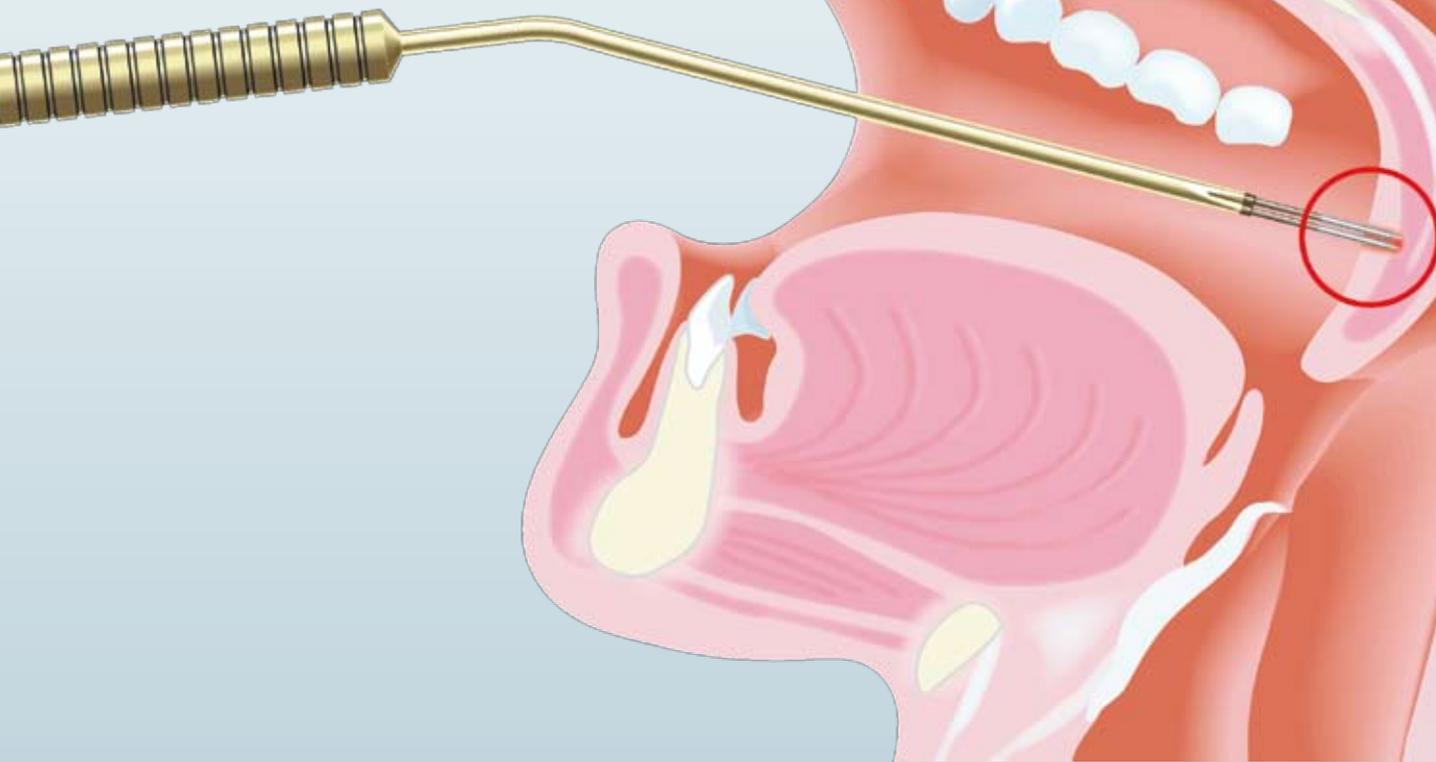




Now with automatic  
thermal cut-out



## ATMOS RS 221 ENT

### Radiofrequency surgery for

- snore therapy
- tonsilectomy
- coagulation
- many other ENT applications

ATMOS RS 221 ENT

# Radiofrequency surgery



Type of treatment	Mono cut channel 1		Mono coag channel 2		Bipolar coag channel 3		Recommended setting ATMOS RS 221			Recommended electrode form	Recommended REF
	Cutting	Cutting with coagulation	Continuous coagulation	Impulse coagulation	Bipolar continuous coagulation	Bipolar impulse coagulation automatic power-off	Performance	Coagulation	Duration		
THROAT	Uvuloplasty / palatoplasty	x					approx. 28-32 watts	C3	n.B.	multi-tip, needle, UPP special electrode	506.5870.0 (#41) 506.5886.0
	Lingual tonsils			x			approx 18-22 watts	C2	8-10 sec	rigid special needle electrode coated, multi-tip	506.5884.0 (#36) 506.5870.0 (#41)
	Tonsillectomy	x					approx. 22-28 watts	C3	n.B.	Multi-Tip	506.5870.0 (#41)
	Tonsillotomy	x					approx. 30-40 watts	C2	n.B.	rigid special needle electrode coated	506.5884.0 (#36)
	Coagulation of the lingual tonsils			x			approx. 15-25 watts	C3	8-10 sec	rigid needle electrodes	506.5881.0 (#32)
	Tightening of the soft palate with automatic power-off					x	approx. 5-15 watts	C2	A	bipolar needle electrodes palate	506.5887.0 (#04)
	Tightening of the lingual tonsils with automatic power-off					x	approx. 5-15 watts	C2	A	bipolar needle electrodes palate	506.5887.0 (#04)
NOSE	Hyperplastic mucosa	x					approx. 25-27 watts	C3	n.B.	ENT sling	506.5882.0 (#35)
	Polyposis nasi	x					approx. 26-30 watts	C3	n.B.	ENT sling	506.5882.0 (#35)
	Rhynophyma	x					approx. 28-30 watts	C3	n.B.	multi-tip, sling	506.5870.0 (#41) 506.5871.0 (#43)
	Concha treatment / epistaxis			x			approx. 22-24 watts	C3	10-15 sec	Multi-tip, rigid needle electrode, bayonet shaped, adjustable fine-wire electrode	506.5870.0 (#41) 506.5885.0 (#52)
EAR	Radioconcho therapy			x			approx. 15-25 watts	C2	8-18 sec	rigid needle electrodes	506.5885.0 (#52)
	Volume reduction of the nasal concha with automatic power-off					x	approx. 5-15 watts	C2	A	bipolar needle electrode concha	506.5888.0 (#03)
	Otoplasty	x					approx. 28-30 watts	C3	n.B.	Multi-Tip	506.5870.0 (#41) 506.5886.0
	Paracentesis	x					approx. 20-30 watts	C2	1-2 sec	Rigid special electrode, coated	506.5884.0 (#36)

