

ARC 300e  
HF SURGICAL GENERATOR  
SIMPLY SAFE



BOWA  
ARC  
300e

**BOWA**  
EINFACH SICHER

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The powerful specialist: ARC 300e

The ARC 300e HF generator provides the most up-to-date technology and technical innovations. The unit settings are already pre-programmed for numerous applications. The software can be updated and upgraded.

Extremely fast processors ensure that the ARC CONTROL is optimally integrated, while self-check programs continuously provide maximum safety. The two outputs are easy to control and enable the most important accessories to be connected. The user can take in all settings at a glance.

Fast: the ARC CONTROL regulator adjusts the power output to the necessary minimum for tissue variations and changes in cutting area or speed in every case.

Safe: the EASY electrode application system monitors the neutral electrode connected to the patient and signals any change in resistance to the user.

Smart: the continuous self-test program monitors all safety-related parameters several hundred times a second and signals any faults.

Flexible: third-party accessories can also be connected to the monopolar and bipolar output using an adapter. As an option, the unit can also be used for Argon Plasma coagulation.

Convenient: many of the 100 locations for storing programs are already pre-programmed. Programs can be shown and hidden as well as named individually. All the main settings / information can be displayed in different languages.

Field of application (extract)	Program
General surgery	Standard, Argon*
Urology	TUR-P, TUR-BT, TUR-VAP
Plastic surgery	MacroPlastic
Gynaecology	Gyn-Abdominal
Plastic surgery, oral and maxillo-facial surgery	Micro Plastic Neuro + Hand
Paediatrics	Pediatric
ENT	ENT
Gastroenterology	GastroCut* (Polypectomy, Papillotomy), Argon-Flex*

\*optional





Fast: ARC CONTROL<sup>®</sup>  
Convenient: 100 programs

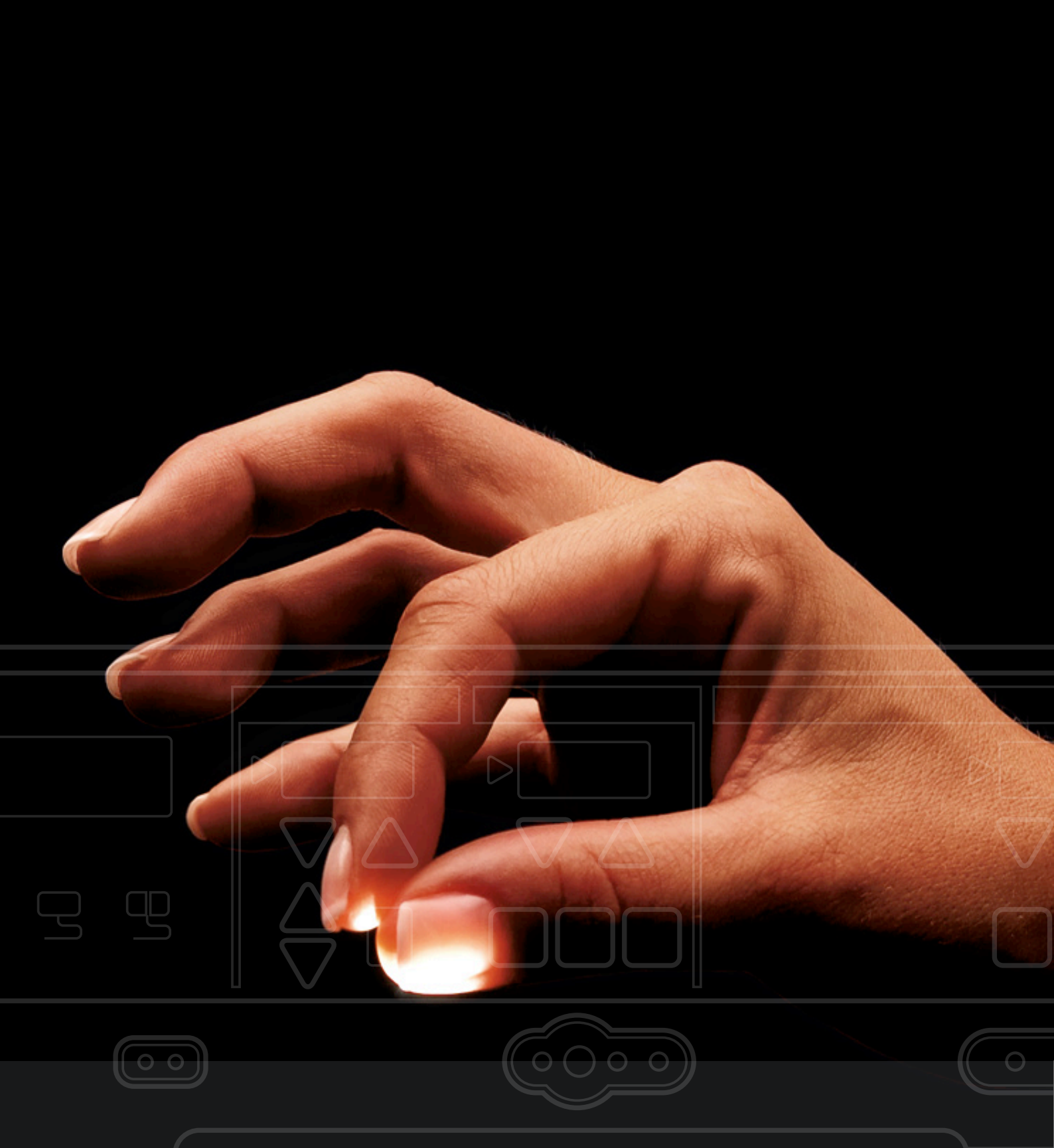
Safe: EASY patient monitoring  
Innovative: High-tech concept

