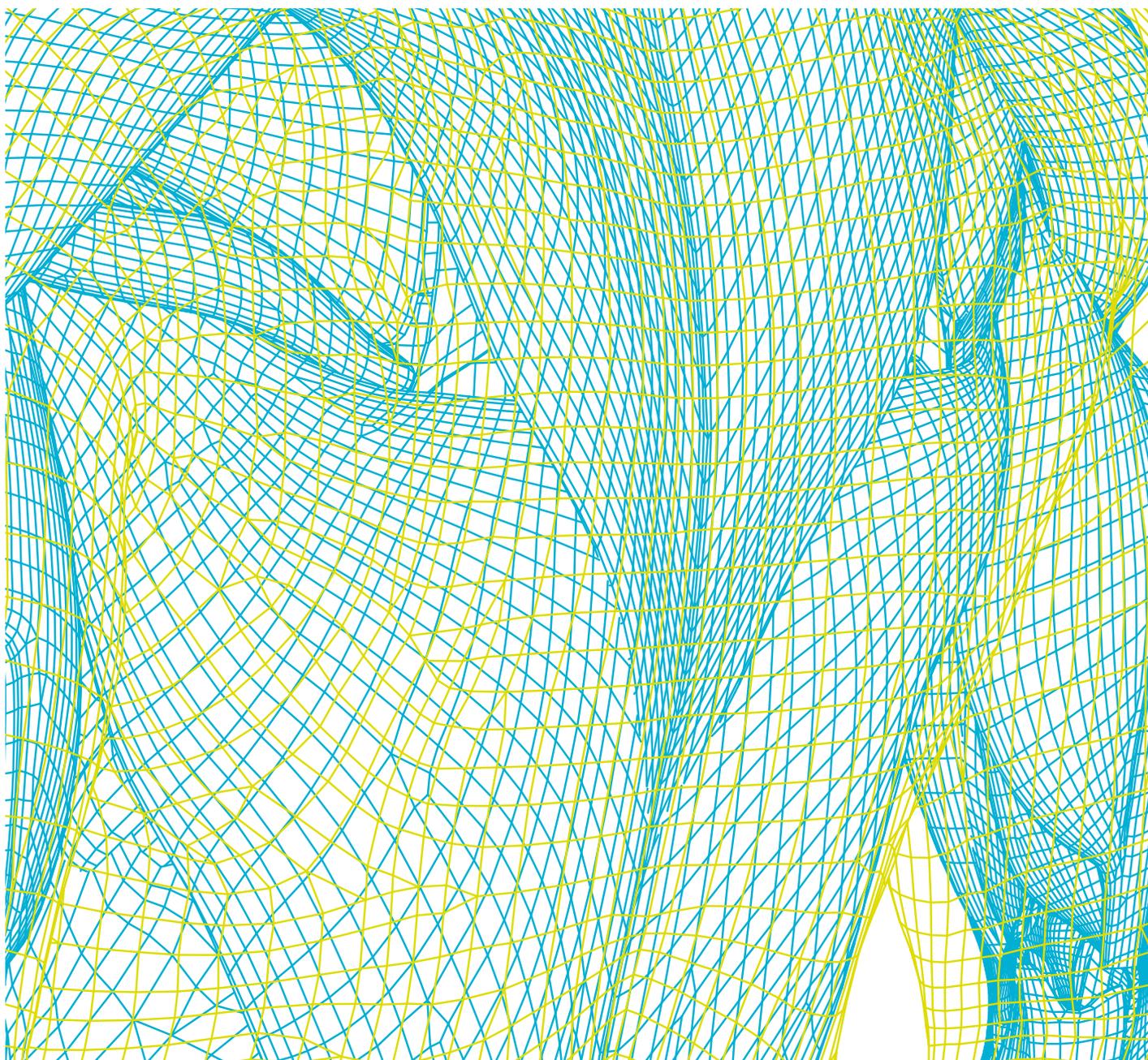


PHYSICAL THERAPY

- | | | | |
|--|--|---|--|
|  Deep oscillation |  Ultrasound therapy |  Shortwave therapy |  Magnetotherapy |
|  MAGCELL® |  Vacuum application |  Microwave therapy | |
|   Combination therapy |  Laser therapy |  Traction therapy | |
|  Electrotherapy |  Shockwave therapy |  Cryotherapy | |





TECHNOLOGY FOR THERAPY

Dear Readers

PHYSIOMED has been developing and selling medical equipment for physical and biomechanic therapy and diagnostics for more than forty years - with increasing success. And not without reason. Excellent quality, sustainability, after sales service and maximum function are not mere words to us. We also work tirelessly to take rehabilitation medicine to the next technical level. And in doing so, we explore new paths. We not only offer you traditional physical therapy products, but also develop – often in cooperation with scientific partners - completely new therapy concepts (like for instance DEEP OSCILLATION® or vocaSTIM®).

We believe in giving you equipment that allows you to treat patients efficiently, in a gentle, effective, and above all, safe manner. With a constant focus on patient well-being and the success of your treatment, we combine tradition with innovation. So while we continue to uphold 'clean currents' (more details on page 28), we also aim to hone and perfect your tools of the trade, for instance with our automated TPS ultrasound dosage strategy or the new 360° ultrasound transducer (see page 27 and 23). But why not browse through our range and see for yourself?

Our greatest achievement is winning your trust!



A stylized, handwritten signature in black ink, consisting of several fluid, connected strokes.

Dr. Jens Reinhold

CEO

PHYSIOMED ELEKTROMEDIZIN AG

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PORTRAIT

PHYSIOMED ELEKTROMEDIZIN AG is one of the world-wide leading producers of high quality equipment for traditional and innovative physical therapy. The PHYSIOMED name stands for outstanding product quality, cutting-edge technological solutions, and excellent value for money.

