

ELECTROSURGERY

VIO® 300 S

ELECTROSURGERY WITH A SYSTEM: AUTOMATIC OUTPUT DOSAGE FOR THE OR.



VIO
300 S



ERBE

Perfection for Life

AUTOMATIC OUTPUT DOSAGE VIO® 300 S. FOR REPRODUCIBLE TISSUE EFFECTS.

ERBE has set an innovative standard with the newly developed VIO electrosurgical system, which provides optimal support for operative procedures in virtually all medical fields. And many more indications can be included.

The **ERBE VIO 300 S** generator module offers **automatic output dosage due to all regulative technologies:**

- **voltage regulation** for sparing, reproducible cutting and coagulation
- **arcing regulation** for high-energy cutting, coagulation and cutting under water
- **output regulation** to maintain constant power levels during coagulation and devitalization

The new and improved electrosurgical modes, effects and application programs make way for new operative procedures.



We configure the VIO 300 S – both the hardware and the software – individually according to your needs: ac-

cording to the medical specialty, the indication and the specific requirements of the operative procedures. This means that operative interventions can be carried out even more efficiently, precisely and sparingly for the patient. A variety of socket modules and software options give you plenty of choice. In spite of its wide choice of output and functions, operating the VIO 300 S is both simple and comfortable. It is individually configured to the needs of the specific operative procedure.



**Tailored to your needs –
Both hardware and software**

- ✦ Automatic output dosage
- ✦ New and improved CUT and COAG functions, both monopolar and bipolar
- ✦ Can be individually configured to meet the requirements of different medical specialties, indications and procedures
- ✦ Simple, interactive and safe operation
- ✦ The VIO 300 S – the master control unit for other modules of the VIO electrosurgical system, for example Argon Plasma Coagulation, smoke plume evacuation, endoscopy irrigation pump and more

Variable configuration with socket modules

You decide which sockets you need: ERBE standard sockets or international 3-PIN sockets, 4 mm sockets for endoscopic interventions, bipolar or monopolar sockets ... many choices are available.



**Precise power output
adjusted to the indi-
vidual indication.**

The user-friendly VIO 300 S generator module functions as the central control unit, providing the right amount of power at the right time. Modern regulative technologies provide optimal power dosages for the new and improved electrosurgical functions.



VEM 2, the VIO extension module has 2 additional sockets allowing you an even greater choice of sockets.



VIO CART: the ergonomic systems cart. For the VIO 300 S and other system components. The VIO 300 S can also be used as a stand-alone unit mounted on a ceiling support.

PRECISE CUTTING. IN VERY CONCEIVABLE MODE.

CUT

You do the cutting – the **VIO 300 S** will automatically adjust the power output. Intelligent microprocessor technology will deliver the required amount of power according to your current needs.

The advantages of **automatic power dosages**: efficient operation with optimal results and a high degree of safety; the ERBE Power Peak System takes specific features of the initial cutting stage into account and provides automatic support; improved cutting effects and reduced thermal damage to tissue; less stress for the patient.



Regulation of voltage and arcing in a single system – for a superior cut

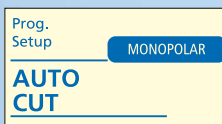
Depending on your choice of mode you will be able to utilize two different regulatory techniques provided by the VIO 300 S generator. **ERBE voltage regulation** constantly regulates the pre-selected voltages during the entire cutting process and automatically controls the power output – creating reproducible cutting results which are largely independent of the cutting speed, type of electrode and tissue type.

ERBE arcing regulation controls the intensity of the arcs required for the cut between the active electrode and the target tissue and constantly adjusts them. This means that the power output is controlled and optimized. Modes which are based on the regulation of arcing are particularly suitable for cuts carried out in adipose tissue or under water.



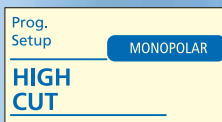
For the optimal cut

- ✦ Dosage of power output with ERBE voltage regulation: reproducible cuts with optimally adjusted power output
- ✦ Dosage of power output with ERBE arcing regulation: reproducible, efficient cuts in tissue with a high impedance
- ✦ Can be used in many specialties, from micro-surgery to high-powered vaporization
- ✦ Cutting results are largely independent of the cutting speed, the shape of the electrode and the tissue type
- ✦ Reproducible adjustment of effects
- ✦ Newly developed electrosurgical monopolar and bipolar CUT effects
- ✦ Bipolar cutting: more safety, as the current flow only occurs at the target tissue
- ✦ Power Peak System for optimal support during the initial cutting stage



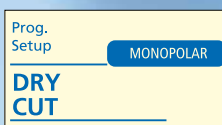
AUTO CUT

Automatically regulates the cutting quality, adjusting it to the current flow requirements through regulation of the voltage. VIO adapts itself to the working mode of the operating physician. Minimal necrosis and reproducible cutting quality – largely independent of the electrode, cutting process and target tissue.