Smart: continuous self-test  
Clearly laid out: Settings at a glance



Simply safe: all settings at a glance





Powerful performance:  
Gastroenterology and urology

**Specialising in powerful performance**

The ARC 300e completes the range of BOWA ARC generators in the medium power segment such as are required in numerous disciplines.

Preset programs reduce preparation time for the operation. The team is able to concentrate totally and utterly on the patient.

**Transurethral resection**

The ARC 300e provides three powerful programs for urology: TUR – Prostate/Vaporisation and TUR vesical tumours: TUR-P, TUR-VAP, TUR-BT

**GastroCut**

ARC 300e has two optional programs for gastroenterological operations: polypectomy and papillotomy. The combination of cutting and coagulation current gives optimum results when using polypectomy loops or papillotomes.

Benefit from the optimised GastroCut programs for endoscopy

- GastroCut Pol (polypectomy)
- GastroCut Pap (papillotomy)

Like all ARC generators, the unit can optionally be combined with the ARC PLUS argon unit for gastroenterological operations: Argon and Argon-Flex.

By using the Argon and Argon-Flex programs, the ARC 300e becomes a powerful workstation for endoscopy and surgery.

GastroCut programs	TUR programs for urology
GastroCut (polypectomy)	TUR-P (prostate resection)
GastroCut (papillotomy)	TUR-BT (vesical tumours)
	TUR-Vap (vaporisation)







ARC PLUS with argon assistance

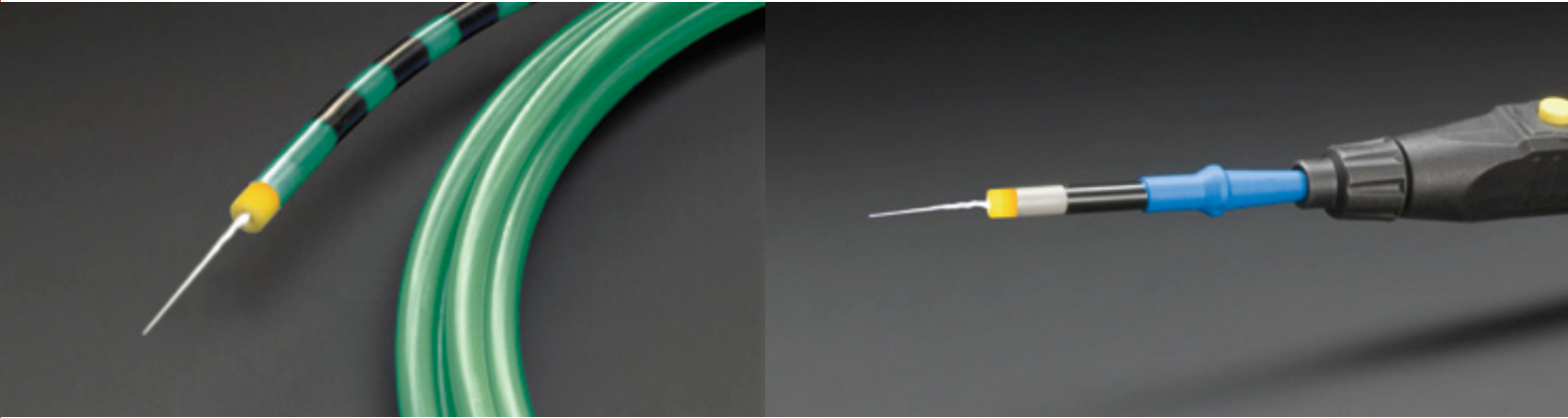
From a stand-alone to a complete workstation

The Argon Plasma coagulation feature of the ARC PLUS ideally complements the range of ARC HF generators. Argon-assisted HF spray coagulation ignites even in the extremely low power range below 10 watts. The low coagulation depth with only superficial necrosis is outstandingly suitable for coagulation in areas at risk of perforation. Non-contact working prevents electrodes from sticking. Various accessories are available for the different Argon Plasma coagulation programs.