The German company focuses on equipment for treatment in the fields of rehabilitation, sports, aesthetic and veterinary medicine. Besides traditional treatment forms like electro-, ultrasound-, vacuum application, laser-, shortwave-, microwave-, traction-, cryo-, magneto- and shockwave therapy, PHYSIOMED has also made a name for itself with several innovative and clinically-tested therapy approaches:

- **DEEP OSCILLATION®** – biologically effective oscillations in tissue based on an electrostatic field
- **MAGCELL®** – electrode-free electrotherapy
- **vocaSTIM®** – therapy concept for the treatment of larynx paresis and dysphagia

In addition, PHYSIOMED also offers CON-TREX® and BfMC biomechanical testing, training and therapy systems.

PHYSIOMED currently exports its products to more than 80 countries worldwide. At the same time, the company, which is engaged in international research, maintains numerous cooperative efforts with universities and the continuous exchange of information with renowned scientists and leading physicians. Our products' outstanding performance, suitability for daily use and high level of innovation are based on our experience since 1973 and continuous communication with practicing therapists.

We make every effort to keep our products safe for the patient and the therapist, and to do this we make sure our safety functions go beyond official legal requirements. Our safety features serve as new benchmarks, such as our emergency stop pushbutton, the automatic current cut-off if an electrode fails or a menu to prevent burns caused by current with a high galvanic content.



Headquarters of PHYSIOMED ELEKTROMEDIZIN AG in Laipersdorf near Schnaittach





Deep oscillation

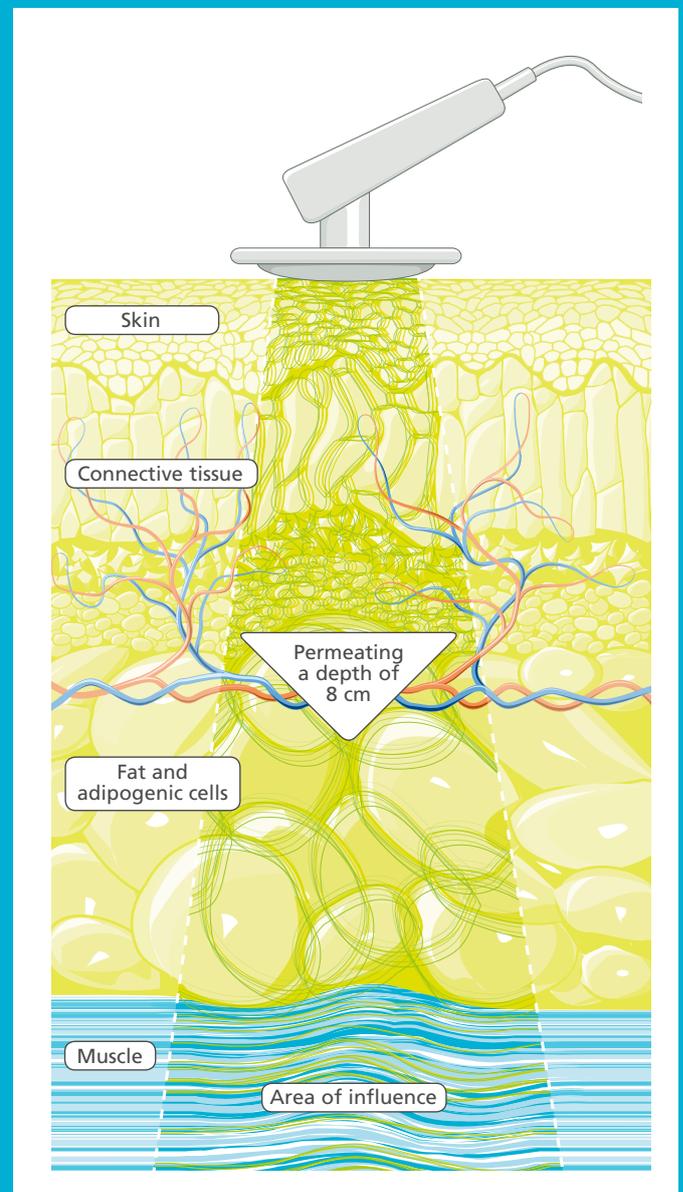
Deep oscillation (DEEP OSCILLATION®) is a unique international patented non-invasive, non-traumatic therapy method. Its special structure allows you to create biologically effective oscillations in the treated tissue using electrostatic attraction and friction. In contrast to other therapies, these pleasant oscillations have a gentle and deep-acting effect on all tissue components (skin, connective tissue, subcutaneous fat, muscles, blood and lymph vessels).

For the treatment, the patient holds a titanium neutral element loosely between the fingers. The pleasant therapy effect of deep oscillation is created beneath special gloves of the therapist or a specially designed hand applicator (second contact) circling over the tissue.

The following effects of deep oscillation (DEEP OSCILLATION®) are clinically proven:

- » High pain-reducing potential (both for acute traumatic and chronic pain syndromes)
- » Prevention and reduction of secondary and primary lymphoedema
- » Anti-inflammatory effect
- » Preventive fibrotic conversion processes, fibrosis reduction
- » Muscular relaxation, movement-promoting effect, mobilisation
- » Promotes wound healing, particularly for secondary wounds and burns
- » Normalisation of haemodynamic skin parameters and influence on biological ageing through preventive impact on premature ageing

The exceptionally gentle action, early implementation and specific clinical effects make deep oscillation a unique therapy option, which is being used increasingly in medical fields that are not typically focused on by conventional physical therapies.







Deep oscillation

Fields of application of deep oscillation:

PRE- AND POSTOPERATIVE THERAPY

With deep oscillation, oedemas and haematomas can be relieved pre- and postoperatively considerably faster than with conventional therapies. Because it can be used at an extremely early stage, wound healing is stimulated and accelerated, local inflammation processes are inhibited and pain is significantly reduced over a sustained period. Scar quality is improved. deep oscillation is therefore frequently used as a routine adjuvant post-operative therapy, for instance in oncology, neurology and traumatology. Due to its very gentle therapeutic effect it is used as a first line therapy for conditions after e.g. mastectomy, Caesarean section, osteosynthesis, endoprosthesis etc.

LYMPHOEDEMA

Use of deep oscillation reduces volume in the case of primary and secondary lymphoedema. The therapy is also increasingly used with success for lipoeedema. deep oscillation has a preventive and anti-fibrotic effect: incipient fibrosis in particular can be treated effectively. Skin conditions and lymphatic drainage are improved.

