



ATMOS RS 221

Suction and cutting with
maximum precision for
best cosmetic results!

Radiofrequency surgery – The revolution is called “cold” incision



A new dimension of precision

Thanks to an innovative technology the ATMOS RS 221 enables incisions without pressure and traction which result in smooth incisions which heal quickly and are considerably less painful. Minimized scarring is the result of less cell damage.

Why radiofrequency surgery?

There is no damage of the surrounding tissue due to less lateral heating during radiofrequency surgery. This is an essential advantage compared to kHz devices: less tissue necrosis and minimized scarring – thanks to the unexcelled precision even the first incision through the cuticle is now possible with a MHz device!

With the new method the histological examination of excised tissue is now possible up to the tissue edge.

The ATMOS RS 221 is operated with a frequency of 2.2 MHz because over 3 MHz there could be safety critical antenna effects, and still the medical result is not improved.

Radiofrequency surgery versus laser

Apart from the fact that the price for laser equipment is ten times more expensive than for the ATMOS RS 221 the applied laser beam develops tissue damaging heat which may cause damage to the surrounding tissue – burnt skin around the wound edges and increased scarring may be the result.

Thanks to radiofrequency even skin burning in the case of wetness at the neutral electrode is no longer possible – an important advantage in pediatric surgery. Another important advantage for the OT staff is the reduced laser smoke and herewith the reduced infection risk!

In combination with the ATMOS smoke evacuation system AtmoSafe this adverse effect could be eliminated completely.

The multifunctional device for many areas of application

Thanks to its invaluable advantages the ATMOS RS 221 radiofrequency surgery device is used mostly for plastic surgery e.g. eyelid lift: with current surgical methods, using a scalpel, laser or electrosurgery, the surgical result in the case of fine skin is insufficient. But even other interventions like rhinophyma or the endoscopic eyebrows lift, hair transplantation, removal of tumours etc. benefit from the use of the ATMOS RS 221. Extensive surgical interventions e.g. mammoplasty, dermatoplasty and abdominal plasty can also be easily performed.

3 operation modes, 3 outlets

With the ATMOS RS 221 the surgeon has three different operation modes at his disposal:

- Cutting (Mono Cut)
- Cutting and monopolar coagulation (Mono Coag)
- Coagulation and bipolar coagulation (Bipol Coag)

Thanks to the comprehensible symbols the operation of the device is easy – the colour-coded electrodes enable an easy selection of the respective outlet. Without any changeover the surgeon may decide to operate with either tool holder or foot switch



Please request therefore also our information-DVD:

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DVD ATMOS RS 221



To request a free copy of the ATMOS RS 221 DVD
please contact us or download a copy from our website:

www.atmosmed.com

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ATMOS RS 221



Cutting and coagulation with maximum precision!

With the radiofrequency surgical device ATMOS RS 221 ATMOS has added a top-class electrosurgical device to the product portfolio in the business range surgery. During an incision with a scalpel the skin is tightened, the incision itself requires pressure.

The result: Imprecise transections, especially in the case of skin unevenness. In case incisions are carried out with conventional HF surgical devices or with laser instead of a scalpel the result often are carbonized wound edges with a delayed wound healing and increased scarring.

With the ATMOS RS 221 these disadvantages are eliminated. The incision – even the first incision through the cuticle – is now possible with an extremely high precision without traction and pressure.

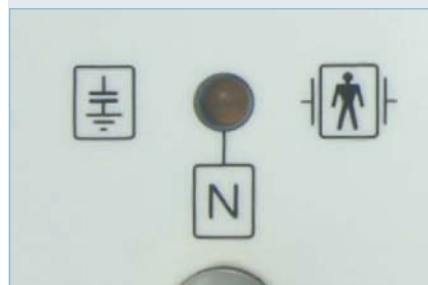
There is no thermal damage of the surrounding tissue and therefore, the wound healing and the scarring are minimized. The consequence is a perfect aesthetic result.

