

80

VIO[®] D

The electrosurgical system for surgical and endoscopic procedures

$\mathsf{VIO}^{\mathbb{R}}$ 300 D and $\mathsf{VIO}^{\mathbb{R}}$ 200 D:

Electrosurgery tailored to perfection.

With the VIO electrosurgical system, Erbe has set innovative standards aimed at providing optimum surgical support for almost any discipline as well as including a range of additional indications.

Erbe VIO 300 D and 200 D generator modules offer automatic power adjustment for all control technologies:

- ☑ Voltage control for gentle, reproducible cutting and coagulation
- ☑ Arc control for high-energy cutting or coagulation and for cutting under water
- ☑ Power control to maintain constant power levels during coagulation and devitalization

TAILORED PRECISELY TO YOUR NEEDS – BOTH IN TERMS OF HARDWARE AND SOFTWARE

- ☑ Can generally be fitted flexibly with socket modules and functions
- All the latest electrosurgical control technologies in a single unit – with automatic power adjustment
- ☑ New and enhanced CUT and COAG functions
- Can be configured for custom setups based on the relevant discipline, indication or procedure
- ☑ Plug & play: plug in the instrument, start working
- ReMode function: remote control using the handle or footswitch "right from the operating table"
- The VIO D range the master control units for other modules in the VIO electrosurgical system, for example argon plasma coagulation, smoke plume evacuation, the endoscopy irrigation pump, and other components
- ☑ VIO 300 D the master module for vessel sealing with BiClamp and BiCision



Versatile operating and safety concept that offers complete convenience.

PreView function on the display

When setting the parameters, changes to the CUT and COAG symbols in the user interface already indicate how the setting is likely to affect tissue on application.

Activating ReMode from the operating table

With its modern ReMode activation concept, Erbe has developed a "remote control" for even greater operating convenience. Using the VIO footswitch or VIO handle, surgeons can alternate independently between preselected instrument settings – without a second user.

Vessel sealing

With VIO 300 D, BiClamp mode optimizes vessel sealing in open surgery and in laparoscopic procedures in urology and gynecology, and in general and visceral surgery.

Consistent enhancement: the NESSY patient plate safety system

With the NESSY safety concept and the Erbe patient plate NESSY Ω , VIO sets new standards with regard to the safety of monopolar electrosurgery.

For use in clinic ORs or specialist surgical ORs

	VIO 300 D	VIO 200 D
Gynecology		-
Urology		-
General surgery		-
Gastroenterology / Endoscopy		
Pulmonology		
ENT		-
Orthopedics		-
Dermatology		-
OMS		
Ophthalmology	-	-



Legend:

strongly recommended
 recommended

CUT Precise cutting using these modes.



Suitable for cutting inside fatty structures or under water (e.g. TUR). Strong hemostasis at the incision edges. Control of arc intensity.

AUTO CUT	02

Standard mode for cutting with minimum necrosis and reproducible cutting quality.

ARGON AUTO CUT	03
ANGON AGIO COI	05

Mode for argon-supported cutting. Minimum carbonization, minimum smoke plume development. Results in a good post-operative healing process.

PRECISE CUT	04
-------------	----

For very fine cutting with precise power adjustment in effect levels. For example, in microsurgery with very fine cutting instruments. ENDO CUT I

Fractionated cutting mode for papillotomy or other needle / wire applications in endoscopy.

ENDO CUT Q	06

For endoscopic polypectomy with a snare. Fractionated cutting and coagulation cycles.

```
DRY CUT 07
```

Cutting mode with pronounced hemostasis as a result of voltage control and modulated forms of current.

BIPOLAR PRECISE CUT

05

For exposure and dissection of very fine structures, for example in microsurgery.

08

BIPOLAR CUT	BIPOLAR CUT+/++	09
DII ULAN CUT		09

For resection of the prostate, bladder or uterus. Fast arc generation, immediate cutting. Homogeneous, controlled arc generation with low application of energy.

COAG Modes for exact coagulation and devitalization.



CLASSIC COAG

Exposure mode for visceral and cardiac surgery. Exact, layer-specific exposure and dissection. Minimum carbonization of the incision edges.

01

SWIFT COAG	02
Effective and fast coagulation with pro-	

nounced hemostasis that is also suitable for exposure.

TWIN COAG	03
-----------	----

For simultaneous activation of two instruments with only one electrosurgical unit – consistent power output.

PRECISE COAG	04

For microsurgical coagulation in the lower power range. Precise power settings and effects.

FORCED APC, PULSED APC, PRECISE APC 05

cover the entire spectrum of all types of non-contact APC coagulation. For hemostasis during endoscopy or open surgery or for surface coagulation and devitalization.

SPRAY COAG	06
SPRAY LUAG	06

Non-contact and efficient surface coagulation with low thermal penetration. Suitable for tissue devitalization or for stopping diffuse bleeding. Extensive carbonization effects.

