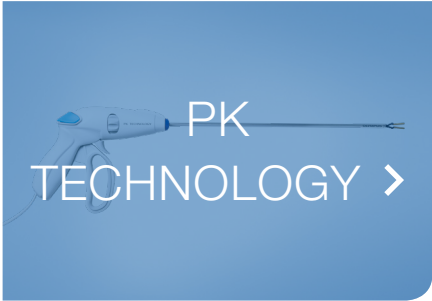


Energy Product Catalog

The Complete Portfolio





Energy Solutions

Unique Hybrid Technology, Advanced Bipolar Energy, and Ultrasonic Energy

One System That Covers Different Medical Specialties and Technologies for Open, Laparoscopic, and Endoscopic Surgery

Electrosurgery

ESG-400 – A Fully Equipped, Latest-Generation HF Generator

Optimizing your state-of-the-art electrosurgery in all surgical disciplines for monopolar, bipolar, and advanced bipolar modes for open, laparoscopic, and endoscopic applications, as well as transurethral or transcervical resection (TURis/TCRIs).



17343

Ultrasonic Surgery

USG-400 – Ultrasonic Energy for Advanced Tissue Management

The USG-400 generator provides compatibility with the SONICBEAT ultrasonic dissector.



5935

Unique Hybrid THUNDERBEAT Technology

Surgical Tissue Management System

Two combined surgical energy generators provide a unique platform that delivers the most widely used energy requirements to the surgical suite, eliminating the need for multiple devices in the operating room.



13897

One System for Different Medical Specialties

Bariatrics	Upper GI	Lower GI	Urology	Other	ENT	Gynecology	Breast Surgery
Standard HF Accessories							
THUNDERBEAT							
SONICBEAT					PK TECHNOLOGY		



Ordering Information

Order Number	Product Description
Generators and Accessories	
WB91051W	ESG-400* electrosurgical generator
N5428060	USG-400 ultrasonic generator
N3809330	Communication cable – short: 0.25 m
N3809630	Docking fixture
WA956215	Power cable Europlug (2x)
WA95623A	Power cable UK plug, 4.5 m (1x)
WA95621A	Power cable EU plug, 4.5 m (1x)
Optional	
N3635730	Energy cart
WB50403W	Foot switch, single (bipolar) pedal
N3809430	Communication cable – long: 10 m**
N3809530	Adapter for the connection to UHI-3 or UHI-4 insufflator
E0427213	Neutral electrode cable (reusable)

* Including one double foot switch

** Required for the automatic mist and smoke evacuation function

Connection Options

ESG-400 Sockets



Monopolar	2 × 3-pin (Ø 4 mm), international standard
	1 × 1-pin (Ø 8 mm), Bovie standard
	1 × coaxial (Ø inner 5 mm / Ø outer 9 mm), Erbe standard
Bipolar	1 × 2-pin (Ø 4 mm, pin spacing 28.8 mm), international standard
	1 × coaxial (Ø inner 4 mm / Ø outer 8 mm), Erbe standard
Universal	1 × 7-pin, Olympus standard
Neutral electrode	2-pin standard, single, or split

USG-400 Sockets



1	THUNDERBEAT
2	SONICBEAT

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.



THUNDERBEAT Unique Hybrid Technology

Unique Hybrid Technology



Olympus aims to provide innovative energy solutions delivering surgical safety and instrument versatility for efficient and streamlined operations with optimal patient outcomes. This is why Olympus developed the unique hybrid technology THUNDERBEAT for open and laparoscopic surgery. THUNDERBEAT is the world's first and only advanced energy system that delivers two well-established forms of energy to a tissue simultaneously:

- **Ultrasonic energy for superior dissection and fast tissue-cutting capability**
- **Advanced bipolar energy for fast and secure hemostasis for vessels up to and including 7 mm in diameter**

With the introduction of the new-generation THUNDERBEAT Type S, the unique concept of hybrid energy technology is raised to the next level. The development of the innovative Type S coating and the revolutionary safety system Intelligent Tissue Monitoring (ITM) enables an optimal temperature control and targeted application of energy for a safe and fast operation.

System compatibility of THUNDERBEAT
with the ESG-400 generator in combination
with the USG-400 generator.





