CURIS®

4 MHz Radiofrequency Generator

product design award

PRECISION ELECTROSURGERY

Welcome

Sutter Medizintechnik is an owner-managed family business based in Freiburg, Germany, founded in 1970. The success and growth are based on innovative products for precision electrosurgery, such as non-stick bipolar forceps and the CURIS® 4 MHz radiofrequency generator.

In the year 2000, we were the first company in the market to produce truly non-stick bipolar forceps. Since then we have successfully developed into one of the leading global manufacturers, offering customers a broad range of different designs and models.

We count on German craftsmanship and the in-house manufacturing of products Made in Germany. Highly qualified surgery mechanics fabricate bipolar forceps according to the highest quality standards – by hand and directly in Freiburg. We do not compromise on safety for patients and users.

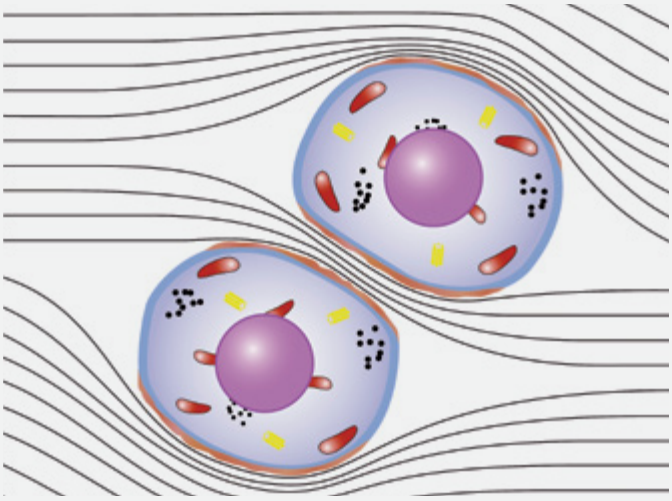
The innovative CURIS® 4 MHz radiofrequency generator offers surgeons in various disciplines the benefits of the ultra-high 4 MHz frequency for both monopolar and bipolar operating modes.

Doctors and medical professionals all over the world inspire and motivate us. They confirm us in our goal to strive for continuous improvement of our durable, high-quality products for added safety and effectiveness in clinical experience.

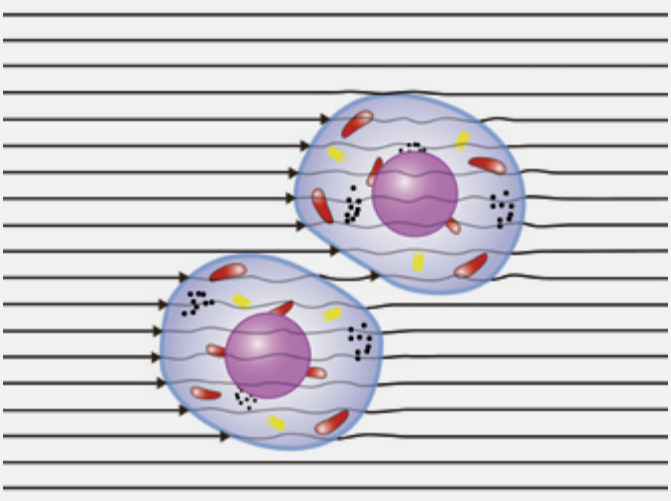
CURIS® 4 MHz Technology

4 MHz Radiofrequency

The higher the frequency, the less the resistance of biological tissue to electromagnetic fields – up to the point where the cell membranes are capacitively coupled.



Conventional electrosurgical units: The electromagnetic field concentrates between the cells and heats up only the outer layer.



CURIS® 4 MHz: Cell membranes are conductive and the energy is absorbed evenly inside the cells. The result are highly focussed tissue effects.

Source: Holder, D. S.: Electrical Impedance Tomography — Methods, History and Applications. IOP Publishing Ltd 2005

CURIS® p3TM Technology

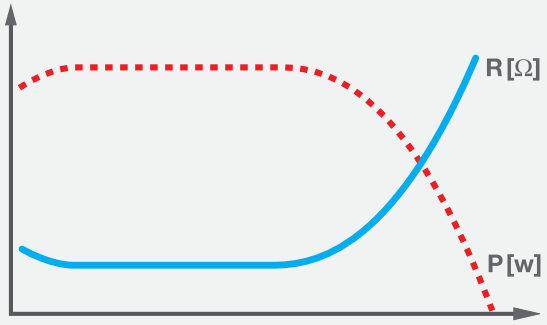
p3TM is active in all coagulation modes of the CURIS® 4 MHz radiofrequency generator. Radiofrequency energy is delivered in small packages of about 50 per second. Due to the pulsed power output, there are very short breaks between the individual packages. The tissue has the time to absorb the energy.