MECHANICAL TRAUMATA AND DAMAGE FROM OVERSTRAINING

In the case of traumata and damage from overstraining, deep oscillation has a direct oedema- and pain-reducing effect and consecutively stimulates self-mobilisation in pain-relieved areas, thus enabling an early return to active life. For sportspersons it means an earlier commencement of active forms of therapy and training, for 'normal' patients a swifter return to activities in daily life.

TRAINING AFTERCARE AND PERFORMANCE STABILISATION IN SPORT

In training aftercare, deep oscillation is known for its rapid, muscle-relaxing and pain-relieving effects, and for its direct effect against microtrauma (muscle aches). Roughage and cell remains are removed more quickly through the treatment. This

promotes a more effective nutritional supply to the muscle cells, thus accelerating the restoration to optimal performance. Re-generation times in the systematic training process can thus be reduced.

SECONDARY WOUND HEALING

Deep oscillation is being increasingly used for secondary wound healing, regrettably often as a last resort. deep oscillation is an efficient adjuvant treatment option in the case of both post-operative and diabetic wound healing disorders and oedema-induced secondary wound healing.

BURNS

In the case of second-degree burns wound healing is significantly accelerated and qualitatively improved by deep oscillation.

CHRONIC PAIN SYNDROMES

In indications such as fibromyalgia syndrome, Sudeck's dystrophy etc., which are accompanied by chronic pain, deep oscillation has a strong pain relieving effect, which often allows for a reduction of medicine intake. The treatment promotes mobilization to a great extent, alleviates muscle stiffness and tackles impairments in activities of daily life, with consequent positive effect on fatigue, fears and depression.

NEUROREHABILITATION

In brain stroke rehabilitation deep oscillation is used for semi-paralysed regions of the body to improve trophicity and reduce spasms in affected areas, and also for lymphatic drainage, for instance to treat lymphoedema in the head area. The therapy is also used with great success for children with cerebral palsy and tetraplegia to reduce spasms and treat bowel obstipation.

Deep oscillation is recommended by:

Lymphedema Clinic Wittlinger
www.lymphedema-clinic.com

Center for excellence in lymphedema treatment
Lymphedema rehabilitation center – Treatment
Academy – Training – Research







DEEP OSCILLATION® Evident

Two-channel deep oscillation unit for professional use



DEEP OSCILLATION® Evident allows you to begin treatment with maximum speed and ease: direct selection of deep oscillation parameters, over the indication index or program memory. During treatment you have a constant overview of all values and timers. With decades of proven use, the PHYSIOMED one-button operation allows fast intuitive operation in combination with the touch screen.

Deep oscillation characteristics can be adjusted precisely to the desired treatment over the individual setting of frequency (or frequency band), duty cycle, burst function and therapy duration. The extensive indication list with practical information, graphics, animations and patient database with 'potpourri' function additionally ease use.

Up to three indication menus can be selected for DEEP OSCILLATION® Evident:

- » CLINICS (for use in clinics, hospitals and physiotherapy practices)
- » SPORTS (for use in sport medicine centres and clinics)
- » AESTHETICS (for use in aesthetic medicine)



SPECIAL FEATURES

DEEP OSCILLATION®

Two-channel deep oscillation

Frequency range from 5-250 Hz

Individual setting of frequency, frequency bands, duty cycle, duration of therapy and burst function

Contact elements made from biocompatible titanium

- ① Special hand applicators in two sizes for all-over and local treatment

Easily interchangeable treatment membranes guarantee a hygienic application

- ② Individual programmes as well as suggested treatments from the indication index can be easily stored on the DEEP OSCILLATION® therapy card and used with DEEP OSCILLATION® Personal

GENERAL FEATURES

- ③ Perfected user guidance through combination of touch screen and PHYSIOMED one-button operation

8" colour monitor

- ④ Swivel and tilt mount for optimum monitor alignment at all times

Comprehensive overview of the therapy parameters including all therapy timers

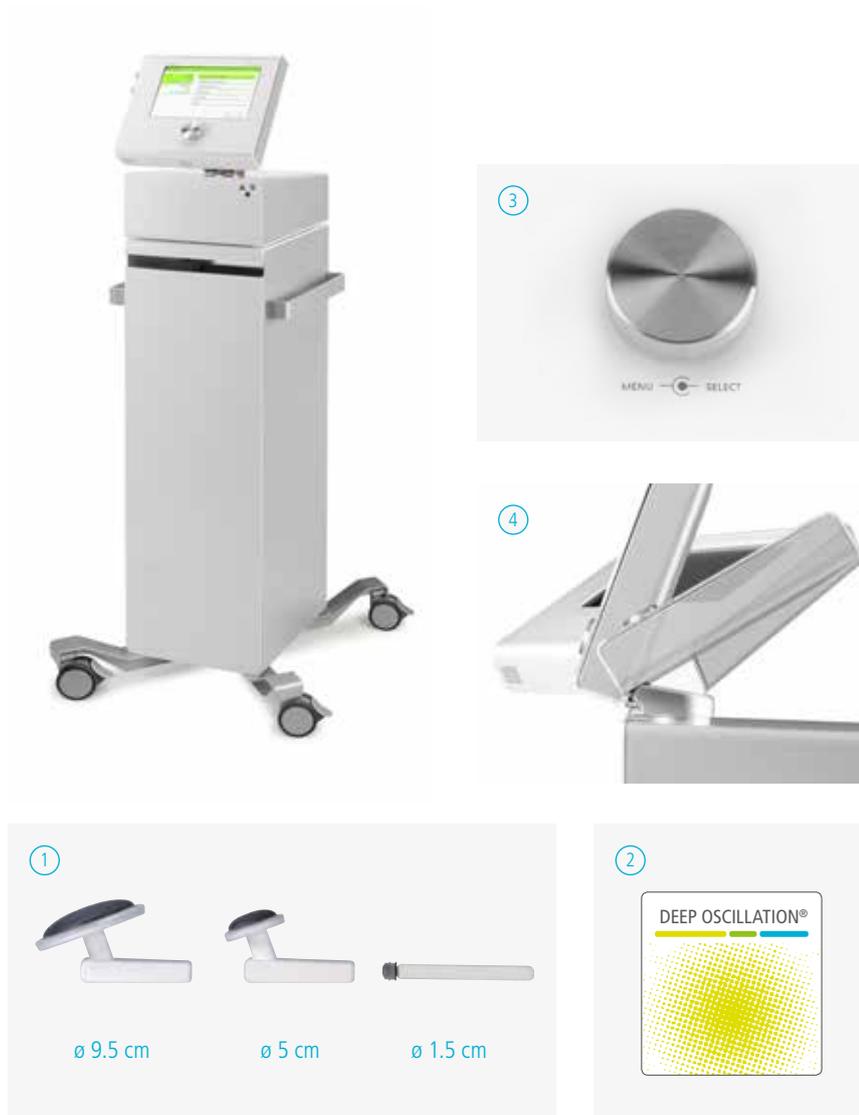
Fastest therapy start: direct, through program memory or indications index