Ordering Information

Order Number	Product Description	Article Code	Diameter	Length	Grip	Pieces
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THUNDERBEAT Instruments for Endoscopic Surgery

EGTB-0535FCS	THUNDERBEAT Type S	TB-0535FCS	5 mm	35 cm	Front-actuated	5/box
EGTB-0545FCS	THUNDERBEAT Type S	TB-0545FCS	5 mm	45 cm	Front-actuated	5/box
N3810430	THUNDERBEAT	TB-0535PC	5 mm	35 cm	Pistol	5/box

THUNDERBEAT Instruments for Open Surgery

N5423930	THUNDERBEAT Type S	TB-0520FCS	5 mm	20 cm	Front-actuated	5/box
N3810730	THUNDERBEAT	TB-0520IC	5 mm	20 cm	Inline	5/box
N3810830	THUNDERBEAT	TB-0510IC	5 mm	10 cm	Inline	5/box
N4505530	THUNDERBEAT Open Extended Jaw	TB-0920OE	9.7 mm	20 cm	Front-actuated	5/box
N4505730	THUNDERBEAT Open Fine Jaw	TB-0009OF		9 cm	Scissor	5/box

Generators and Accessories

WB91051W	ESG-400 electrosurgical generator	ESG-400
N5428060	USG-400 ultrasonic generator	USG-400
N3808760	Transducer for THUNDERBEAT	TD-TB400
N3809330	Communication cable – short: 0.25 m	
N3809630	Docking fixture	
WA956215	Power cable Europlug (2x)	
WA95623A	Power cable UK plug, 4.5 m (1x)	
WA95621A	Power cable EU plug, 4.5 m (1x)	
A90223A	Cleaning adapter for hooks	
N2366530	Cleaning adapter for scissors	
N2301000	Cleaning brush for surfaces (all instruments)	

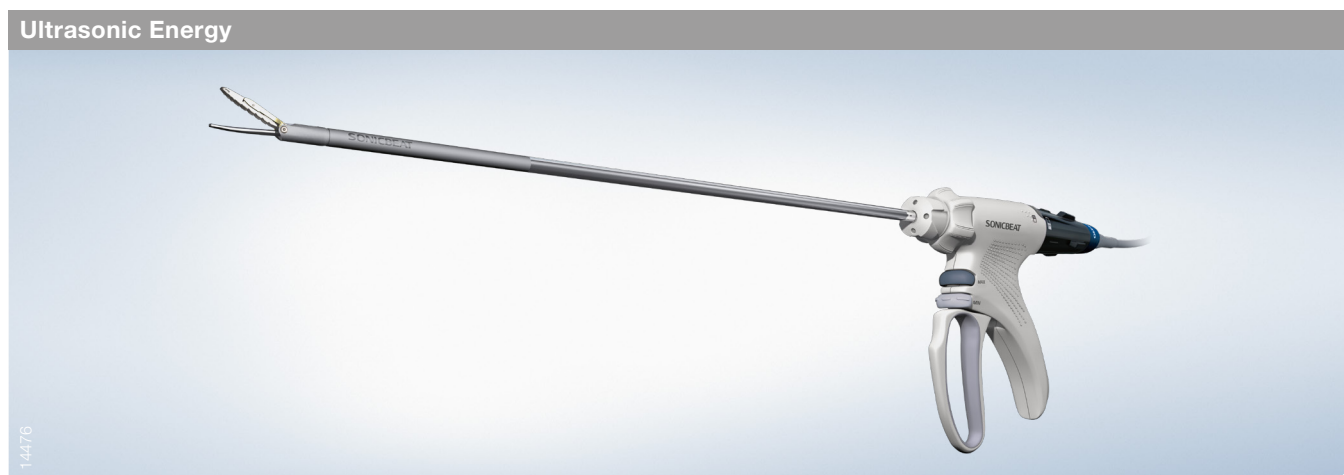
Optional Equipment

N3635730	Energy cart, TC-E400
N3809230	Foot switch for THUNDERBEAT
WB50403W	Foot switch, single (bipolar) pedal
N3809430	Communication cable – long: 10 m
N3809530	Adapter for the connection to UHI-3 or UHI-4 insufflator
E0427213	Neutral electrode cable (reusable)

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.



SONICBEAT Ultrasonic Energy



SONICBEAT is based on the design of Olympus' THUNDERBEAT in order to meet the aim of steadily developing ergonomic and multipurpose instruments for open and laparoscopic surgery. In contrast to THUNDERBEAT, SONICBEAT operates with ultrasonic energy only.