**Important Information:**

The manufacturer cannot be held liable for wrong settings, the notes are only recommendations! The required settings depend on the tissue characteristics, the age of the patient, the position of the neutral electrode, the electrode used, the type of wave and the device settings. Please contact us for any questions.

# ATMOS RS 221 ENT – Radiofrequency surgery

## Radiofrequency technology in the ENT surgery

Bipolar high frequency technology has been used in ENT medicine for many years to ensure that blood vessels are closed – during surgeries as well as in the ENT outpatients' clinic (e.g. for epistaxis).

Developments of new device features - in particular increased electric field frequency - provide new opportunities for treatment in the areas of throat, nose, pharynx and ear as a result of the precise cutting function. The electrodes are individually primed for the application and facilitate the handling of the radiofrequency surgical device with minimal tissue stress.

Apart from the precise cutting function, radio frequency technology also provides new applications in the area of coagulation: special bipolar electrodes are used to reduce the volume of the nasal concha and to stiffen the soft palate. The radio frequency energy may be stopped automatically during bipolar coagulation as soon as the required tissue resistance has been achieved.

The ATMOS RS 221 ENT provides the new opportunities in radiofrequency surgery that are ideal for use in ENT medicine. This makes handling easier for the doctor and if applied correctly, there are fewer risks of secondary bleeding for the patient and faster wound healing.



Illustrations and descriptions include optional functions as well as the basic equipment.

We have  
been  
certified

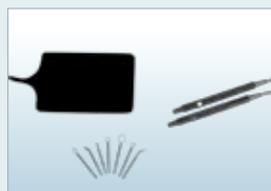


EN ISO 9001  
EN ISO 13485



### Bipolar coagulation

Safe hemostasis with bipolar tweezers (e.g. epistaxis).



### Neutral electrode

The neutral electrode is used for monopolar cutting and coagulation. The rubber reinforced bandage ensures good skin contact and prevents burns.



### Optimal device parameters

The strength of the radiofrequency wave is individually adjustable, depending on the application and the tissue structure. This guarantees an optimal cutting function with a simultaneous, individually adjustable coagulation level.



