpupillary distance adjustment: from 55 to 75 mm
- mechanical stage, double layers (size: 125x135 mm, move range: 75x35 mm)
- Abbe condenser with iris diaphragm and filter
   halogen lamp 6 V, 20 W brightness adjustment
- power supply: switchable 110-220 V, 50 Hz



Fine focusing knob