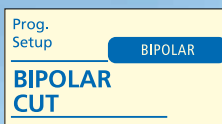
HIGH CUT

For use in special areas such as when cutting adipose tissue or cutting under water. The regulatory system controls the arcing intensity and ensures that the cut will be precisely regulated with minimal power output.



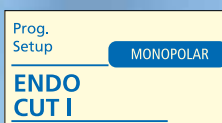
DRY CUT

A combination of voltage regulation and modulated waveforms which produces an electrosurgical cut with a unique quality of hemostasis. Ideal for operative procedures which require good initial hemostasis.



BIPOLAR CUT

Bipolar cutting with all the advantages provided by voltage regulation in 8 pre-determined cutting qualities. The cutting current is only present at the distal end of the applicator. This ensures more safety and guarantees precise cuts.

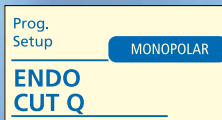


ENDO CUT I (OPTION*)

ENDO CUT Q (OPTION*)

The fractionated cut with cutting and coagulation intervals.

For snare (Q) or needle/wire applications (I) in endoscopic procedures.

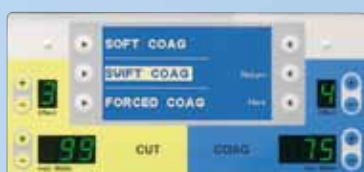


* Only available ex factory (must be ordered)

ALL REGULATED AUTOMATICALLY. FOR EXACT COAGULATION AND DEVITALIZATION.

COAG

The concept of the VIO electrosurgical generator is so variable that it offers all known types of monopolar and bipolar electrosurgical coagulation for all requirements – and much more. From the new SOFT coagulation to coagulation types which call for the simultaneous activation of two separate instruments (option*).

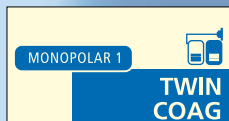


Voltage and power regulation in a single system – for even better coagulation

ERBE voltage regulation constantly maintains a pre-set voltage during the entire coagulation process. This ensures that the precise amount of power required is delivered. Even under widely differing conditions it is possible to create reproducible and optimal coagulation effects at all times. With a precisely limited or minimal power output – adapted to individual requirements. If the procedure requires contact coagulation with minimal carbonization, quick coagulation and as little sticking to the electrode as possible, then ERBE Soft Coagulation is the method of choice. The new **ERBE power regulation** will maintain a constant pre-set power output level over a longer period, thereby creating an effective, previously unknown soft coagulation.

New COAG functions (optional*)

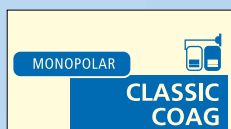
You now have the option of expanding your system with newly developed COAG functional components for medical specialties, indications and new operative procedures.



TWIN COAG (OPTION*)

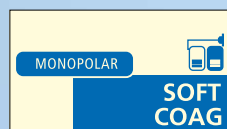
This option will expand the range of your VIO 300 S, permitting you to simultaneously activate two separate monopolar instruments, for example when carrying out heart surgery or breast surgery.

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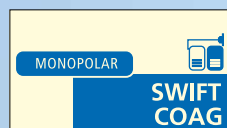
CLASSIC COAG

Gentle, layer-specific preparation and dissection. Immediate incision, minimal carbonization, limited thermal lateral damage to the edges of the incision. The mode for visceral and cardiac surgery.



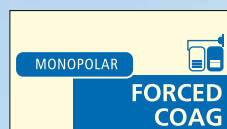
SOFT COAG

The new, rapid soft coagulation with regulation of power output. Coagulation without carbonization and almost no sticking of the electrode. Provides in-depth coagulation with minimal tissue damage.



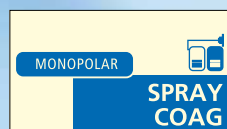
SWIFT COAG

Coagulation – also suitable for dissection. This mode makes it possible to carry out effective and rapid coagulation or dissection while achieving pronounced hemostasis; the voltage regulation means that there is minimal formation of smoke plume.