CURIS®: one device - many applications

CURIS® Precision thanks to Auto*RF*™

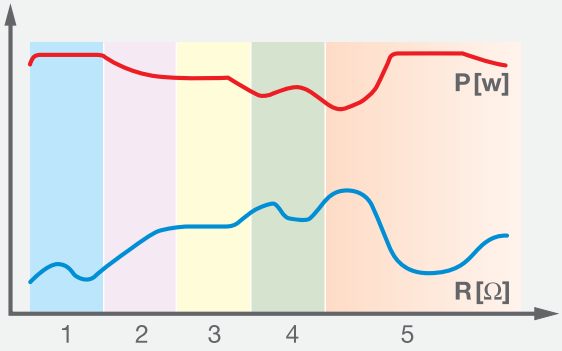
The Auto*RF*™ function is a key control feature of the CURIS® 4 MHz radiofrequency generator. It responds to tissue impedance in all modes and adjusts the power output according to tissue resistance in certain modes. Auto*RF*™ will tailor the energy output (will cut off if needed or increase to the chosen maximum) in order to help achieve reproducible surgical results while cutting or coagulating.

CURIS®
RaVoR™



RaVoR™ mode: The pulsed power output with short intervals between the individual packages allows for the coagulated tissue to absorb the applied energy.

CURIS®
CUT



Monopolar cutting: Sections 1 to 5 illustrate the different kinds of tissues and cutting speeds to which the unit adjusts its power output. Illustration only.

CURIS® 4 MHz radiofrequency generator & accessories

CURIS® 4 MHz radiofrequency generator - Basic set

87 00 11 – CURIS® Basic set		
Qty.	**REF**	**Description**
1	**36 01 00-01**	CURIS® radiofrequency generator (incl. main cord, user's manual and test protocol)
1	**36 01 10**	Foot switch two pedals for CURIS® (cut & coag), cable length: 4 m (~ 13 ft)
1	**36 02 38**	Reusable cable for single-use patient plates, length: 3 m (~ 10 ft)
1 (x50)	**36 02 29**	Disposable split patient plates
1 (x50)	**36 44 04**	Disposable monopolar pencils

Accessories

36 09 00 - Fuego Trolley

The trolley has a solid design and comes with a hook to mount the foot switch.
Two storage baskets for accessories and documentation.

CURIS® Technical data

RF output max.	performance	oper. frequency
monopolar		
CUT 1 (unmodulated)	100 W ± 20 % 600 Ω	4.0 MHz
CUT 2 (modulated)	80 W ± 20 % 600 Ω	4.0 MHz
CONTACT (Coag)	80 W ± 20 % 400 Ω	4.0 MHz
SOFTSPRAY (Coag)	60 W ± 20 % 600 Ω	4.0 MHz
bipolar		
BICUT 1	80 W ± 20 % 300 Ω	4.0 MHz
BICUT 2	80 W ± 20 % 300 Ω	4.0 MHz
EXCISE (Cut)	80 W ± 20 % 300 Ω	4.0 MHz
MACRO (Coag)	80 W ± 20 % 50 Ω	4.0 MHz
PRECISE (Coag)	50 W ± 20 % 50 Ω	4.0 MHz
RaVoR™	40 W ± 20 % 50 Ω	4.0 MHz

Modulation frequency	33 kHz
Mains supply	100-240 V; 50/60 Hz
Measurements W x H x D	320 mm x 170 mm x 385 mm
Weight	approx. 5.2 kg/11lb
Mode of operation	Intermittent INT 10 s / 30 s equals 25 % ED
Standards	IEC 60601-1; IEC 60601-2-2
Safety class	I
EMC (Interference suppr.)	IEC 60601-1-2
Type	CF (cardiac floating) defibrillator-proof
Quality assurance	ISO 13485

SUTTER MEDICAL TECHNOLOGIES USA, INC.

120 INTERSTATE NORTH PARKWAY · SUITE 118 · ATLANTA, GA 30339

WWW.SUTTER-USA.COM · INFO@SUTTER-USA.COM