With the use of the frequency range of 2.2 MHz tissue is vaporised only where the cutting electrode is in contact with the tissue. The resistance of the tissue prevents the propagation of radiowaves and therefore a carbonised lateral tissue. ATMOS offers a wide range of accessories for the ATMOS RS 221 e.g., electrodes for the incision, coagulation and ablation.

For your particular safety in the OT the combination of ATMOS RS 221 and the smoke evacuation system AtmoSafe is perfect.



MONO CUT
Always the perfect incision performance for every type of tissue



Symbol buttons
Left: Symbol for operation mode
Right: Symbol for device type acc. to EN 60 601-1
Below: Symbol for neutral electrode (illuminates in case of malfunction)



MONO COAG
For the smooth coagulation with definable depth effect



Set of electrodes



BIPOL COAG
Safe bipolar coagulation



The innovation!



The problem of previous surgical methods

Aesthetic and plastic surgeons wish – with regard to the patient – to operate with the best methods. Incisions with a scalpel are usually performed with traction and pressure, in doing so the tissue can slip especially in the case of soft or thin skin areas – a perfect aesthetic result is almost impossible. Incisions with laser may damage the surrounding tissue due to the extreme impact of heat – a longer and painful wound healing may be the result.

Is there a better method which is even more favourably-priced?

The radiofrequency surgery offers new possibilities and has not any of the aforesaid weaknesses. The advantages are the perfect results and the simplicity of the method. More and more plastic surgeons can no longer imagine a surgical intervention without radiowaves – for experienced doctors with radiosurgical systems the advantages compared to the other methods like scalpel, laser or HF surgery are indisputable.

Less impact of heat on the tissue speeds up the healing process and has a positive influence on the post-operative well-being. The incisions are smooth without the tissue being squeezed. The incision with the self-sterilizing radiofrequency electrode improves the haemostasis and results in an almost scarless wound healing.

ATMOS RS 221

Basic equipment



Disciplines:

- » Aesthetic plastic surgery
- » General and reconstructive surgery
- » Dermatology
- » OMS
- » ENT
- » Gynaecology

- » Precision
- » Aesthetic result
- » ATMOS quality and service
- » Price-performance

ATMOS RS 221	REF	
ATMOS RS 221 radiosurgery system 2.2 MHz 4 operating modes: cutting, coagulation-cutting, monopolar-coagulation, bipolar-coagulation, automatic switch of outputs: cutting/coagulation alternatively via handpieces or foot switch. Memory function for storing the last used values. Technical data: Cutting performance max. 100 W, coagulation performance max. 90 W, Standard ATMOS-, Martin-, Berchtold-connections Included in delivery: basic unit, mains cable, maintenance book, operating instructions	506.5800.0	

Technical data	ATMOS RS 221
Voltages	230 V~
Dimensions (H x W x D)	138 mm x 285 mm x 230 mm
Weight	4 kg, accessories plus 1.8 kg
Classifications	protection class: I; degree of protection: type BF; defibrillationproof; class IIb (acc. to appendix IX, directive 93/42/EEC)
Rated frequency	50 / 60 Hz
Fuses	2 x T 1,6 A / H at 230 V~, 2 x T 3,15 A / H at 115 V
Output voltage	500 V max. top level output voltage
Working frequency	2.2 MHz
Max. coagulation performance:	max. 90 Watt at 1 kOhm
Cutting performance	max. 100 W at 1 kOhm
Colour	grey-white (RAL 9002) / dove-blue (RAL 5014)

The stated technical data are valid at the moment of printing, and are subject to change!