Treatment index with intelligent filtering functions based on body region or per alphabet for quick location of the desired treatment proposal

- ⑤ Extensive therapy and dosage suggestions and detailed animations illustrating treatment, which can be viewed during therapy at the touch of a button

Patient database for max. 100 entries: up to 5 treatment levels can be saved and configured as potpourris per patient

Multifunctional intensity controls with emergency stop function and quick switching between channels



TECHNICAL DATA

Protection class	1, type BF
Power connection	100 - 240 VAC ± 10 %
Mains frequency	50 / 60 Hz
Current consumption	0.1 A (at 230 V) or 0.2 A (at 115 V)
Power consumption	20-30 VA
Output voltage max.	400 V
Load impedance	10 MΩ
Output frequency	5 – 250 Hz
Dimensions (W x H x D)	260 x 350 x 370 mm (monitor unfolded)
Weight	6.2 kg

STANDARD ACCESSORIES

[2]	Applicator handholds
[4]	Connection cables DEEP OSCILLATION®
[1]	Connection cable grey for adhesive electrodes
[1]	Mains cable
[1]	Operating instructions
[2]	Oscillator heads Ø 5 cm
[2]	Oscillator heads Ø 9.5 cm
[2]	Patient leads DEEP OSCILLATION®
[1]	PHYSIOPADS adhesive electrode for DEEP OSCILLATION® (set of 4)
[1]	Powder
[1]	Special gloves size M (100 pcs.)
[3]	Therapy cards DEEP OSCILLATION®
[2]	Titanium neutral elements
[1]	Trolley Evident



DEEP OSCILLATION® Personal

Deep oscillation unit for mobile use or to continue treatment at home



With the brand new PHYSIOMED App treatment protocols can be created, archived and processed!

DEEP OSCILLATION® Personal can be used to read and retrieve program sequences previously written on the DEEP OSCILLATION® therapy card with the DEEP OSCILLATION® Evident unit in the clinic. This enables personalised mobile therapy on the ward and continuation of treatment in the patient's home according to the desired specifications. This way you can guarantee the sustainability of your treatments until the next appointment in your clinic or treatment room.

DEEP OSCILLATION® Personal is also available with the Basic and Pro therapy cards. The Basic version offers a wide selection of the most important indication settings with pre-programmed treatment parameters, which usually consist of different treatment sections of different frequencies. In addition, the Pro therapy card allows all parameters to be set manually as required for up to three therapy sequences of a treatment.

SPECIAL FEATURES

DEEP OSCILLATION®

One-channel deep oscillation

Frequency range from 5-250 Hz

Contact elements made from biocompatible titanium

- ① Special hand applicators in various sizes for both large or local treatments with easily replaceable treatment membranes for hygienic application (optional accessory)

GENERAL FEATURES

Intuitive PHYSIOMED one-button operation

Colour monitor

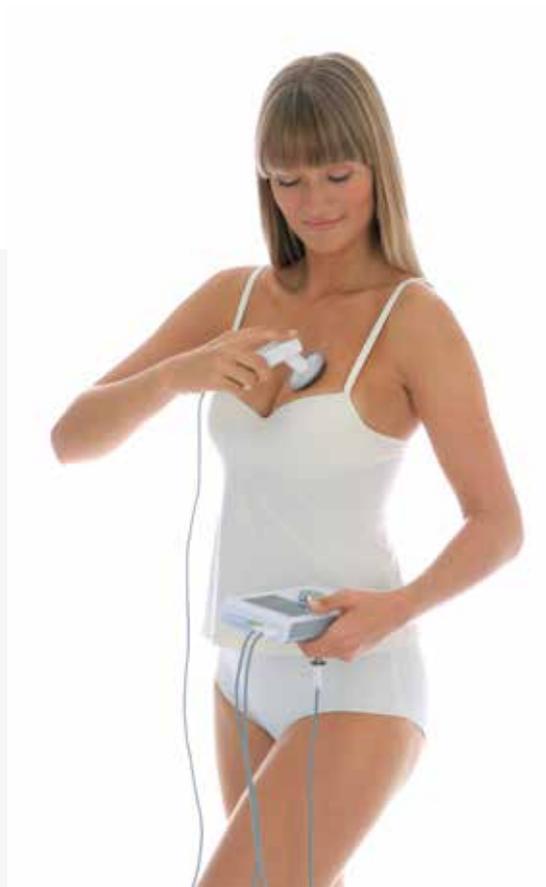
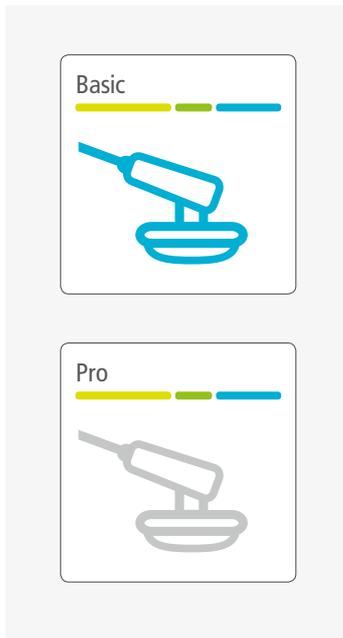
Comprehensive overview of the therapy parameters

