

ATMOS® RS 221 ENT

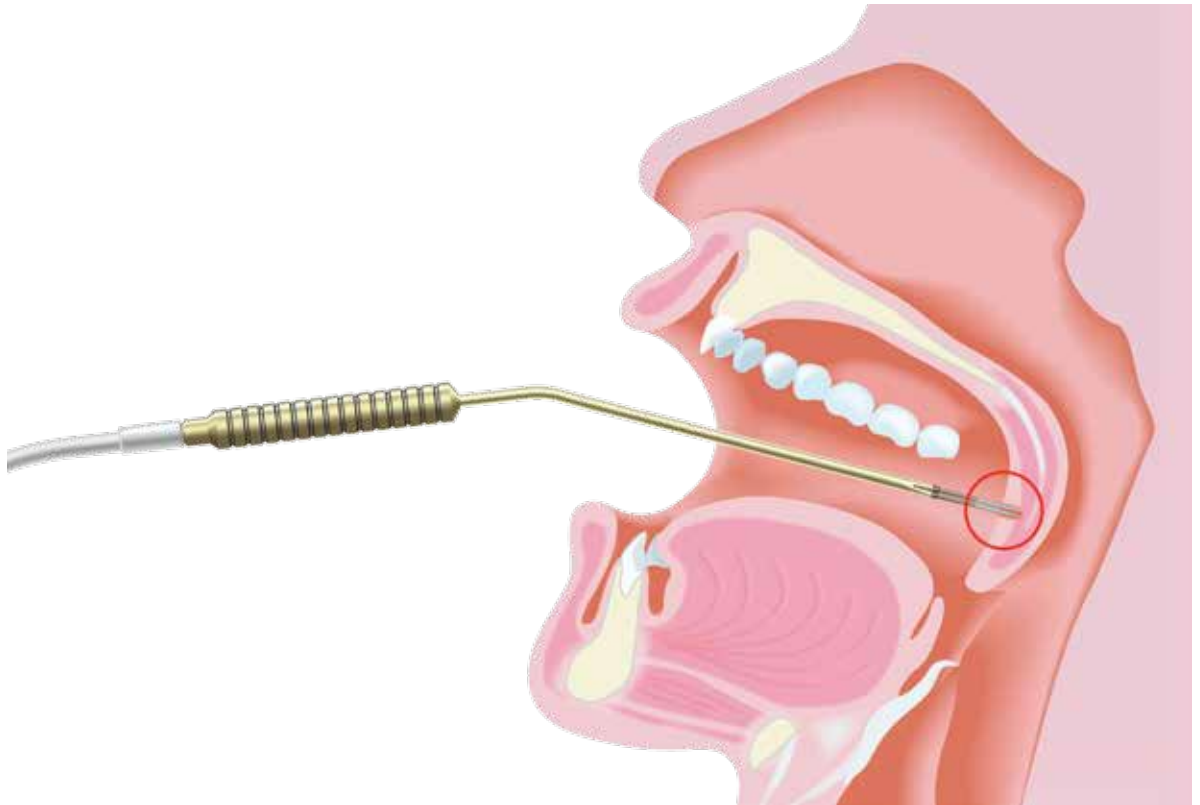
# Radiofrequency surgery

MAXIMUM  
PRECISION



## ATMOS® RS 221 ENT

Radiofrequency surgery for: snore therapy, tonsilectomy, coagulation and further ENT treatments



