

ELECTROSURGICAL GENERATOR

ESG-410

Surgical Tissue Management System



ELECTROSURGICAL GENERATOR ESG-410

ESG-410 Features and Benefits

Six sockets and a full range of monopolar and bipolar modes	■ For a vast variety of open, laparoscopic and endoscopic surgery procedures
Faster and stable plasma ignition without tissue contact	■ The user can ignite the electrode before touching the bladder wall to resect a tumor.
Wireless foot switches	■ Ability to move freely during operations
Automatic foot switch assignment for plasma instruments	■ No need to manually assign a foot switch for plasma procedures
Software updates via USB	■ Easy on-site service upgrades
Saving procedure settings on USB flash drive	■ Import & export of individual settings & procedures via USB interface
Superior LCD with touch screen interface	■ Better visibility from large distance by doubling the visible area compared to ESG-400.
New Monopolar Standard Modes	■ Option to reduce the visible number of monopolar modes to four Standard modes without effect settings.
Compatibility with Olympus equipment:	<ul style="list-style-type: none"> ■ HF resection electrodes and PK instruments ■ Monopolar and bipolar electrosurgical pencils and instruments ■ OR integration, insufflators and smoke evacuators ■ TC-E410 System Cart

ESG-410 Technical Specifications

Power supply

Voltage range	100–120 V~ / 220–240 V~
Frequency	50/60 Hz
Maximum input power	1150 VA @ 100-120 VAC 1500 VA @ 220-240 VAC
Power fuse	2 x 250 V/ T 10 AH
Terminal for potential equalization	Yes

Output

High frequency functions	Monopolar/Bipolar
High frequency	440 kHz ± 25%
Maximum high frequency power	320 W
All modes	25% duty cycle

Classification

Protection class according to IEC 60601-1	CF, Class I
Classification according to MDD 93/42/EEC	IIB

Sockets

MONOPOLAR	2 x 3-pin plugs, 4 mm pin diameter 2 x 1-pin plugs, 8 mm pin diameter 2 x 1-pin plugs, 4 mm pin diameter 2 x coaxial plugs, 9/5 mm pin diameter
BIPOLAR	1 x 2-pin plug, 4 mm pin diameter, 28.6 mm pin spacing 1 x 2-pin plugs, 4 mm pin diameter with 3rd coding pin 1 x 2-pin plugs, 4 mm pin diameter, 22 mm pin spacing 1 x coaxial plug, 8/4 mm pin diameter
UNIVERSAL	2 x 7-pin, Olympus standard
Neutral electrode	2-pin standard, single or split

Size and weight

Width x Depth x Height	370 x 501 x 241 mm
Weight	16.7 kg

Operation environment

Temperature	10 to 40 °C (50 to 104 °F)
Relative humidity	30 – 85%, non-condensing
Atmospheric pressure	70 – 106 kPa

Output characteristics

		Mode	Maximum output voltage [Vp]	Maximum power level [W]		
MONOPOLAR	CUT	Blend	2200	200		
		BlendCut	1400	200		
		FineCut	560	120		
		PowerCut	2000	120		
		PulseCut Slow	714	150		
		PulseCut Fast	714	150		
		Pure	1300	300		
		PureCut	700	300		
		COAG	COAG	Fulgurate	3600	120
				ForcedCoag	2000	120
PowerCoag	2000			120		
SoftCoag	235			200		
Spray	4300			120		
SprayCoag	4300			120		
BIPOLAR	CUT			BipolarCut	645	100
				PlasmaCut	700	320
				PK LoopCut	590	200
				PK MorceCut	560	300
		PK PureCut	510	200		
		PK SoftCut	610	200		
		COAG	COAG	AutoCoag	220	120
				BiSoftCoag	220	120
				HardCoag	220	120
				PKCoag	220	120
		PK SoftCoag	230	120		
		SalineCoag	245	200		

Order information

Article	Article number
ESG-410 electrosurgical generator	WA91307W
Foot switch, double pedal	WA91301W
Foot switch, double pedal, wireless	WA91302W
Foot switch, single pedal	WA91303W
Power cable, EU, 4.5 m, with angled plug	WA95621A
Power cable, US, 4.5 m, with angled plug	WA95622A
Power cable, UK, 4.5 m, with angled plug	WA95623A
HF cable MAJ-860, monopolar, 3.5 m, pin diameter 8 mm	A02915A
HF cable MAJ-861, monopolar, 3.5 m, pin diameter 4 mm	A02916A
Communication cable MAJ-1871, 0.25 m	N3809330
Communication cable MAJ-1872, 10 m	N3809430
Adapter MAJ-1873 for UHI-2/3	N3809530
Energy cart TC-E410	K10030288
Neutral electrode cable MAJ-814	E0427213
Neutral electrode cable	WA99510A