

BOWA
EINFACH SICHER

BOWA-electronic GmbH & Co. KG
Heinrich-Hertz-Strasse 4-10
72810 Gomaringen | Germany

Phone +49 (0)7072-6002-0
Fax +49 (0)7072-6002-33
info@bowa-medical.com | bowa-medical.com



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ARC 200 HF SURGICAL GENERATOR SIMPLY SAFE



BOWA
2000



The specialist: ARC 200

The ARC 200 HF generator provides the most up-to-date technology and technical innovations. The generator settings are already pre-programmed for numerous applications. The software can be updated and upgraded. Extremely fast processors ensure optimally integrated control of the arc.

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 permanent self-test program checks all safety-related parameters hundreds of 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 ARC can also be used for Argon Plasma coagulation.

Convenient: some 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*
Gynaecology	Gyn-Abdominal
Plastic surgery, oral and maxillo-facial surgery	Micro Plastic Neuro + Hand
Paediatrics	Pediatric
ENT	ENT
Gastroenterology	GastroCut* (Polypectomy, Papillotomy), Argon flex*

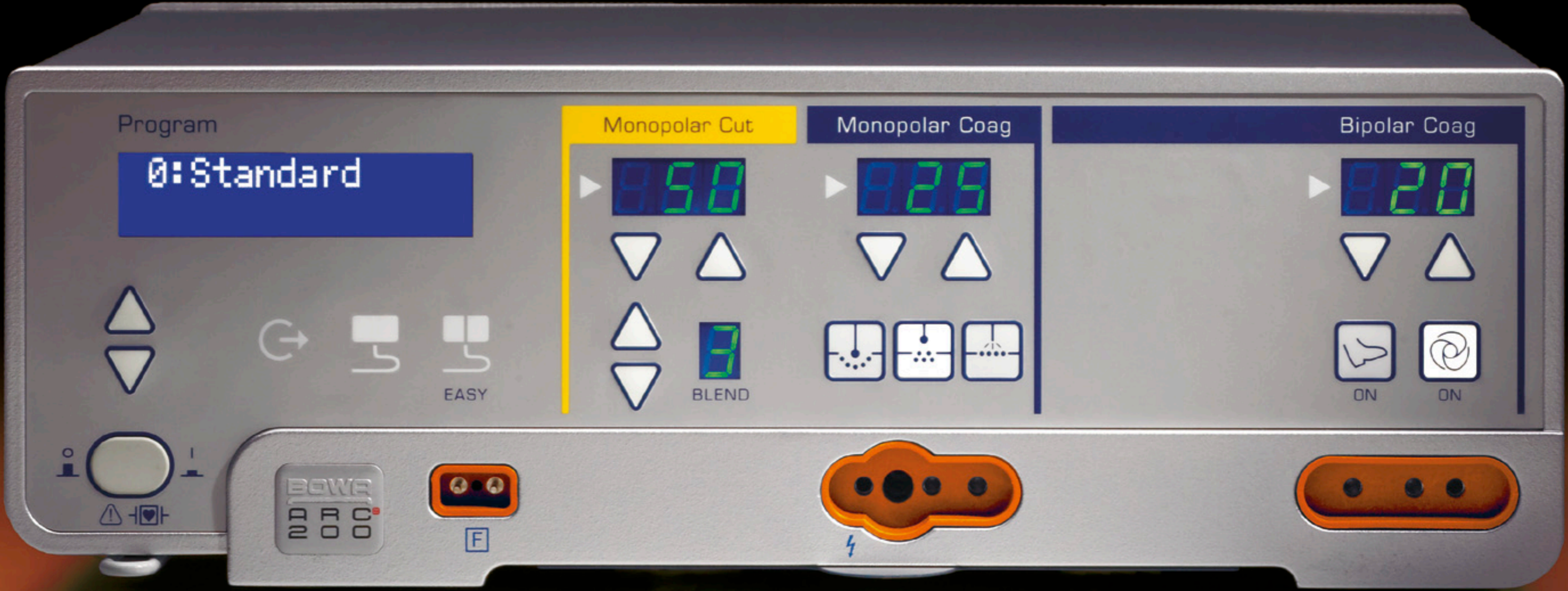
*optional



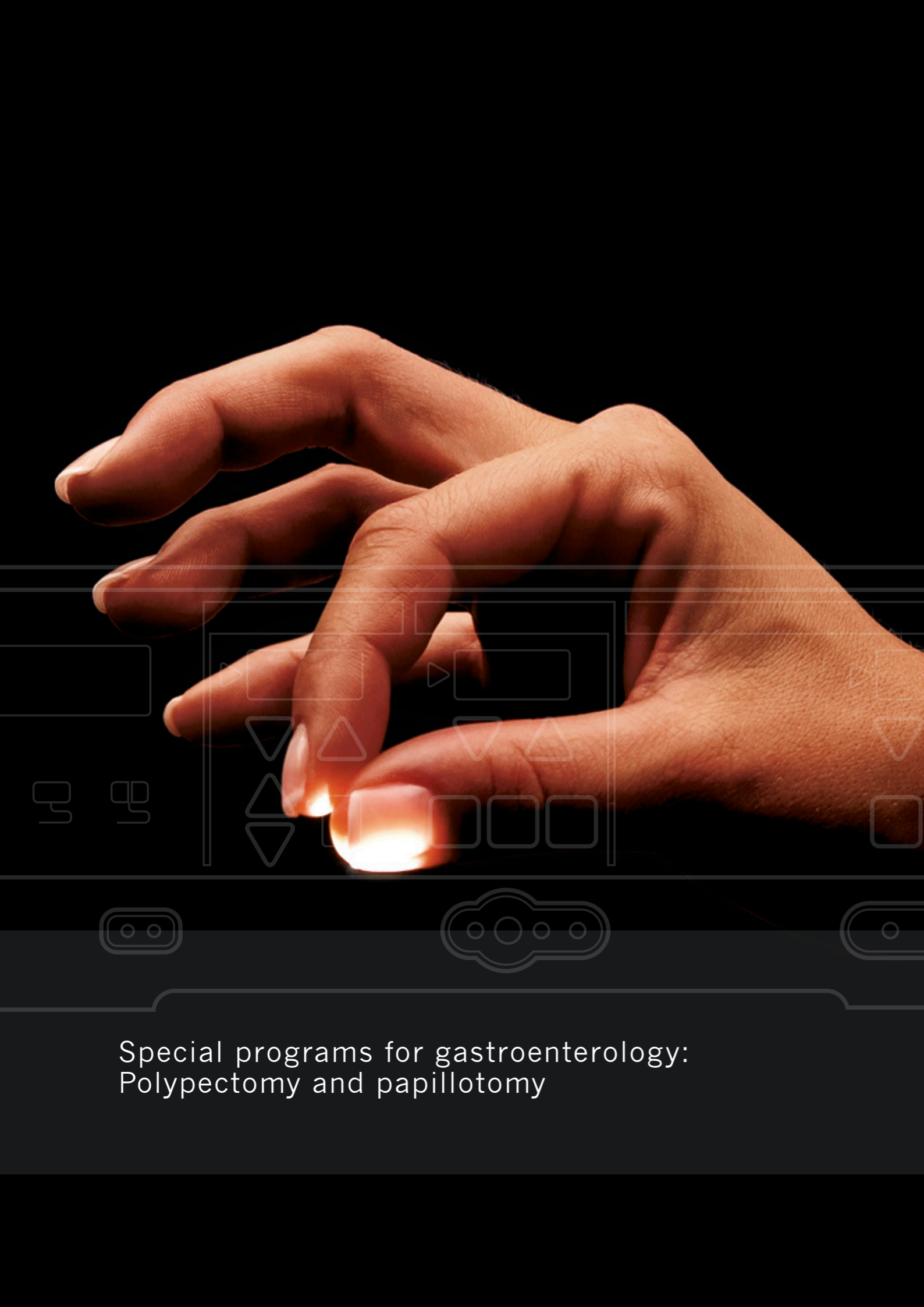
Fast: ARC CONTROL
Convenient: 100 programs

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



Special programs for gastroenterology:
Polypectomy and papillotomy

Specially designed for low power ranges

The ARC 200 completes the range of BOWA ARC generators in the low power segment such as are required in numerous special disciplines.

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

GastroCut programs
GastroCut Pol (polypectomy)
GastroCut Pap (papillotomy)

GastroCut

ARC 200 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.

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 200 becomes a powerful workstation for endoscopy and surgery.





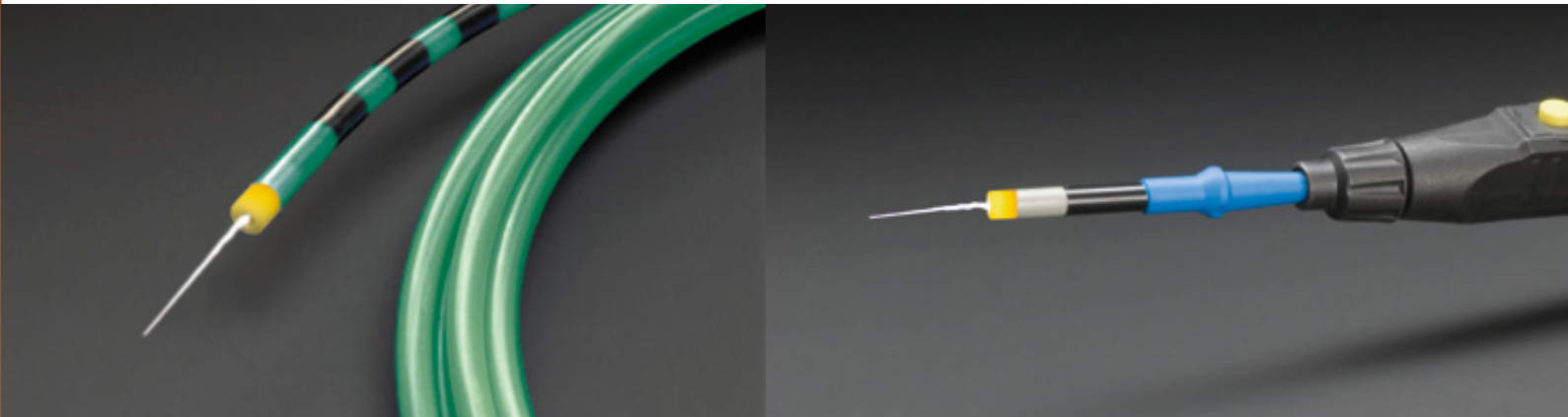
ARC PLUS with argon assistance

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
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 200