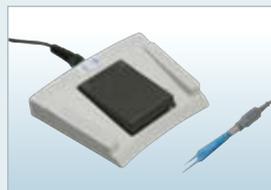
### Automatic mode / bipolar coagulation

The automatic function guarantees a consistent quality of treatment during the bipolar volume reduction of nasal concha and hardening of the soft palate.



### Ergonomic handles

The ergonomically designed handles guarantee the safe use of the radiofrequency technology in the operating area. The handles are autoclavable at least 150 times at 134°C, in accordance with DIN 58946.



### Foot switch / bipolar mode

The device is started up via the foot switch when bipolar tweezers are used in bipolar coagulation mode.



### Complete radiofrequency workstation

The ATMOS RS 221 ENT as well as the smoke evacuation system ATMOS SE 6501 can be easily integrated into the ATMOS S 61 Servant therapy: the ideal workstation for radiofrequency surgery.

ATMOS RS 221 ENT

# RF surgery for all ENT applications



- » standard in the surgical somnoplasty
- » Minimal damage to the surrounding tissue in the field of soft palate and tonsil surgery
- » ideal frequency 2,2 MHz
- » universal connections for instruments from all leading manufacturers
- » automatic instrument preselection
- » Also now suitable for snoring treatment application
- » new electrodes available

## ATMOS RS 221 ENT with automatic switch off

REF

4 operating modes: cutting, coagulation cutting, monopolar coagulation, bipolar coagulation, automatic outlet switching: cutting/coagulation alternatively with tool holder or foot switch. Memory function for storing the most recently used settings/ values. Cutting performance max. 100 W. Coagulation performance max. 90 W. Standard connections for ATMOS, Martin-, Berchtold connections, mains cable 3 m and operating instructions

**Included in delivery:**

**ENT accessories electrode set, consisting of:**

Tool holder yellow (Cutting), tool holder blue (Coagulating), ENT needle electrode #32, ENT loop electrode flexible # 35, ENT ball-shaped electrode # 34, ENT tonsil electrode, ENT Radioconchotherapy electrode, ENT UPP electrode, neutral electrode rubberband for neutral electrode, cabel for neutral electrode.)

506.5900.0

Technical data	ATMOS RS 221 ENT
Nominal Voltage:	230 V ~
Rated frequency :	50 Hz
Fuses:	2 x T 1,6 A / H bei 230 V
Output voltage:	500 V max. high level output voltage
Output frequency:	2,2 MHz
Max. coagulation performance:	90 watts at 1 kOhm
Cutting performance:	max 100 w at 1 kOhm
Dimensions (H x W x D):	138 mm x 285 mm x 230 mm
Weight:	4 kg
Colour:	grey-white (RAL 9002), dove-blue (RAL 5014)
Classification:	degree of protection: type BF; defibrillationproof, class: IIb (acc. to appendix IX directive 93/42/EEC)

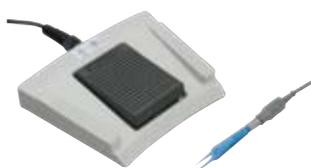


The technical data are valid at the time of printing and are subject to technical changes!

Accessories for ATMOS RS 221 ENT	REF
<p>① <b>ATMOS RS 221 ENT monopolar accessories set consisting of:</b></p> <ul style="list-style-type: none"> <li>▪ tool holder, yellow, Cutting (for 1.6 mm electrodes)</li> <li>▪ tool holder, blue, Coagulating (for 1.6 mm electrodes)</li> <li>▪ standard set of electrodes (41, 43, 44, 45, 46, 47, 48)</li> <li>▪ neutral electrode with rubber fixation</li> <li>▪ connection cable for neutral electrode</li> </ul>	506.5850.0
<p>② <b>ATMOS RS 221 ENT bipolar accessories set consisting of:</b></p> <ul style="list-style-type: none"> <li>▪ bipolar tweezers, short, straight, L = 110 mm tip 0.5 mm</li> <li>▪ foot switch with 2.5 m cable</li> <li>▪ bipolar cable, L = 2.5 m</li> </ul>	506.5860.0
<p>③ <b>ATMOS RS 221 ENT accessories (monopolar) consisting of:</b></p> <ul style="list-style-type: none"> <li>▪ tool holder, cutting (for 1.6 mm electrodes)</li> <li>▪ tool holder, coagulating (for 1.6 mm electrodes)</li> <li>▪ ENT set of electrodes (32, 35, 34, ENT tonsil electrode, ENT radioconchotherapy electrode, ENT UPP electrode)</li> <li>▪ neutral electrode with rubber bandage</li> <li>▪ connecting cable for neutral electrodes</li> </ul>	506.5880.0
<p>④ <b>Tool holder for cutting, yellow</b> for 1.6 mm electrodes, cable length 2.5 m, autoclavable</p>	506.5851.0
<p>⑤ <b>Tool holder for coagulation, blue</b> for 1.6 mm electrodes, cable length 2.5 m, autoclavable</p>	506.5852.0
<p><b>Neutral electrode, 168 x 112 mm (185cm<sup>2</sup>), cable length 0.5 m, autoclavable up to 134°C (min. 75x)</b></p>	506.5853.0
<p><b>Connecting cable for neutral electrode</b></p>	506.5854.0
<p><b>Rubber bandage for neutral electrode 0.5 m</b></p>	506.5855.0
<p><b>Foot switch with 2.5 m cable</b></p>	506.5861.0
<p><b>Bipolar cable, L = 2.5 m, autoclavable (min. 300x)</b></p>	506.5862.0
<p>⑥ <b>Bipolar tweezers,</b> short, straight, L = 110 mm, tip 0.5 mm</p>	506.5863.0