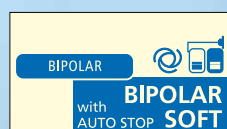
FORCED COAG

Allows the physician to operate rapidly and effectively while meeting all the requirements of a standard coagulation. Can be applied either directly using the coagulation electrode or indirectly, for example, with the help of insulated surgical forceps.



SPRAY COAG

For efficient, non-contact coagulation of surfaces. The expected penetration depth of this type of coagulation is limited. This makes Spray Coagulation very suitable for the treatment of diffuse bleeding or for superficial tissue devitalization.



BIPOLAR SOFT COAG

Bipolar coagulation. The low voltages used in this mode prevent the instrument from sticking and distinctly reduce tissue carbonization. Effective – with a subtle adjustment of 8 different effects.

For perfect coagulation

- ✦ Dosage of power output with voltage regulation: reproducible coagulation with optimal power output
- ✦ Power regulation for rapid non-sticking coagulation with minimal carbonization
- ✦ Newly developed electrosurgical COAG effects
- ✦ AUTO START and AUTO STOP functions
- ✦ TWIN COAG (option*): Simultaneous activation of 2 electrodes/instruments for dissection
- ✦ Reproducible adjustment of effects
- ✦ SWIFT COAG: coagulation with voltage regulation for dissection and pronounced hemostasis with minimal smoke plume

INNOVATIVE USER INTERFACE AND SAFETY CONCEPT. VERSATILE AND COMFORTABLE.

The **FocusView** function of the new ERBE VIO 300 S is an innovative user interface: you will only see the parameter settings which you actually need for each current procedure.

Innovative development:

the Neutral Electrode Safety System **NESSY**

With the **NESSY** safety concept and the new ERBE patient plate **NESSY** Ω the VIO 300 S sets new standards for patient safety in monopolar surgery.



Simple user interface

The user interface concept of the VIO 300 S allows the operating physician and his team to quickly and directly access the program parameters. The power output and the effects can be easily changed, directly and at the highest level of the interface, using the up and down keys.



Pre-set adjustment of effects

For constant operative results with reproducible tissue effects.



NESSY monitors the application of the patient plate and provides the user with information.



With its new shape the **NESSY** Ω electrode can be applied irrespective of direction.

It practically precludes the troublesome "leading edge" effect, i.e. the development of high current densities at the electrode edges.

WELL DESIGNED OPERATION AND ACTIVATION CONCEPT – JUST WHAT YOU ALWAYS WANTED.

Advantages at a glance

- ✦ Simple to operate (despite wide choice of functions) due to **FocusView**
- ✦ Display-supported neutral electrode safety system **NESSY** provides interactive assistance when positioning the patient plate
- ✦ Assignment of the foot switch: the display makes it possible to assign the foot switches or even just one foot switch pedal to the output socket of choice – simple and flexible
- ✦ VIO supports the automatic activation functions AUTO START and AUTO STOP