Fastest therapy start over the indication index* or programmable therapy card DEEP OSCILLATION® therapy card

Extensive treatment index* featuring therapeutic information, dosage proposals and application graphics

Battery-driven

*in combination with Basic oder Pro therapy card



TECHNICAL DATA

Protection class	II, type BF
Input voltage	7.2 VDC
Input current	1.3 ADC
Power supply	1 x 7.2V Li-Ion 24 Wh battery
Output voltage max.	400 Vs
Load impedance	10 MΩ
Output frequency	5 – 250 Hz
Dimensions (W x H x D)	100 x 31 x 190 mm
Weight	0.5 kg
Charging device:	
Power connection	100 – 240 VAC
Mains frequency	50 – 60 Hz
Current consumption max.	0.35 A

STANDARD ACCESSORIES

[1]	Charging device
[1]	Connection cable DEEP OSCILLATION®
[1]	Connection cable grey for adhesive electrodes
[1]	Hand applicator set
[1]	Operating instructions
[1]	PHYSIOPADS adhesive electrode for DEEP OSCILLATION® (set of 4)
[1]	Powder
[1]	Special gloves size M (100 pcs.)
[1]	Therapy card
[1]	Titanium neutral element
[1]	Transportation bag



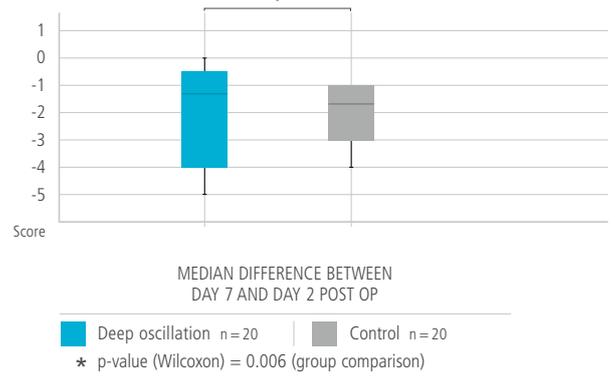
Clinical effects and studies

PAIN REDUCTION

Many medical studies show that deep oscillation reduces pain. The effect in the case of trauma-induced pain is seen in a reduction of noxious inflammatory potential (inflammation syndrome and, among other, Calor, tissue acidosis and prostaglandin) of TRPV1 pain receptors, explained by the mechanical distribution and intensified interstitial drainage via deep oscillation.

In an ex-vivo study Boisnic and Branchet (2013) found significantly fewer TRPV1-expressing keratinocytes than in the control group following deep oscillation treatment. The findings from ex-vivo skin models also confirm a statistically significant pain-reducing potential through deep oscillation.

POST-OPERATIVE PAIN SYNDROME (VAS)
Source: Reinhold et al. (2014)

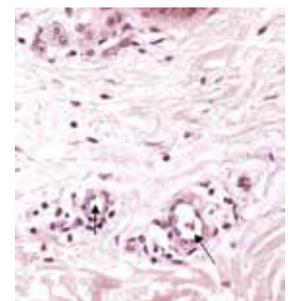
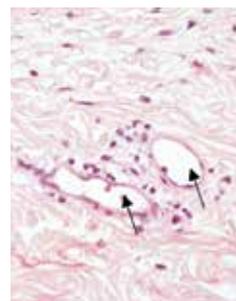
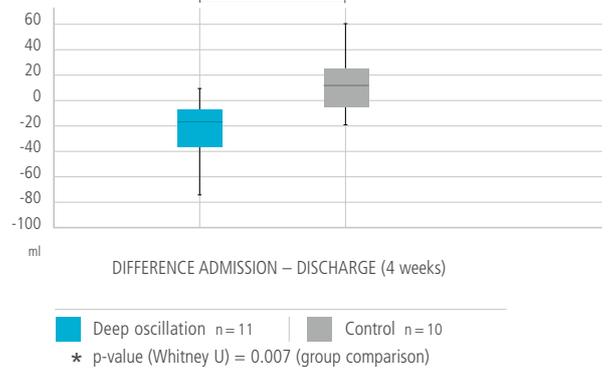


VOLUME CHANGE

Several studies confirm the oedema-reducing effect of deep oscillation. Oscillation effects a 'stirring' of the basic substance, thus promoting the removal of interstitial fluid and substances (proteins, cell debris, neurotransmitters etc.). Interstitial septa and fissures are kept open by the mechanical activation, which helps interstitial drainage. This significantly reduces both local oedema and aseptic inflammation. Proof was also established of a significant reduction in swellings in the area of the wound, due to the treatment. In chronic conditions the treatment helps to disperse fibrosis and to diminish hardening of the tissue.

Ex-vivo tests show that deep oscillation also results in a significant reduction of dermal oedema compared to the control group. Significantly lower values than in the control group were also recorded in the histological evaluation of the percentage of dilated capillaries in the treatment group. Clear differences were likewise established in a histological planimetric measurement of the surface of dilated dermal capillaries (Boisnic and Branchet 2013). The findings suggest a vasomodulating effect (moderate vasoconstriction) of capillaries as a mechanism with an anti-oedematous effect prompted by deep oscillation.

VOLUME MEASUREMENT OEDEMA (3D MEASURING)
Source: Jahr et al. (2008)



© Boisnic and Branchet (2013)

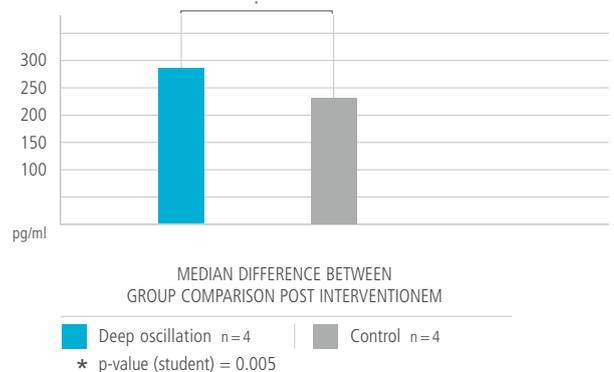
Analysis of vasodilation following HE staining (x 400): untreated skin model (on left). Vasoconstriction of dermal capillaries following two treatments with DEEP OSCILLATION® (on right).