①



②



③



④



⑤



⑥

ATMOS RS 221 ENT

# Consumables



Consumables	REF
① <b>Self-adhesive disposable electrodes (50 pcs.)</b> size 104 x 215 mm (for adults)	506.5878.0
② <b>Cable for self-adhesive disposable electrode</b> Length 3 m, with plug for the RS 221 and clamp connection with twin bolt to the single-use neutral electrode, autoclavable	506.5877.0
③ <b>Special electrode for Uvulopalatoplastik</b> Teflon coated, for safe and gentle removal of the uvula and the soft palate, to be used for chronic snorers. L = 105 mm, tip needle 18 mm (12 mm isolated) yellow shaft.	506.5886.0
<b>#32</b> ④ <b>Cutting ENT needle electrode (extra long) #32</b> flexible shaft, L = 100 mm, super-fine wire, (2 pcs.)	506.5881.0
<b>#34</b> ⑤ <b>Coagulation ball-shaped electrode (extra long) #34</b> flexible shaft, L = 100 mm, Ø ball 9 mm, (2 pcs.)	506.5883.0
<b>#35</b> ⑥ <b>Cutting ENT loop electrode (extra long) #35</b> flexible shaft L = 128 mm, Ø loop 9 mm, super-fine wire, yellow shaft, (2 pcs.)	506.5882.0
<b>#36</b> ⑦ <b>Coagulation-electrodes, pointed needle electrode #36</b> 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 or needle = 18 mm (12 mm isolated)	506.5884.0
<b>#41</b> ⑧ <b>Multi-tip Electrode, with spare wire #41</b> with adjustable wire, for depth control (2 pcs.), wire 0.2 mm	506.5870.0
<b>#43</b> ⑨ <b>Cutting-electrode, round loop #43 (2 pcs.) Ø 13 mm</b>	506.5871.0
<b>#44</b> ⑩ <b>Cutting-electrode, round loop #44 (2 pcs.) Ø 7 mm</b>	506.5872.0
<b>#45</b> ⑪ <b>Cutting-electrode, rhombical #45</b> (2 pcs.) leg length 7 mm	506.5873.0
<b>#46</b> ⑫ <b>Cutting-electrode, triangle electrode # 46</b> (2 pcs.) leg length 7 mm	506.5874.0
<b>#47</b> ⑬ <b>Coagulation-electrode, thick needle-electrode #47</b> (2 pcs.) needle Ø = 1.5 mm, needle length 1.5 mm	506.5875.0
<b>#48</b> ⑭ <b>Coagulation-electrode, ball-shaped-electrode # 48</b> (2 pcs.), Ø ball 2 mm.	506.5876.0
<b>#52</b> ⑮ <b>Electrode for the nasal radioconchotherapy bayonet-shaped, #52</b> total length = 155 mm, length of needle = 26 mm (10 mm isolated), blue shaft	506.5885.0
<b>#03</b> ⑯ <b>Bipolar needle electrode (puncture electrode) for volume reduction of the nasal concha # 03</b> 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	506.5888.0
<b>#04</b> ⑰ <b>Bipolar needle electrode (puncture electrode) for volume reduction of the soft palate and the lingual tonsils # 04</b> 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	506.5887.0

Unless otherwise noted, all electrodes are autoclavable and therefore reusable. Please see operating instructions for further details!