In direct combination with the USG-400 generator, the latest SONICBEAT technology harnesses ultrasonic energy for the highest level of precision and safe application. Respecting anatomic layers, SONICBEAT provides the finest dissection as well as simultaneous cutting and consistent sealing of 5.0 mm vessels, at the lowest level of lateral thermal spread.

System compatibility of SONICBEAT
with the USG-400 generator.





Ordering Information

Order Number	Product Description	Article Code	Diameter	Length	Grip	Pieces
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SONICBEAT Instruments for Endoscopic Surgery

N5390430	SONICBEAT	SB-0535FC	5 mm	35 cm	Front-actuated	5/box
N5390630	SONICBEAT	SB-0545FC	5 mm	45 cm	Front-actuated	5/box

SONICBEAT Instruments for Open Surgery

N5390830	SONICBEAT	SB-0520FC	5 mm	20 cm	Front-actuated	5/box
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Generators and Accessories

N3808860	Transducer for SONICBEAT	TD-SB400
N5428060	USG-400 ultrasonic generator	USG-400
WA95623A	Power cable UK plug, 4.5 m (1x)	
WA95621A	Power cable EU plug, 4.5 m (1x)	

Optional Equipment

N3635730	Energy cart, TC-E400
N3809130	Foot switch for SONICBEAT
N3809530	Adapter for the connection to UHI-3 or UHI-4 insufflator

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.

PK TECHNOLOGY

Advanced Bipolar Energy

Advanced Bipolar Energy



① PK Cutting Forceps ② PK Needle ③ PK Spatula ④ PK Hook ⑤ PK Lap Loop

⑥ PK Morcellator ⑦ PneumoLiner

PK TECHNOLOGY provides surgeons with the ability to seal, transect, coagulate, dissect, vaporize, resect, and mobilize tissue all with precision and control from one energy platform: the ESG-400 – a fully equipped, latest-generation HF generator that provides the PK TECHNOLOGY instruments with advanced bipolar energy. An auto-detection function and dedicated sealing and cutting modes for PK TECHNOLOGY instruments and other Olympus devices help simplify the OR workflow.

System compatibility of PK TECHNOLOGY with the ESG-400 generator.





Ordering Information

Order Number	Product Description	Diameter	Length	Pieces
PK TECHNOLOGY Instruments				
EGPK-CF0533	PK Cutting Forceps	5 mm	33 cm	5/box
WA90300A	PK Lap Loop	5 mm	33 cm	5/box
EGPK-NE0533	PK Needle	5 mm	33 cm	5/box
EGPK-JH0533	PK J-Hook	5 mm	33 cm	5/box
EGPK-SP0533	PK Spatula	5 mm	33 cm	5/box
Contained Tissue Extraction System				
WA90200A	PK Morcellator			
WA90500A	PneumoLiner			
Generators and Accessories				
WB91051W	ESG-400 electrosurgical generator			
WA95623A	Power cable UK plug, 4.5 m (1x)			
WA95621A	Power cable Europlug, 4.5 m (1x)			
Optional Equipment				
N3635730	Energy cart, TC-E400			
WB50403W	Foot switch, single (bipolar) pedal			
N3809530	Adaptor for the connection to UHI-3 or UHI-4 insufflator			
E0427213	Neutral electrode cable (reusable)			

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.

SonoSurg Ultrasonic Energy

Ultrasonic Surgery



SonoSurgX Ultrasonic Instruments

Thanks to the fully reusable, autoclavable instruments SonoSurg offers an excellent price–performance ratio. The system enables a very precise dissection and controlled energy delivery for reliable cutting and coagulation in laparoscopic and open procedures of various surgical disciplines like general surgery, gynecology, and urology.



SonoSurg Ultrasonic Aspirators

The SonoSurg ultrasonic aspirator comprised of the IU irrigation unit* and KV-6 suction pump is a compact, high-powered system ensuring efficient ultrasound aspiration and coagulation. The system offers a wide selection of autoclavable probes to suit your needs in open and laparoscopic surgery.

System Compatibility of SonoSurg Devices with the SonoSurg G2 Generator

The SonoSurg G2* is a multifunctional ultrasonic generator enabling the use of cost-efficient reusable instruments available for open and endoscopic surgery. For a clear view during endoscopic procedures through automatic mist and smoke evacuation the SonoSurg system can be combined with the UHI-3 or UHI-4 insufflators.