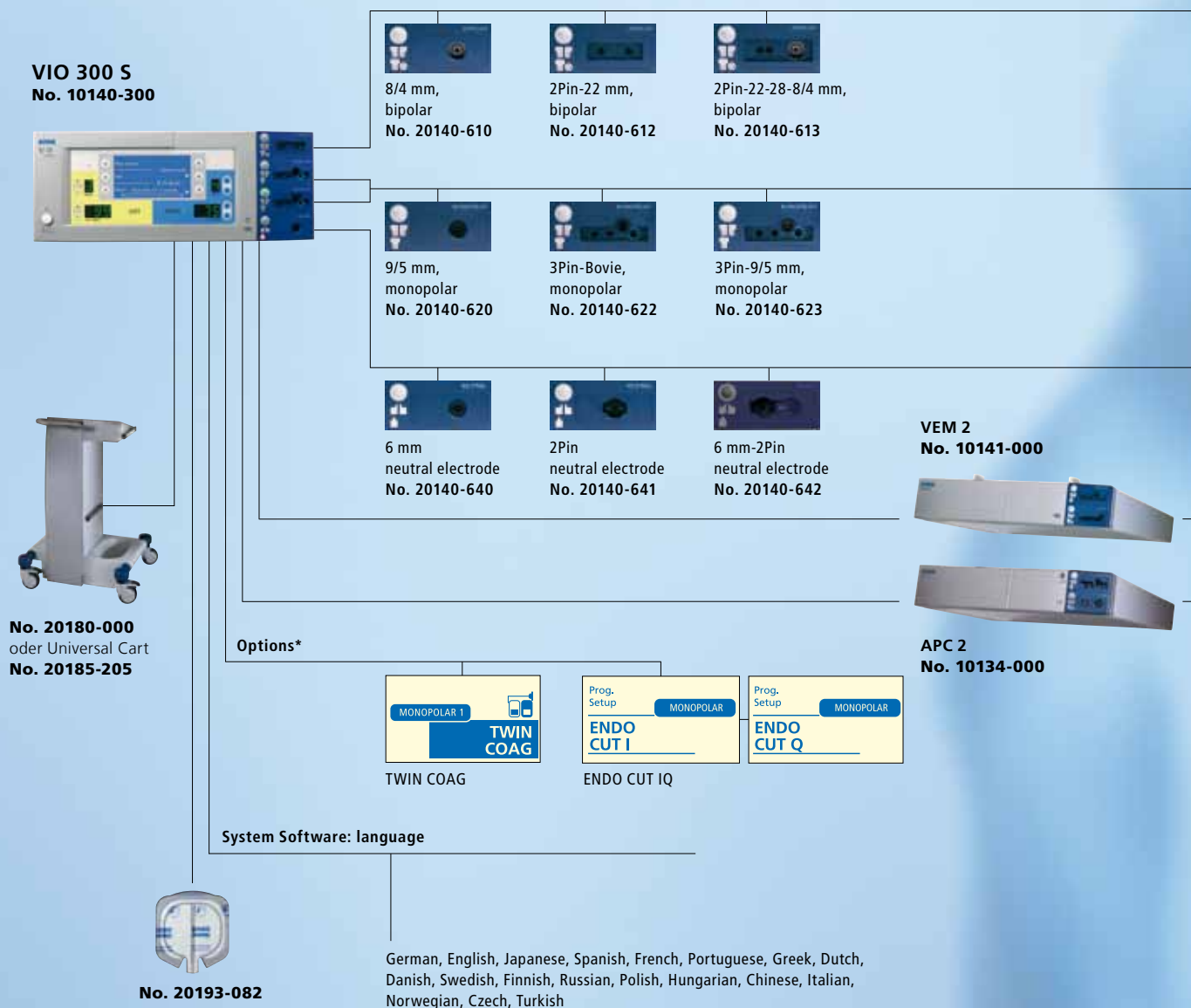


The user interface of the VIO 300 S allows the operating physician and his team to directly access the program parameters.

FocusView limits the amount of information displayed to the essentials, showing only the parameter settings of the instruments either currently plugged into the unit or activated.

INDIVIDUAL CONFIGURATION ACCORDING TO YOUR REQUIREMENTS.

The ERBE VIO 300 S – open to future developments with modular hardware and software. We configure the system according to your requirements – which can range from the basic “stand-alone” electrosurgical generator to the full electrosurgical system. This diagram provides you with a first overview of the range of possible options for configuration. Our experts are on hand to offer professional advice. We would like to help you make the right choice.



* Only available ex factory (must be ordered)

TECHNICAL DATA AT A GLANCE.



Power output	
Maximum CUT output	300 Watt for 500 Ohm (with PPS temporary 400 Watt)
Maximum COAG output	Up to 200 Watt
Safety system	NESSY
Frequency	350 kHz

Mains connection	
Supply voltage	100 V – 120 V/220 V – 240 V $\pm$ 10 %
Frequency	50/60 Hz
Mains current	max. 8 A/4 A
Power input during stand-by	40 Watt
Power input during max. electrosurgical output	500 Watt/920 VA
Potential equilization connection	yes
Fuse	T 8 A/T 4 A

Dimensions and weight	
Width x Height x Depth	410 x 160 x 370 mm
Weight	8.8 kg

Ambient temperature for the transport and storage of the unit	
Temperature	–40 °C to + 70 °C
Relative humidity	10 % – 95 %

Ambient temperature during operation of the unit	
Temperature	+10 °C to + 40 °C
Relative humidity	15 % – 80 %

Standards	
Classification acc. to the EC-Directive 93/42/EEC	II b
Protective class acc. to EN 60 601-1	I
Type acc. to EN 60 601-1	CF

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ELECTROSURGERY
VESSEL SEALING
ARGON PLASMA COAGULATION
CRYO SURGERY
WATERJET SURGERY

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