BOWA ARC 200 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 200 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 / Argon 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 200

Compendium: Technical specification for high frequency electrosurgical generator ARC 300e	
Max. output power for monopolar Cut	200 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.

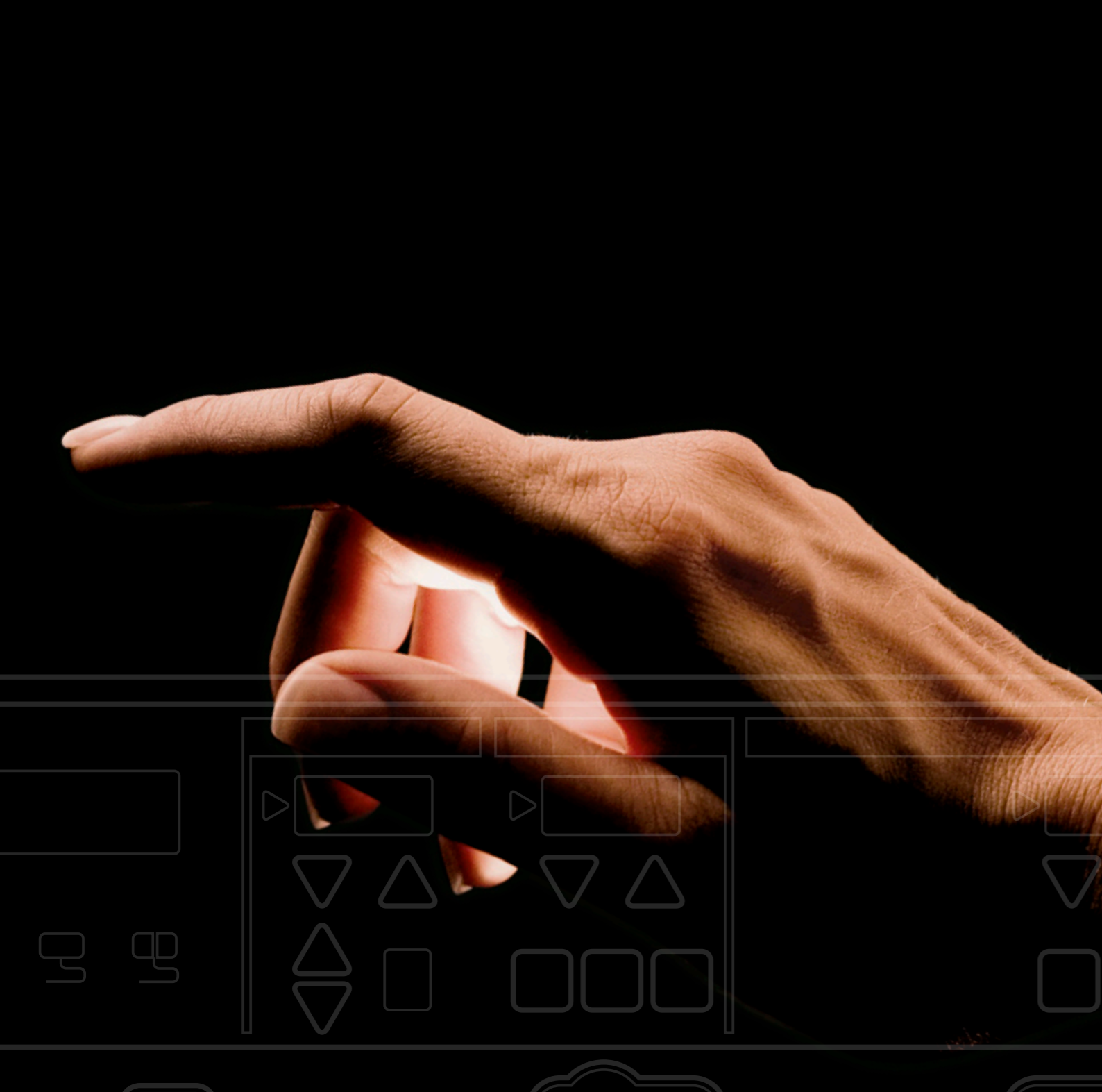
The unit can be maintained by the hospital technician himself. The fault memories are easy to read. The technician can update software by changing a board and subsequently calibrating the unit.

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 200

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 200 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.