### 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.



## THROAT

## NOSE

## EAR

Type of treatment	Mono Cut channel 1		Mono Coag channel 2		Bipolar Coag channel 3		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		
Uvuloplasty / palatoplasty		X					ca. 28-32 watts	C3	n.B. multi-tip, needle UPP special electrode	506.5870.0 (#41) 506.5886.0	
Lingual tonsils			X				ca. 18-22 watts	C2	8-10 rigid special needle sek. electrode coated, multi-tip	506.5884.0 (#36) 506.5870.0 (#41)	
Tonsillectomy		X					ca. 22-28 watts	C3	n.B. Multi-Tip	506.5870.0 (#41)	
Tonsillotomy		X					ca. 30-40 watts	C2	n.B. rigid special needle electrode coated	506.5884.0 (#36)	
Coagulation of the lingual tonsils			X				ca.15-25 watts	C3	8-10 rigid needle electrodes sec.	506.5881.0 (#32)	
Tightening of the soft palate with automatic power-off						X	ca. 5-15 watts	C2	A bipolar needle electrodes palate	506.5887.0 (#04)	
Tightening of the lingual tonsils with automatic power-off						X	ca. 5-15 watts	C2	A bipolar needle electrodes palate	506.5887.0 (#04)	
Hyperplastic mucosa		X					ca. 25-27 watts	C3	n.B. ENT sling	506.5882.0 (#35)	
Polyposis nasi		X					ca. 26-30 watts	C3	n.B. ENT sling	506.5882.0 (#35)	
Rhynophyma		X					ca. 28-30 watts	C3	n.B. multi-tip sling	506.5870.0 (#41) 506.5871.0 (#43)	
Concha treatment / epistaxis			X				ca. 22-24 watts	C3	10-15 multi-tip rigid needle electrodes sec.	506.5870.0 (#41) 506.5885.0 (#52)	
Radioconcho therapy			X				ca. 15-25 watts	C2	8-18 rigid needle electrodes sec	506.5885.0 (#52)	
Volume reduction of the nasal concha with automatic power-off						X	ca. 5-15 watts	C2	A bipolar needle electrode concha	506.5888.0 (#03)	
Otoplasty		X					ca. 28-30 watts	C3	n.B. Multi-Tip	506.5870.0 (#41) 506.5886.0	
Paracentesis		X					ca. 20-30 watts	C2	1-2 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

### 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.

### 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.

### 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.



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

## 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.



## ATMOS® RS 221 ENT

ATMOS® RS 221 ENT with automatic switch off		REF
<p><b>1</b> <b>Radiofrequency device for cutting and coagulation in the ENT surgery</b></p> <p>Characteristics: 4 operating modes: cutting, coagulation cutting, monopolar coagulation (continuous- and impulse mode), bipolar coagulation (continuous-, impulse- and automatic mode). Option to select probe operation via probe handle or foot control possible. Memory-operation for storage of the last used data. Most of ATMOS electrode are reusable and 70 times autoclavable (see operating instructions). <i>Included in delivery:</i> ATMOS® RS 221 ENT accessories set (monopolar) (REF 506.5880.0), tool holder, cutting (for 1.6 mm electrodes), tool holder, coagulating (for 1.6 mm electrodes), ENT electrode kit (32, 35, 34, ENT tonsil electrode, ENT Radioconchotherapy electrode, ENT UPP electrode), neutral electrode with rubber bandage, connection cable for neutral electrode, operating instructions. The bipolar set is not include in delivery please order separately (REF 506.5860.0).</p>	506.5900.0	
<b>ATMOS® RS 221 ENT with automatic switch off 100 V~</b>	506.5900.1	
<b>ATMOS® RS 221 ENT with automatic switch off 115 V~</b>	506.5900.2	
<b>ATMOS® RS 221 ENT with automatic switch off 127 V~</b>	506.5900.3	
Accessories		REF
<p><b>2</b> <b>ATMOS® RS 221 ENT monopolar accessories set autoclavable at 134 °C</b></p> <p>handle, yellow, cutting (for 1.6 mm electrodes), handle, 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.</p>	506.5850.0	
<p><b>3</b> <b>ATMOS® RS 221 ENT bipolar accessories set autoclavable at 134 °C</b></p> <p>bipolar tweezers, bayonett, L = 195 mm, width of the tip 1 mm, length of the tip 6 mm, foot switch with 2.5 m cable, bipolar cable, L = 2.5 m.</p>	506.5860.0	
<p><b>ATMOS® RS 221 ENT accessories set (monopolar)</b></p> <p>Tool holder, cutting (for 1.6 mm electrodes), Tool holder, coagulating (for 1.6 mm electrodes), ENT set of electrodes (32, 35, 34, ENT tonsil electrode, ENT radioconchotherapy electrode, ENT UPP electrode) Neutral electrode with rubber bandage, Connecting cable for neutral electrodes</p>	506.5880.0	
<p><b>4</b> <b>Handle for cutting, yellow</b></p> <p>for 1.6 mm electrodes, cable length 2.5 m, autoclavable</p>	506.5851.0	
<p><b>5</b> <b>Handle for coagulation, blue</b></p> <p>for 1.6 mm electrodes, cable length 2.5 m, autoclavable</p>	506.5852.0	