Fields of application (extract)

Argon
General surgery
Abdominoplasty
ENT

Argon-Flex
Gastroscopy
Double balloon enteroscopy
Bronchoscopy
Coloscopy
Rectoscopy



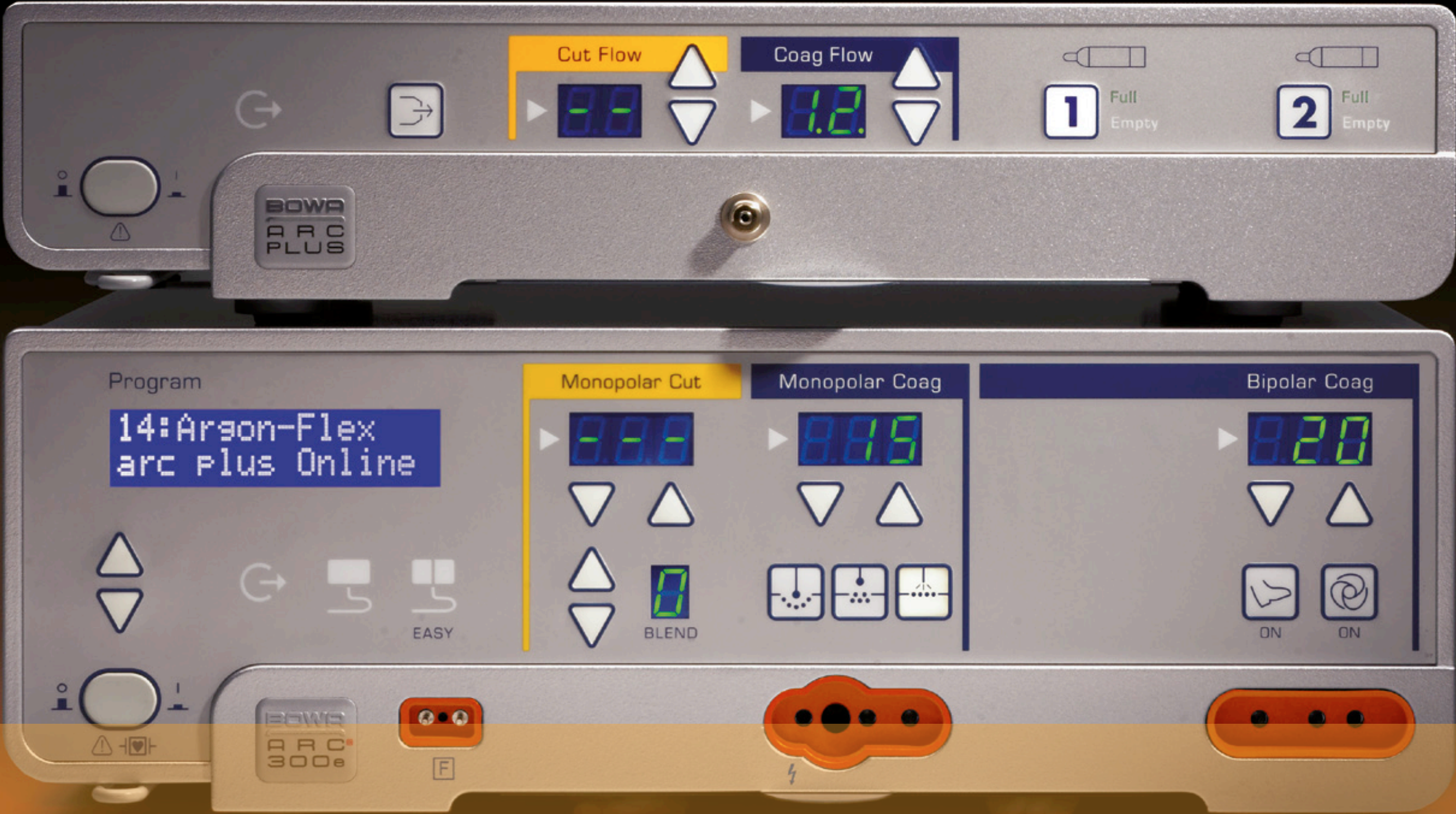


Safety: continuous self-test

Operation: simple and safe

Ignition: below 10 Watts

Endurance: bottle and spare bottle



Precise power adjustment for special applications





Simply check: Data & facts

# Technical specification for ARC 300e

BOWA ARC 300e units can be used in special areas of HF surgery. ARC generators can be used singly or in combination with the ARC PLUS unit on ceiling supply units or placed on the ARC CART. The ARC 300e has one monopolar and one bipolar output. The unit can be maintained by the hospital technician himself.