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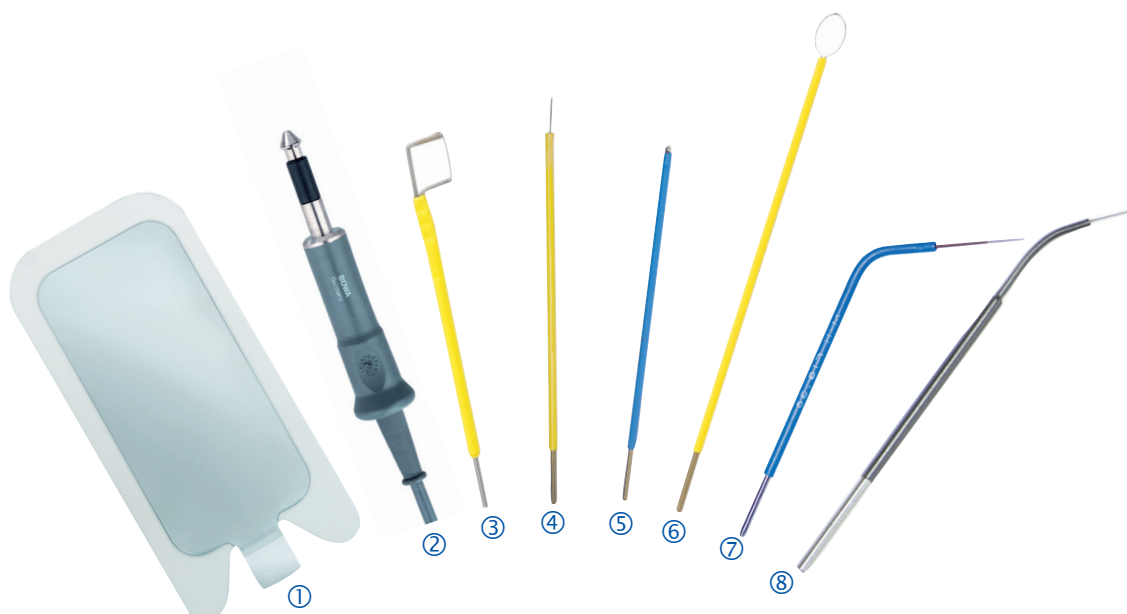



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Accessories for ATMOS RS 221	REF	
ATMOS RS 221 monopolar accessories set		
autoclavable at 134 °C consisting of: tool holder, yellow, cutting (for 1.6 mm electrodes), tool holder, blue, coagulating (for 1.6 mm electrodes), standard set of electrodes (41, 43, 44, 45, 46, 47, 48), neutral electrode with rubber fixation, connection cable for neutral electrode.	506.5850.0	
ATMOS RS 221 bipolar accessories set		
① autoclavable at 134 °C consisting of: bipolar tweezers, short, straight, L = 110 mm, tip 0.5 mm foot switch with 2.5 m cable, bipolar cable, L = 2.5 m.	506.5860.0	
② Tool holder for cutting, yellow for 1.6 mm electrodes, cable length 2.5 m, autoclavable	506.5851.0	
③ Tool holder for coagulation, blue for 1.6 mm electrodes, cable length 2.5 m, autoclavable	506.5852.0	
Neutral electrode , 168 x 112 mm (185 cm ²) cable length 0.5 m, autoclavable up to 134 °C (at least 75 x)	506.5853.0	
Connecting cable for neutral electrode	506.5854.0	
Rubber bandage for neutral electrode, L = 0.5 m	506.5855.0	
Foot switch for grip without a release button, cable L = 2.5 m	506.5861.0	
Bipolar cable, L = 2.5 m, autoclavable (at least 300 x)	506.5862.0	
④ Bipolar tweezers, short, straight, L = 110 mm tip 0.5 mm	506.5863.0	