* Please note that the IU irrigation unit and the SonoSurg G2 generator are no longer available.





Ordering Information

Order Number	Product Description	Article Code	Diameter	Length	Grip	Tip Design
SonoSurgX Instruments for Endoscopic Surgery						
N2643660	SonoSurgX scissor	T3771	5 mm	34 cm	Pistol	Straight
N2643960	SonoSurgX scissor (HF)	T3900	5 mm	34 cm	Pistol	Straight
N2643760	SonoSurgX scissor	T3775	5 mm	34 cm	Pistol	Curved
N2644060	SonoSurgX scissor (HF)	T3905	5 mm	34 cm	Pistol	Curved
N2644160	SonoSurgX scissor (HF)	T3910	5 mm	34 cm	Inline	Straight
N2644260	SonoSurgX scissor (HF)	T3915	5 mm	34 cm	Inline	Curved
N2643860	SonoSurgX scissor	T3795	5 mm	45 cm	Pistol	Curved
SonoSurg Instruments for Endoscopic Surgery						
N2301160	SonoSurg scissor	T3071	5 mm	35.7 cm	Pistol	Straight
N2301460	SonoSurg scissor (HF)	T3100	5 mm	34 cm	Pistol	Straight
N2301260	SonoSurg scissor	T3075	5 mm	34 cm	Pistol	Curved
N2301560	SonoSurg scissor (HF)	T3105	5 mm	34 cm	Pistol	Curved
N2301660	SonoSurg scissor (HF)	T3110	5 mm	34 cm	Inline	Straight
N2301760	SonoSurg scissor (HF)	T3115	5 mm	34 cm	Inline	Curved
N2301360	SonoSurg scissor	T3095	5 mm	45 cm	Pistol	Curved
A90208A	SonoSurg hook	T3060	5 mm	33 cm		
SonoSurgX Instruments for Open Surgery						
N2644760	SonoSurgX scissor (HF)	T3955	5 mm	8.8 cm	Inline	Curved
N2644560	SonoSurgX scissor (HF)	T3930	5 mm	19 cm	Pistol	Straight
N2644660	SonoSurgX scissor (HF)	T3935	5 mm	19 cm	Pistol	Curved
N2644360	SonoSurgX scissor (HF)	T3920	5 mm	19 cm	Inline	Straight
N2644460	SonoSurgX scissor (HF)	T3925	5 mm	19 cm	Inline	Curved
SonoSurg Instruments for Open Surgery						
N2302260	SonoSurg scissor (HF)	T3155	5 mm	8.8 cm	Inline	Curved
N2302060	SonoSurg scissor (HF)	T3130	5 mm	19 cm	Pistol	Straight
N2302160	SonoSurg scissor (HF)	T3135	5 mm	19 cm	Pistol	Curved
N2301860	SonoSurg scissor (HF)	T3120	5 mm	19 cm	Inline	Straight
N2301960	SonoSurg scissor (HF)	T3125	5 mm	19 cm	Inline	Curved
N1051930	SonoSurg hook	T3080	5 mm	11.3 cm		
Aspirator for Endoscopic Surgery						
N1806830	Aspirator probe for T3330 (HF)	MH-125	7 mm	43 cm		Straight
N1807230	Aspirator sheath, long	T3330		45.8 cm		Straight
Aspirator for Open Surgery						
N1806630	Aspirator probe for T3310 (HF)	MH-112	7 mm	11.7 cm		Straight
N1807030	Aspirator sheath, short	T3310		14.5 cm		Straight
N1806730	Aspirator probe for T3320 (HF)	MH-113	7 mm	12.9 cm		Angled
N1807130	Aspirator sheath, angled	T3320		15.3 cm		Angled
N1806930	SonoSurg attachment for sheaths	T3300				

Order Number	Product Description	Article Code
SonoSurg Instrument Accessories		
A90205A	SonoSurg transducer with connecting cable	T2H
N1021430	SonoSurg transducer without detachable MAJ-1121 connecting cable	T2H-C
N1021500	Cable for T2H-C transducer	MAJ-1121
A05952A	Instrument tray with lid for SonoSurg instruments	
N2367160	SonoSurg hand switch	MAJ-677
A90222A	Torque wrench	MAJ-1117
26441	Cleaning brush for transducer	MH-507
WA90214A	Cleaning brush for hook/scissor	MH-362
A90223A	Cleaning adapter for hooks	MAJ-1118
N2366530	Cleaning adapter for scissors	MAJ-1532
N2301000	Cleaning brush for surfaces (all instruments)	MAJ-1534