Zubehör	REF
6 <b>Neutralelektrode, 168 x 112 mm (185 cm<sup>2</sup>),</b> cable length 0.5 m, autoclavable up to 134 °C (at least 75 x)	506.5853.0
<b>Connecting cable for neutral electrode</b>	506.5854.0
7 <b>Rubber bandage for neutral electrode, L = 0.5 m</b>	506.5855.0
8 <b>Foot switch for grip without a release button, cable L = 2.5 m</b>	506.5861.0
<b>Bipolar cable, L = 2.5 m, autoclavable (at least 300 x)</b>	506.5862.0
9 <b>Bipolar tweezers, bayonett, L = 195 mm,</b> With of the tip 1 mm, length of the tip 6 mm	506.5865.0



1 REF 506.5900.0



2 REF 506.5850.0



3 REF 506.5860.0



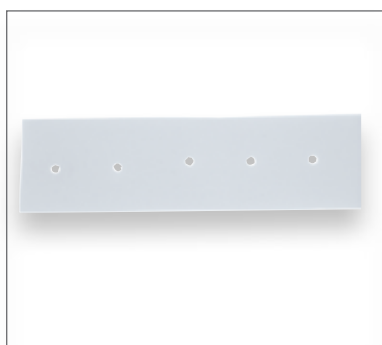
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7 REF 506.5855.0



8 REF 506.5861.0



9 506.5865.0

## Consumables

Consumables for ATMOS® RS 221 ENT		REF
1	<p><b>Self-adhesive disposable electrodes (50 pcs.)</b> Size 104 x 215 mm (for adults) <i>Included in delivery: 50 pcs.</i></p>	506.5878.0
2	<p><b>Cable for self-adhesive disposable electrode, length 3 m</b> With plug for the ATMOS® RS 221 and clamp connection with twin bolt to the single-use neutral electrode, autoclavable</p>	506.5877.0
3	<p><b>Special electrode for Uvulopalatoplasty</b> Teflon coated, for safe and gentle removal of the uvula and the soft palate. To be used for chronic snorers. Overall length: 100 mm <i>Included in delivery: 1 pc.</i></p>	506.5886.0
4	<p><b>Cutting ENT needle electrode (extra long), #32</b> Schaft biegsam, L = 100 mm, fine wire <i>Included in delivery: 2 pcs.</i></p>	506.5881.0
5	<p><b>Coagulation ENT ball-shaped electrode (extra long), #34</b> Schaft biegsam, L = 100 mm, Ø ball 2,3 mm <i>Included in delivery: 2 pcs.</i></p>	506.5883.0
6	<p><b>Cutting ENT loop electrode (extra long), #35</b> Flexible shaft L = 128 mm, Ø loop 9 mm, super-fine wire <i>Included in delivery: 2 pcs.</i></p>	506.5882.0
7	<p><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 of needle = 18 mm (12 mm isolated) <i>Included in delivery: 1 pc.</i></p>	506.5884.0
8	<p><b>Multi-tip electrode, with spare wire, #41</b> with adjustable wire, for depth control (2 pcs.), wire 0.2 mm <i>Included in delivery: 2 pcs.</i></p>	506.5870.0





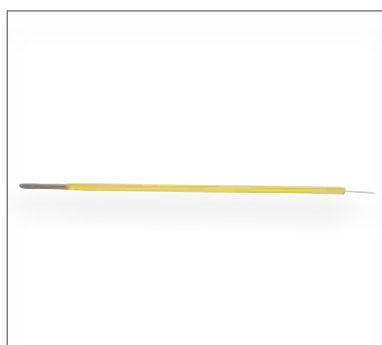
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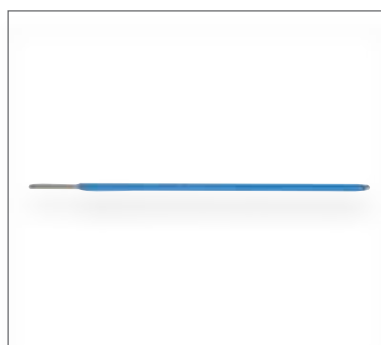
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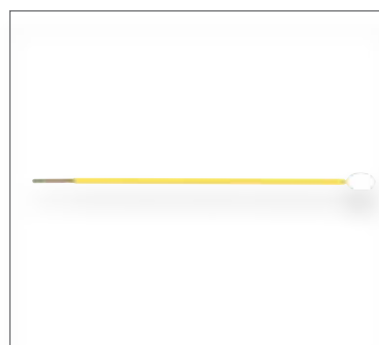
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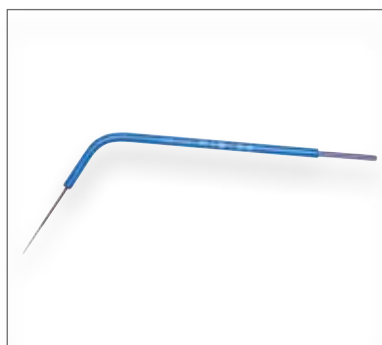
4 REF 506.5881.0