ANTI-INFLAMMATORY EFFECT

Deep oscillation checks acute and chronic inflammation by confining inflammation-promoting cell movement to the affected area. This is achieved by reducing the production of inflammation mediators and minimising water and protein loss from blood and lymph vessels. The findings of a study (ex-vivo) by Boisnic and Branchet (2013) confirm these clinical experiences: DEEP OSCILLATION® achieves a significant reduction in the prominent pro-inflammatory cytokine IL-8 compared to the control group.

CONTENT IL-8 (ELISA)

Source: Boisnic and Branchet (2013)



The physiological effectiveness of deep oscillation has been documented in numerous publications based on experimental and clinical studies:

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Hernández Tápanes S., Socas Fernández M., Iturralde Y., Addiel Suárez Fernández A. (2018): The Effect of Deep Oscillation Therapy in Fibrocystic Breast Disease. *A Randomized Controlled Clinical Trial*. *International Archives of Medicine* Vol. 11 No. 14. doi: 10.3823/2555.

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MAGCELL®

MAGCELL® is a portable hand device for electrode-free electrotherapy. Magnetic alternating fields are produced over rotation by permanent magnets. A sinusoidal pulsating electromagnetic field (PEMF) is generated over the special magnet arrangement and device function principle. However, with a value of 0,105 tesla field strength it is many times higher than for commercially available magnetic field therapy devices with coils or mats, which generally operate with field strengths of maximum 100 gauss or 0.01 tesla. By contrast MAGCELL®-therapy units produce field strengths, which are generally stronger by factor 10 than these devices.

According to induction law induced time-variable magnetic fields induce electric fields. The physical effects of MAGCELL® derive from the electric fields produced in living cells and tissue based on induction law. Depending on tissue conductivity the field incites an electric current. Taking into account the specific conductivity for various body tissue and liquids, this electric current can be calculated. Its strength, or more precisely, current density (= current strength per area, A/m²) determines biological effectiveness.

All calculated current densities exceed 10 mA/m² and are thus within the range of effects internationally confirmed and classified as 'good': above the 'subtle biological effects' and within the range of 'confirmed macro effects' (10-100 mA/m²). Induced current densities are much higher again in blood and body fluids. The term 'electrode-free electrotherapy' for MAGCELL® derives from the distinctly strong induced current densities and exceeding of the threshold value of 10 mA/m²: both of which are not found on equipment using coils or mats.

Body fluids (e.g. joint fluid) play a key role in the relevant therapy indications for MAGCELL® devices. The cells in this fluid or adjacent tissue are exposed to the established current densities. MAGCELL® exceeds by far the recognised effective current densities so that treatment is effective even at a tissue depth of 3-5 cm. MAGCELL® also induces above-threshold current densities in the blood, which are crucial for clinical therapy effects, for instance in respect of blood flow stimulation and immunomodulatory processes. The same applies for interstitial liquids, which moreover are found in virtually all organs and tissue. In bones and fatty tissue with low conductivity current densities are well below the effectiveness threshold of 10 mA/m², so a therapeutic effect in this tissue can scarcely be envisaged.

The following effects of electrode-free electrotherapy with MAGCELL® are clinically recorded:

- » pain alleviation and movement stimulation
 - e.g. in the case of osteoarthritis
- » substantial improvement in circulation
- » reduction of sensory neurotoxicities (polyneuropathy)

Further clinical effects

A dog's prostate gland serves as animal model in the case of irregularities in the growth of the human prostate. In a study (Leoci et al. 2014) benign prostatic hyperplasia (BPH) symptoms improved significantly in respect of prostate volume reduction without influencing semen quality, testosterone behaviour or the libido.

Another clinical and experimental study (Funk et al. 2014) confirms that MAGCELL® MICROCIRC also significantly boosts micro-circulation even widens the blood vessels. The authors recommend the therapy for clinical situations where an improvement in micro circulation is identified, like for instance in the case of chronic tissue repair.

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MAGCELL® ARTHRO

Pain-alleviating and movement-promoting effect for osteoarthritis

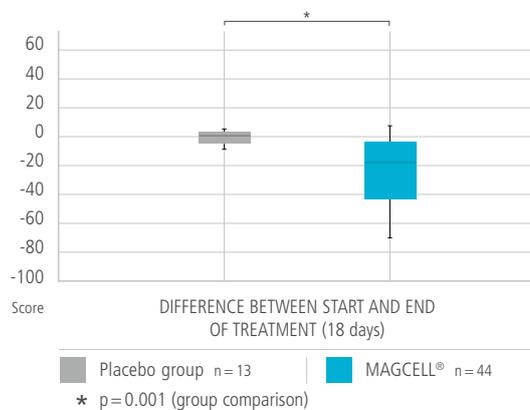
MAGCELL® ARTHRO significantly improves general symptoms (WOMAC total score) and individual scores for pain, stiffness and daily activity in osteoarthritis (ARC criteria II and III). The therapy can be applied several times daily as a complementary treatment without side effects and may thus help to reduce intake of pain medication.

Special features, technical data and standard accessories are identical to MAGCELL® MICROCIRC



WOMAC TOTAL SCORE

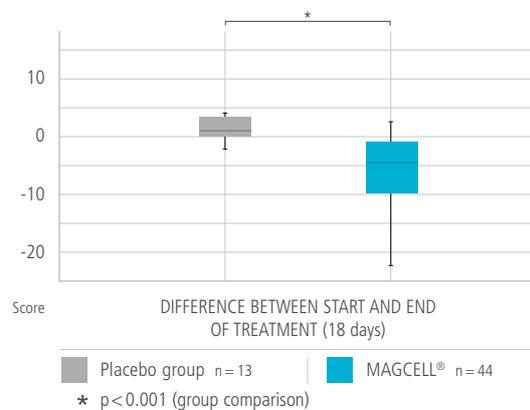
Source: Wuschech et al. (2015)



In a randomised controlled study on the effect of MAGCELL® ARTHRO for knee arthritis with osteoarthritis level 2.8 ± 0.8 (American College of Rheumatology criteria) at the primary clinical end point (WOMAC total score) median increase of 0.7 P (non-significant) was recorded in the placebo group between T0 and T1 (18 days), yet in the MAGCELL®-group a significant local decrease of 21.8 P. During the study no undesirable incidents or side effects occurred related to therapy.