FORCED COAG	07

Fast and effective standard coagulation with moderate thermal penetration. Slight carbonization effects.

```
SOFT COAG
```

Gentle coagulation with deep penetration, without carbonization, resulting in minimum adhesion of the electrode. Supported by the power control. BIPOLAR SOFT COAG BIPOLAR SOFT COAG+/++ 09

Mode for safe coagulation during bipolar resection in saline solution as well as for forceps coagulation.

BICLAMP		10
	e BiClamp by providi sealing of vessels an	5
	CED COAG	11

BIPOLAR PRECISE COAG 12

with moderate hemostasis.

08

For the exposure and coagulation of very fine structures, for example in microsurgery.

These modes and upgrades are available with the VIO 300 D and VIO 200 D models

CUT mode

	VIO 300 D	VIO 200 D
AUTO CUT		
HIGH CUT		-
DRY CUT		
DRY CUT°	-	-
BIPOLAR CUT		
BIPOLAR CUT +		-
BIPOLAR CUT ++	-	-
PRECISE CUT		
BIPOLAR PRECISE CUT		
ENDO CUT Q		
ENDO CUT I		
ARGON AUTO CUT		
ARGON HIGH CUT		-
ARGON DRY CUT		
ARGON DRY CUT°		-

COAG mode

	VIO 300 D	VIO 200 D
SOFT COAG	•	•
SWIFT COAG		
SWIFT COAG°		-
CLASSIC COAG	•	-
FORCED COAG	•	-
SPRAY COAG	-	-
BIPOLAR SOFT COAG	-	-
BIPOLAR SOFT COAG +	-	-
BIPOLAR SOFT COAG ++	-	-
BIPOLAR FORCED COAG	•	-
PRECISE COAG		
BIPOLAR PRECISE COAG		
TWIN COAG		-
BICLAMP		-
FORCED APC		
PRECISE APC	•	
PULSED APC		
ARGON SOFT COAG	•	
ARGON SWIFT COAG		
ARGON SWIFT COAG°		-
ARGON FORCED COAG	-	-
ARGON TWIN COAG		-

Legend:

■ included
 ■ supports UPGRADE

FOR PERFECT CUTTING

- Newly-developed electrosurgical monopolar and bipolar CUT modes
- ☑ Power adjustment as a result of Erbe voltage control, for reproducible cutting
- Power adjustment as a result of Erbe arc control, for reproducible, efficient cutting in high-impedance tissue
- Additional area of application from microsurgery through to power-intensive vaporization
- ☑ Cutting results largely independent of cutting speed, shape of the electrode and tissue
- ☑ Bipolar cutting for more safety
- ☑ Power Peak System for optimum cutting behavior

FOR PERFECT COAGULATION

- Newly-developed electrosurgical COAG effects
- Power adjustment as a result of voltage control, for reproducible coagulation with optimally adjusted power output
- Power control for fast "non-stick" coagulation without carbonization
- ☑ Monopolar and bipolar coagulation for all your requirements
- MUTO-START and AUTO-STOP functions
- TWIN COAG: simultaneous activation of two electrodes / instruments for exposure

Technical data

VIO 300 D and VIO 200 D

Power output	
Maximum cut power (VIO 300 D)	300 watts at 500 Ohm (with PPS, briefly 400 watts)
Maximum cut power (VIO 200 D)	200 watts at 500 Ohm
Maximum COAG power	up to 200 watts
NE safety system	NESSY
Frequency	350 kHz
Power connection	
Line voltage	100 V - 120 V / 220 V - 240 V ± 10 %
Power frequency	50 / 60 Hz
Line current	max. 8 A / 4 A
Power consumption in standby mode	40 watts
Power consumption at max. HF power	500 watts / 920 VA
Potential equalization connection	Yes
Power fuse	T 8 A / T 4 A
Dimensions	Width x Height x Depth 410 x 160 x 370 mm
Weight	9.5 kg



 VIO 300 D
 VIO 200 D

 No. 10140-100
 No. 10140-200



bipolar No. 20140-610

6

9/5 mm,

monopolar

No. 20140-620

6 mm

patient plate

No. 20140-640

2Pin-22 mm, bipolar **No. 20140-612**

3Pin-Bovie,

monopolar

No. 20140-622

.

2Pin

patient plate

No. 20140-641

. .

2Pin-22-28-8/4 mm, bipolar **No. 20140-613**

....



3Pin-9/5 mm, monopolar **No. 20140-623**



patient plate No. 20140-642



Multifunction **No. 20140-630** (VIO 300 D only)





Erbe Elektromedizin GmbH Waldhoernlestrasse 17 72072 Tuebingen Germany Phone +49 7071 755-0 Fax +49 7071 755-179 info@erbe-med.com erbe-med.com