The fault memories are easy to read. The technician carries out any required software updates by changing a board and subsequently calibrating the unit. If third-party accessories are used, these can be connected with the help of adapters.

Maximum cutting power, short-term	420 watt
Number of types of cutting current	20 + 2 with Gastro option
Number of types of coagulation current	6 monopolar + 2 with Gastro / Argon option 2 bipolar
ARC CONTROL🔥 via 32-bit microcontroller (RISC)	Yes
Number of displays / indicators	5
Number of foot switches	1
Digital set-up	Yes
Auto Start function for bipolar output	Yes
ARC CONTROL🔥 for monopolar cutting	Yes
Neutral electrode monitoring (EASY)	Yes
Impedance window for checking the NE	0 – 300 Ohm
Clock frequency	44 kHz
Continuous system self-test (ISSys)	Yes
Unlimited error memory	Yes
Error documentation display	Yes
Arc suppression for contact coagulation	Yes
Continuous Cut Support (CCS)	Yes
Continuous leakage current monitoring	Yes
Defibrillator checked	Yes

Technical specification for ARC 300e

Compendium: Technical specification for high frequency electrosurgical generator 300e	
Max. output power for monopolar Cut	300 W
Max. output power for monopolar Coag	120 W
Max. output power for bipolar Coag	120 W
NE safety monitoring (EASY)	Yes
Rated frequency	330 kHz sinusoidal / 1 MHz pulse
Mains connection / max. current consumption	90 V ·130 V / 6.4 A 198 V ·230 V / 3.2 A
Mains fuse	90 V · 130 V / 8 A slow-acting 198 V ·230 V / 4 A slow-acting
Mains frequency	50 Hz / 60 Hz
Power consumption in standby mode	55 VA
Max. power consumption at max HF power	750 VA
Equipotential bonding connector	

Storage and transport conditions	
Temperature	-20 °C · +50°C
Relative humidity	0 · 75 %, non-condensing
Air pressure	500 · 1600 mbar

Operating conditions	
Temperature	10 °C · +40 °C
Relative humidity	30 · 75 %, non-condensing
Air pressure	700 · 1600 mbar
Protection class to EN 60601-1	I
Type according to EN 60601-1	CF
Operating mode	10 sec / 30 sec
Classification according to EC Directive 93 / 42 / EEC	Class IIb

Mains connection	
Power consumption	40 VA
Mains frequency	50 / 60 Hz
Equipotential bonding connector	Yes
Voltage range	85 to 264 V AC

Dimensions and weights	
External dimensions (W x H x D)	430 x 150 x 400 mm
Weight	10 kg

Technical specification for ARC PLUS

BOWA ARC PLUS can be combined with all ARC generators for use in all areas of HF surgery coupled by means of a communications interface. The unit can be located both on ceiling supply units and also on a mobile ARC CART.

The unit can be maintained by the hospital technician himself. The fault memories are easy to read. The technician can update software by changing a board and subsequently calibrating the unit.