Consumables for ATMOS RS 221	REF	
① Self-adhesive disposable electrodes (50 pcs.) size 104 x 215 mm (for adults)	506.5878.0	
② Cable for self-adhesive disposable electrode length 3 m, with plug for the ATMOS RS 221 and clamp connection with twin bolt to the single-use neutral electrode, autoclavable	506.5877.0	
③ Special electrode for Uvulopalatoplasty Teflon coated, for safe and gentle removal of the uvula and the soft palate, to be used for chronic snorers Overall length: 100 mm Included in delivery: 1 pc	506.5886.0	
④ Cutting ENT needle electrode (extra long), #32 flexible shaft, L = 100 mm, fine wire Included in delivery: 2 pcs.	506.5881.0	
⑤ Coagulation ball-shaped electrode (extra long), #34 flexible shaft, L = 100 mm, Ø ball 2,3 mm Included in delivery: 2 pcs.	506.5883.0	
⑥ Cutting ENT loop electrode (extra long), #35 flexible shaft L = 128 mm, Ø loop 9 mm, super-fine wire Included in delivery: 2 pcs.	506.5882.0	
⑦ Coagulation-electrodes, pointed needle electrode, #36 Coated and bent electrode for coagulation of the lingual tonsils and the submucous UPP; also very suitable for the preparation of fat tissue. L = 105 mm, length of needle = 18 mm (12 mm isolated) Included in delivery: 1 pc	506.5884.0	
⑧ Multi-tip electrode, with spare wire, #41 with adjustable wire, for depth control (2 pcs.), wire 0.2 mm	506.5870.0	

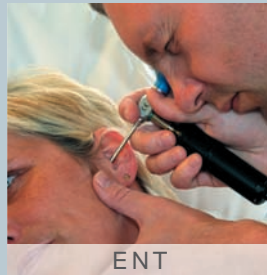


① Cutting-electrode, round loop, Ø 13 mm, #43 Included in delivery: 2 pcs.	506.5871.0	
② Cutting-electrode, round loop, Ø 7 mm, #44 Included in delivery: 2 pcs.	506.5872.0	
③ Cutting-electrode, rhombical, #45 leg length 7 mm Included in delivery: 2 pcs.	506.5873.0	
④ Cutting-electrode, triangle electrode, # 46 leg length 7 mm Included in delivery: 2 pcs.	506.5874.0	
⑤ Coagulation-electrode, thick needle-electrode, #47 needle Ø = 1.5 mm, needle length 1.5 mm Included in delivery: 2 pcs.	506.5875.0	
⑥ Coagulation-electrode, ball-shaped-electrode, Ø ball 2 mm, # 48 Included in delivery: 2 pcs.	506.5876.0	
⑦ Electrode for the nasal radioconchotherapy, #52 bayonet-shaped, total length = 155 mm, length of needle = 26 mm (10 mm isolated), blue shaft Included in delivery: 1 pc	506.5885.0	
⑧ Bipolar needle electrode (puncture electrode), #03 for volume reduction of the nasal concha. Bent on the rear, isolated needles, ergonomic plastic handle, Total length: 188 mm, needles: 16 mm, isolation: 6.5 mm angled after 97 mm, angle: 20 degree, autoclavable up to 134 °C Included in delivery: 1 pc	506.5888.0	
⑨ Bipolar needle electrode (puncture electrode, bent at the top), #04 for volume reduction of the soft palate and the lingual tonsils. Bent in front, isolated needles, ergonomic plastic handle, total length: 193 mm, needles: 19.5 mm, isolation: 9.5 mm bent after 169 mm, angle: 55 degree, autoclavable up to 134 °C Included in delivery: 1 pc	506.5887.0	
Unless otherwise specified all electrodes are autoclavable and therefore reusable. For detailed information please see the operating instructions!		

For your notes:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

ATMOS ... for a better life



ENT



Surgery



Care



Gynaecology

Do you know ATMOS?

ATMOS develops and manufactures innovative medical technology in the business ranges ENT, Surgery, Care and Gynaecology. In the field of suction as well as in the ENT field we rank among the leading businesses worldwide.

Certainly you have already come into contact with an ATMOS product.

Some 100,000 ATMOS suction units and more than 10,000 ATMOS ENT workstations are in daily use in clinic and practice in more than 70 countries all over the world.

When may we welcome you as a customer?

Doctors and patients worldwide rely on ATMOS.