Order Number	Product Description	Article Code
Aspirator Accessories		
N1807930	Tubing set for suction/irrigation	MAJ-1099
N1806430	SonoSurg transducer without detachable MAJ-1121 connecting cable	T2L-GE-C
N1021500	Cable for T2L-GE-C transducer	MAJ-1121
A05952A	Instrument tray with lid for SonoSurg instruments	-
N1808130	Cleaning rod for aspirator probe	MAJ-1178

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.



EVEREST Bipolar Energy

Bipolar Energy



① **Everest LYONS**
Dissecting Forceps

② **Everest Bipolar**
Cutting Forceps

③ **Everest Macro-jaw**
and **Micro-jaw Forceps**

④ **Everest MOLLY**
Forceps

Everest Bipolar Products

The Everest Bipolar Products offer a wide range of instruments for precise tissue coagulation, transecting, dissection, grasping and mobilization. Bipolar technology reduces the hazards associated with monopolar electrosurgery, including alternate site burns, direct coupling, capacitive coupling, and insulation failure. It also minimizes lateral thermal spread. Bipolar coagulation is superior compared to monopolar electrosurgical technology and yields less collateral thermal damage.^{1,2}

System compatibility of Everest with the ESG-400 generator and other standard bipolar generators.



¹ Vilos, G.A. and Rakumar, C. Electrosurgical Generators And Monopolar and Bipolar Electrosurgery. Journal of Minimally Invasive Gynecology. 2013;20:279-287.

² Livaditis, G.J. Comparison Of Monopolar And Bipolar Electrosurgical Modes For Restorative Dentistry: A Review of the Literature. J Prosthetic Dentistry. 2001;86:390-399.



Ordering Information

Order Number	Product Description	Diameter	Length
Everest Bipolar Cutting Forceps			
EG3005	Everest cutting forceps	5 mm	33 cm
EG3006-020	Everest cutting forceps, with cord	5 mm	33 cm
Everest LYONS Dissecting Forceps			
EG3700-000	Everest LYONS dissecting forceps	5 mm	33 cm
EG3740-000	Everest LYONS dissecting forceps	5 mm	45 cm
Everest MOLly Forceps			
EG3300-000	Everest MOLly forceps	3 mm	33 cm
EG3330-000	Everest MOLly forceps	5 mm	33 cm
EG3345-000	Everest MOLly forceps	5 mm	45 cm
Everest Macro-Jaw and Micro-Jaw Forceps			
EG3600-000	Everest Macro-jaw forceps	5 mm	33 cm
EG3640-000	Everest Macro-jaw forceps	5 mm	45 cm
EG3601-000	Everest Micro-jaw forceps	5 mm	33 cm
Everest Connector Cords For Standard Bipolar Generators*			
EGEC3999	Fixed dual banana pin style cord to connect Everest devices to generators with standard banana pin receptacles		