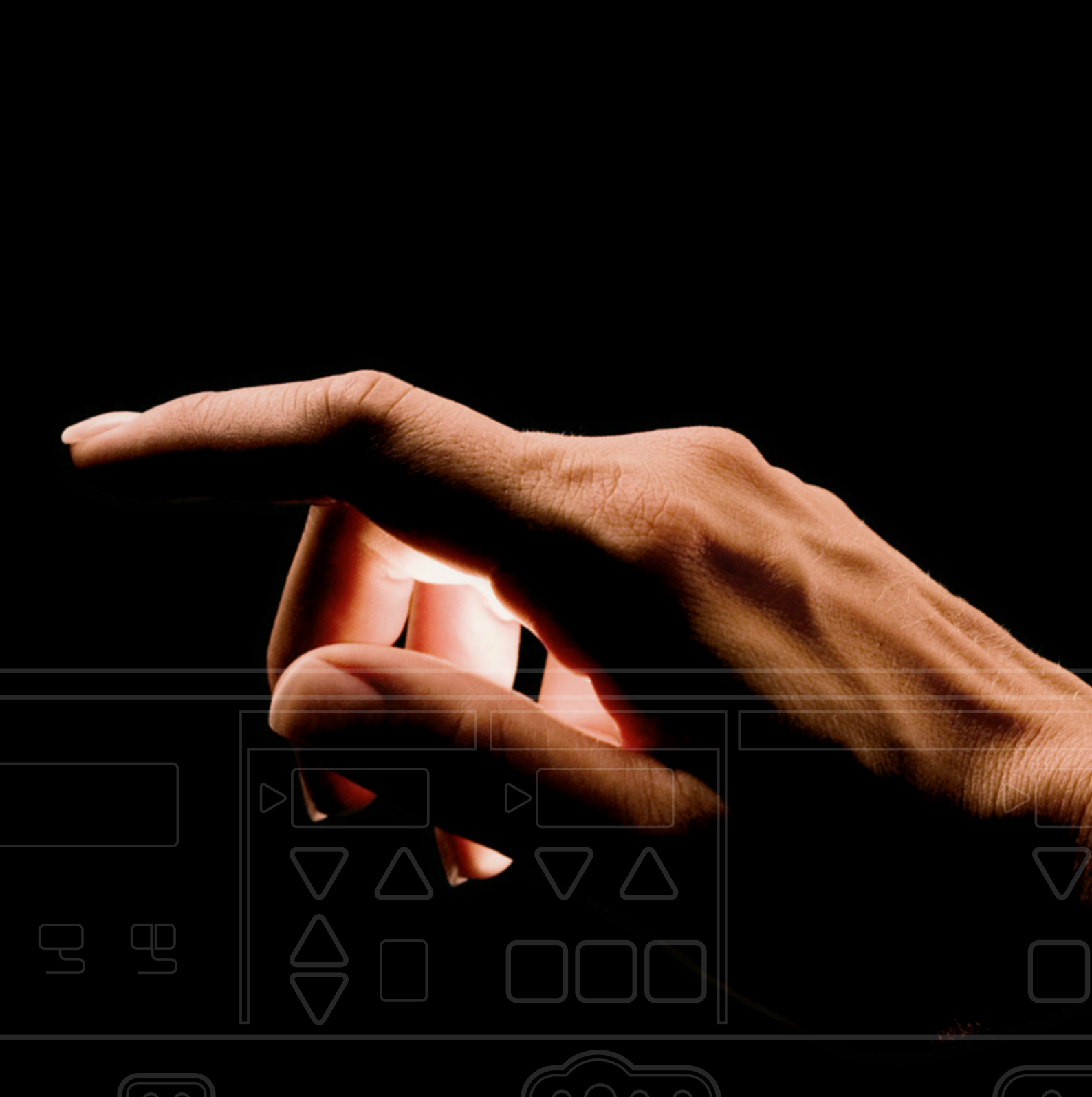
Gas supply	
Gas type	Argon Purity 4.8 or better, Class 2.1 A
Adjustment range	0.1 to 1.0 l/min, adjustment step 0.1 l/min
Adjustment range	1.0 to 3.0 l/min, adjustment step 0.2 l/min
Adjustment range	3.0 to 9.5 l/min, adjustment step 0.5 l/min
Gas input pressure	between 2.5 and 4.5 bar
Max. gas output pressure	2 bar

- Two gas connectors, automatic or manual changeover of gas bottles and optical level indicator
  - PURGE rinsing function with electrode-dependent gas pressure control
  - Safety devices
  - Continuous flow monitoring, fault indication with display of error number, hose blockage detection, continuous self-test, warning tone, continuous pressure monitoring at distal end
- Documentation
  - Recording of fault conditions and operator errors by storing within the unit. Data recall facility
  - Connections, communication
  - Optical interface for communication with ARC 300e

Mains connection	
Power consumption	40 VA
Mains frequency	50 / 60 Hz
Equipotential bonding connector	Yes
Voltage range	85 to 264 V AC

Dimensions and weights	
External dimensions (W x H x D)	430 x 94 x 400 mm
Weight	7.3 kg
Protection class to EN 60601-1	I
Type according to EN 60601-1	CF in conjunction with ARC generators
Classification according to EC Directive 93/42/EEC	Class IIa





For even greater potential

ARC 300e and ARC PLUS complement one another to form a powerful all-in-one package.

The BOWA ARC CART or any ceiling supply unit provides the right footing for the units.

The ARC CART can be configured individually, e.g. with shelves, drawer, basket and gas bottle holder.

The whole range of foot switches has ergonomically arranged pedals.

BOWA provides a complete program of electrosurgical accessories.