WOMAC PAIN SCORE

Source: Wuschech et al. (2015)



The WOMAC individual scores for pain, stiffness and daily activity also resulted in significant local improvements in the MAGCELL®-group compared to a slight median increase (non-significant) in the placebo-group. A highly significant result ($p < 0.001$) in favour of the MAGCELL®-group was recorded for the individual parameter pain reduction compared to the placebo in the difference between the beginning and end of treatment.

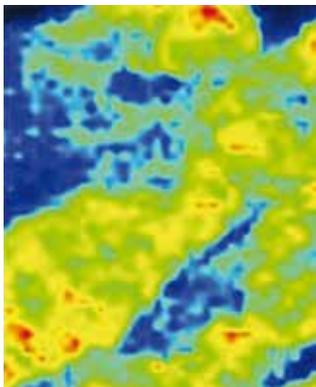
MAGCELL® MICROCIRC

Blood flow stimulation and reduction of sensory neurotoxicities in cytostatic-induced polyneuropathy

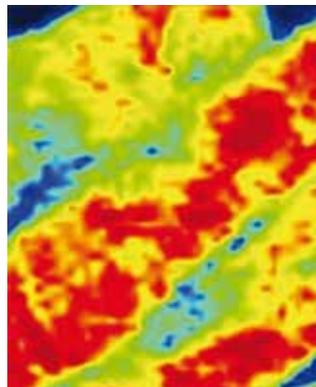
MAGCELL® MICROCIRC can positively influence symptoms of neurotoxicities like sensory ataxia, neuropathy and neuropathic pain symptoms (especially CIPN I-IV) on hands and feet as a result of chemotherapy. Moreover a significant increase in nerve conductivity speed (ulnar nerve) was achieved by the treatment.

BLOOD FLOW STIMULATION

Source: Funk et al. (2014)



1. Control (without MAGCELL® MICROCIRC)



2. Two minutes after treatment with MAGCELL® MICROCIRC

MAGCELL® MICROCIRC significantly increases micro-circulation ($p < 0,001$) while nitric oxide (NO) has a blood vessel dilatory effect. The authors recommend the therapy for clinical situations where an improvement in micro circulation is identified, like for instance in the case of chronic tissue repair.

TECHNICAL DATA

Protection class	Internal power supply
Power supply	2 x 1.5 V R6 alkaline batteries
Magnetic field strength max.	200 mT
Treatment duration	MAGCELL® ARTHRO 2.5 min.
Treatment duration	MAGCELL® MICROCIRC 5 min.
Dimensions (W x H x D)	83 x 152 x 25 mm
Weight	0.21 kg

STANDARD ACCESSORIES

[2]	Batteries
[1]	Metal case
[1]	Operating instructions



SPECIAL FEATURES

ELECTRODE-FREE ELECTROTHERAPY

Electrode-free electrotherapy for therapists and patients

Pulsating electromagnetic fields (PEMF)

Field strength more than 1000 gauss

Effective treatment concept due to repeatable short-treatment periods

Through-textile treatment (even through shoes)

GENERAL FEATURES

Very easy one-button operation

Battery-driven

Optical and acoustic function control

Automatic switch-off at the end of the therapy period



Combination therapy

Combination therapy units

PHYSIOMED combination therapy units enable you to start therapy with maximum speed and ease: direct selection of current or therapy form, over the indication index or program memory. During treatment you have a constant overview of all parameters and timers. With decades of proven use, PHYSIOMED one-button operation permits fast intuitive control. A wide variety of safety features prevent malfunctions on all levels. For instance, a warning signal can be emitted when the recommended intensity is exceeded in relation to the selected electrode size. The emergency shut-off function can be activated over the intensity control and manual keys to ensure increased safety for both therapists and patients.

Thanks to the individual selection of additional parameters (pulse length and form, frequency, bursts, biphasic application, galvanic base etc.) the characteristics of current forms can be precisely adjusted to the desired treatment. Diagnostics programs,

exhaustive indication lists with practical information, diagrams and treatment animations and patient database with 'potpourri' function simplify electrotherapy treatment.

Choose between two ergonomically designed transducers with surface areas of 2.5 cm² or 5 cm², which are also suitable for subaqueous treatment. The biocompatible and exceptionally durable titanium transducers afford maximum safety and reliability in terms of performance and prevent metallurgical deposits. Along with continuous or pulsed energy output (4 duty cycles [1:10, 1:5, 1:3, 2:5]), optical and acoustic coupling controls ensure efficient therapy.

As an absolute innovation, the IONOSON-DO-Evident even offers deep oscillation therapy in the fourth channel (more details from page 6). Please see opposite for an overview of the specifications for the individual units.