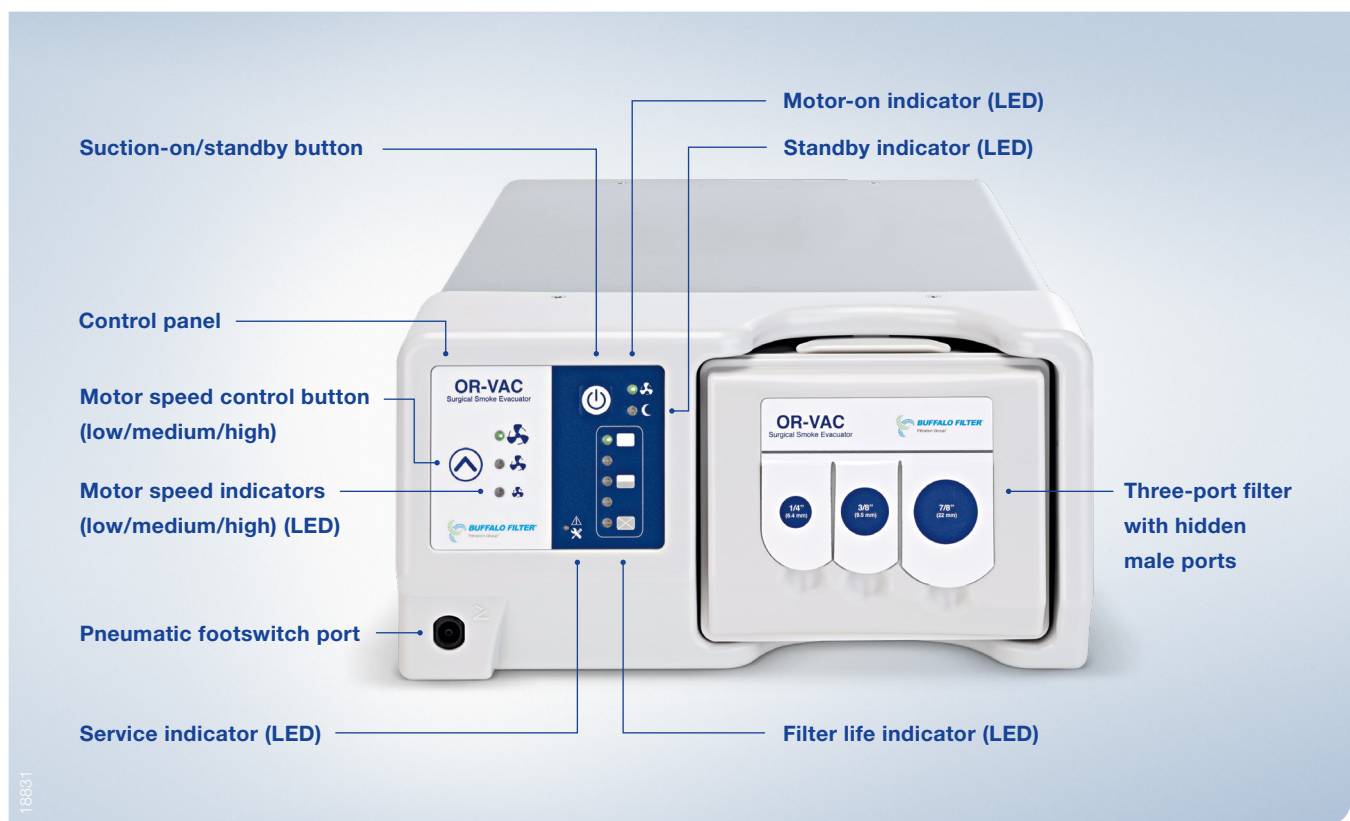
*Reusable, supplied non-sterile

All devices supplied sterile, single-use disposable, except for Everest connector cords.

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.



OR-VAC Surgical Smoke Evacuator



The OR-VAC surgical smoke evacuator provides ideal smoke management for operating rooms, physicians' offices, and outpatient surgery centers. The OR-VAC minimizes exposure to these toxic smoke biohazards during electrosurgery, procedures with lasers, and ultrasound tissue dissections. It combines variable filter life, a compact design, and three-port filter with filter-life-tracking technology.



Ordering Information

Order Number	Reference Number*	Product Name
WA98110A	HYVV220	OR-VAC surgical smoke plume evacuator, 220/240 V
WA98115A	FOWV220	OR-VAC surgical smoke plume evacuator, 220/240 V, with exhaust capture port
WA98120A	OL3532	OR-VAC filter, 2/box
WA98130A	OLLAP12	OR-VAC laparoscopic smoke evacuation tube, 12/box
WA98160A	OL3MT24	OR-VAC open smoke evacuation tube, 24/box
WA98140A	OLSONIC	OR-VAC adapter for automatic activation
WA98150A	OLPRFIL20	OR-VAC fluid trap, 20/box
WA98170A	OLPWRCORDUKM	Power cord, UK
N3647400	-	Communication cable, length 0.7 m
N3647600	-	Communication cable, length 1.8 m
N3809430	-	Communication cable, length 10 m
K7504124	-	TC-C2 compact trolley**

Specifications

Dimensions	15.2 (H) × 27.9 (W) × 39.4 (D) cm
Weight	5.0 kg
Noise Level	55.0 dB A (max.)