5 REF 506.5883.0



6 REF 506.5882.0



7 REF 506.5884.0



8 REF 506.5870.0

## Consumables

Consumables for ATMOS® RS 221 ENT		REF
1	<b>Cutting-electrode, round loop, Ø 13 mm, #43</b> <i>Included in delivery: 2 pcs.</i>	506.5871.0
2	<b>Cutting-electrode, round loop, Ø 7 mm, #44</b> <i>Included in delivery: 2 pcs.</i>	506.5872.0
3	<b>Cutting-electrode, rhombical, #45</b> leg length 7 mm <i>Included in delivery: 2 pcs.</i>	506.5873.0
4	<b>Cutting-electrode, triangle electrode, # 46</b> Sleg length 7 mm <i>Included in delivery: 2 pcs.</i>	506.5874.0
5	<b>Coagulation-electrode, thick needle-electrode, #47</b> needle Ø = 1.5 mm, needle length 1.5 mm <i>Included in delivery: 2 pcs.</i>	506.5875.0
6	<b>Coagulation-electrode, ball-shaped-electrode, Ø ball 2 mm, # 48</b> <i>Included in delivery: 2 pcs.</i>	506.5876.0
7	<b>Electrode for the nasal radioconchotherapy, #52</b> Bayonet-shaped, total length = 155 mm, length of needle = 26 mm (10 mm isolated), blue shaft <i>Included in delivery: 2 pcs.</i>	506.5885.0
8	<b>Bipolar needle electrode (puncture electrode), # 03</b> 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 at 134°C <i>Included in delivery: 2 pcs.</i>	506.5888.0
9	<b>Bipolar needle electrode (puncture electrode, bent at the top), # 04</b> 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 at 134°C <i>Included in delivery: 2 pcs.</i>	506.5887.0



1 REF 506.5871.0



2 REF 506.5872.0



3 506.5873.0



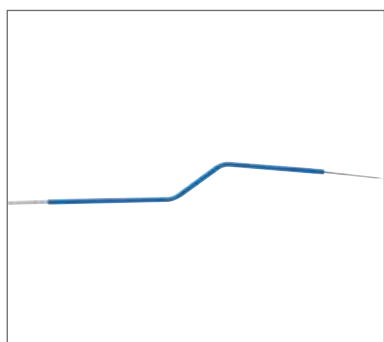
4 REF 506.5874.0



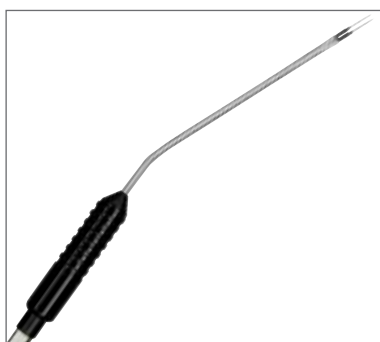
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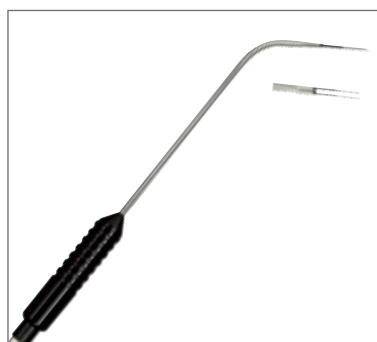
6 REF 506.5876.0



7 REF 506.5885.0



8 REF 506.5888.0



9 REF 506.5887.0



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