Flow Settings

Standard Tube ID	Liters per Minute
22 mm	708*
9.5 mm	130
6.4 mm	57

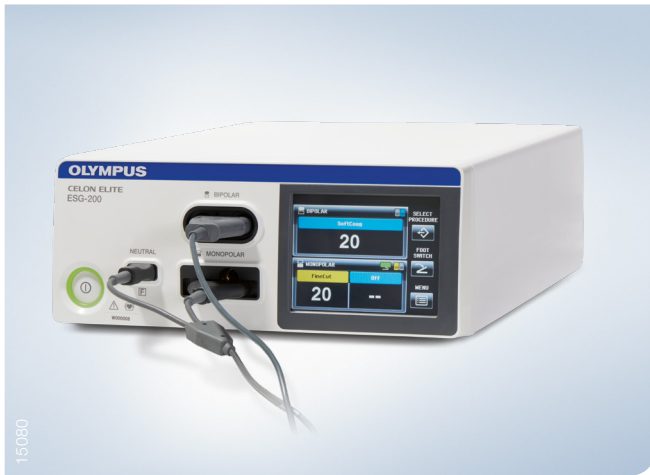
* Using new 22 mm tubing

** If TC-E400 is not suitable and an additional cart is needed

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Dedicated HF Generators For ENT, Gastrointestinal and Respiratory



ESG-200

CELON ELITE is a radiofrequency-based power control unit that incorporates multiple functions into a single device. The intelligent tissue monitoring allows precise and safe tissue ablation for a variety of ENT indications.

Specifications		
Areas of Application	ENT, Head and Neck	
Special Features	<ul style="list-style-type: none"> · Touch screen · Personalized settings · Radiofrequency-induced thermotherapy (RFITT) 	
Sockets	Bipolar output	Monopolar output
	Olympus standard 2-pin plug (28 mm) Erbe standard 1-pin coaxial plug	International standard 3-pin plug (4 mm diameter) Bovie standard* 1-pin plug (8 mm diameter) Erbe standard** 1-pin plug (5 mm diameter) Banana plug 1-pin plug (4 mm diameter)
Max. Power Output	120 watts	



ESG-300

The ESG-300 is a high-end HF generator dedicated to advanced gastrointestinal and respiratory procedures such as POEM or ESD. The ESG-300 can be combined with the APU-300 for argon plasma applications.

Specifications		
Areas of Application	Gastrointestinal and respiratory	
Special Features	<ul style="list-style-type: none"> · Touch screen · Wireless foot switch · Personalized settings · Argon PLASMA ready (in combination with APU-300) 	
Sockets	Bipolar output	Monopolar output
	International standard 2-pin plug (22 mm) Erbe standard 1-pin coaxial plug	International standard 3-pin plug (4 mm diameter) Bovie standard 1-pin plug (8 mm diameter) Banana plug 1-pin plug (4 mm diameter)
Max. Power Output	120 watts	



Ordering Information

CELON ELITE (ESG-200)

Order Number	Product Description
WA90001A	CELON ELITE "Type E", (incl. double-pedal foot switch)
WA90002A	CELON ELITE "Type B", (incl. double-pedal foot switch)
WA95621A	Power cable, EU, 4.5 m with angled plug
WA95622A	Power cable, US, 4.5 m with angled plug
WA95623A	Power cable, UK, 4.5 m with angled plug
WB50402W	Double-pedal foot switch
E0427213	MAJ-814 P-Cord for disposable neutral electrodes
WB990007	CelonProBreath
WB990008	CelonProSleep Plus
WB990278	CELON ELITE ProCut Handpiece
WB990177	CelonProCut Electrode (5 pcs/box)
WB990202	CelonProCut Gripping Forceps

ESG-300

Order Number	Product Description
WA90003W	ESG-300 electrosurgical generator
WA90004W	APU-300 argon plasma unit
WA94034W	Wireless foot switch incl. receiver and charger
WA94033C	Wired foot switch, 4 m cable
K10026806	TC-E300 (EU) system cart, for most European countries
K10026805	TC-E300 (UK) system cart, UK standard
A02915A	MAJ-860 active cord for ET instruments, 8 mm
E0427213	MAJ-814 connecting cable for disposable neutral electrode
E0427245	MAJ-897 split neutral electrode, disposable, 10 pcs
WA94041A	Pressure reducer, DIN 477-6, central and southern Europe
WA94042A	Pressure reducer, DIN 477-10, northern Europe
WA94043A	CGA no. 580, Italy

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.