						
Combination therapy		IONOSON-DO-Evident	IONOSON-Evident	IONOSON-Expert	Electrotherapy	PHYSIODYN-Expert
DEEP OSCILLATION®	Deep oscillation	X				
Currents	IF (Classic interference current)	X	X	X		X
	AMF (Bipolar interference current)	X	X	X		X
	MT (Medium-frequency muscle stimulation)	X	X	X		X
	KOTS (Russian stimulation)	X	X	X		X
	G (Galvanisation)	X	X	X		X
	GMC (Galvanisation with microcurrent)	X	X	X		X
	DF (Diadynamic current diphasé fixe)	X	X	X		X
	MF (Diadynamic current monophasé fixe)	X	X	X		X
	CP (Diadynamic current modulé en courtes périodes)	X	X	X		X
	LP (Diadynamic current modulé en longues périodes)	X	X	X		X
	RS (Diadynamic current)	X	X			
	UR (Ultra stimulation current acc. to Träbert)	X	X	X		X
	HV (High voltage current)	X	X	X		X
	TENS (Transcutaneous electric nerve stimulation)	X	X	X		X
	MENS (Electric nerve stimulation with microcurrent)	X	X	X		X
	IG 30 (Pulse galvanization 30)	X	X	X		X
	IG 50 (Pulse galvanization 50)	X	X	X		X
	FM (Frequency-modulated current)	X	X	X		X
	STOCH (Stochastic current)	X	X	X		X
	FaS (Faradic surge current)	X	X	X		X
	HVS (Current mode with high voltage stimulation characteristics)	X	X	X		X
	T/R (Pulses with adjustable parameters)	X	X	X		X
Diagnostics	Faradic excitability test	X	X	X		X
	Medium-frequency test (Lange)	X	X	X		X
	Accommodation quotient	X	X	X		X
	Rheobase/chronaxy	X	X	X		X
	I/T curve	X	X	X		X
Treatment	Spasticity treatment acc. to Hufschmidt or Jantsch	X	X	X		X
	Alternating and simultaneous stimulation	X	X	X		X
	Two-channel electrotherapy	X	X	X		X
	Simultaneous therapy	X	X	X		
Ultrasound	1 MHz ultrasound	X	X	X		
	3 MHz ultrasound	X	X	X		
	Biocompatible titanium transducer	X	X	X		
	Transducer 360°	X	X			
	TPS	X	X			
	Subaqueous treatment	X	X	X		
Other features	Touch screen	X	X	X		X
	Application animations	X	X			
	Treatment index with filtering functions	X	X	X		X
	One-button operation	X	X	X		X
	Warning in case of intensity exceeding	X	X			
	Multifunctional intensity controls	X	X	X		X
	Favorites menu			X		X
	Patient database	X	X	X		X
	SD card slot for product updates			X		X



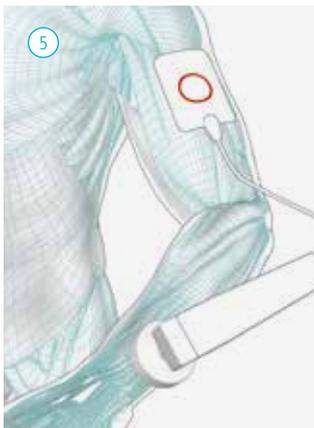
IONOSON-Evident IONOSON-DO-Evident

The new benchmark in electro-, ultrasound and simultaneous therapy in a contemporary design - now optionally available with deep oscillation



IONOSON-DO-Evident

The identical IONOSON-DO-Evident offers deep oscillation therapy on the fourth channel as an additional feature (see page 6 ff. for more details) and thus comes with a wider selection of standard accessories





Combination therapy unit IONOSON-Evident on an Evident trolley

SPECIAL FEATURES

ELECTROTHERAPY

Two-channel electrotherapy including 22 currents

Diagnostics: the user-guided navigation makes the diagnostic evaluation self-explanatory and effective (see page 21)

Alternating and simultaneous stimulation

Spasticity treatment acc. to Hufschmidt or Jantsch

Manual release key for emergency shut-off or intentional exercises

- 1 Warning in case of intensity exceeding

ULTRASOUND THERAPY

- 2 The ergonomic ultrasound transducers 360° offer maximum safety and reliability in terms of power output. They combine 1 and 3 MHz ultrasound in an extremely durable and biocompatible titanium transducer, thereby excluding metallurgical deposits and are also suitable for subaqueous treatment. The innovative joint technology enables different types of handle and thus user-friendly operation, aimed at meeting the demands of different treatment settings and anatomical conditions.

Continuous or pulsed energy output (4 duty cycles [1:10, 1:5, 1:3, 2:5])

TPS ultrasound dosage (see page 27)

GENERAL FEATURES

- 3 Perfected user guidance through combination of touch screen and PHYSIOMED one-button operation

8" colour monitor

- 4 Swivel and tilt mount for optimum monitor alignment at all times

Comprehensive overview of the therapy parameters including all therapy timers

Fastest therapy start: direct, through program memory or indications index

Treatment index with intelligent filtering functions based on body region, therapy form, desired therapy effect or per alphabet for quick location of the desired treatment proposal

- 5 Extensive therapy and dosage suggestions and detailed animations illustrating treatment, which can be viewed during therapy at the touch of a button

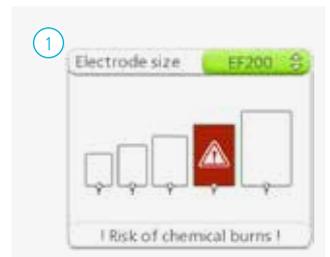
Patient database for max. 100 entries: up to 10 electrotherapy and five ultrasound settings as well as five diagnostic findings can be saved and configured as potpourris per patient

Multifunctional intensity controls with emergency stop function and quick switching between channels

Logical colour coding of electrotherapy and vacuum application accessories for quick and accurate allocation of channels and polarity

Vacuum application with PHYSIOVAC-Evident see page 34 (option)

Simultaneous therapy



TECHNICAL DATA

Protection class	1, type BF			
Power connection	115 / 230 VAC ±10 %, DO Version: 100-115 / 230 VAC ±10%			
Mains frequency	50 – 60 Hz			
Current consumption	0.6 A – 1.2 A			
Power consumption	130 VA; DO Version: 150 VA			
Power output stimulation current max.	GMC, MENS = 1000 µA; G = 25 mA at 500 Ohm; HV, HVS, TENS = 140 mA at 500 Ohm; DF, MF, CP, LP, RS = 70 mA at 500 Ohm; UR, IG30, IG50, FM, STOCH, FaS, T/R = 75 mA at 500 Ohm; IF, AMF, MT, KOTS = 100 mA at 500 Ohm			
Power output ultrasound max.				
Effective surface	2.5 cm ² transducer	5 cm ² transducer		
Ultrasound frequency	1 MHz	3 MHz	1 MHz	3 MHz
Mean power density	3 W/cm ²	1 W/cm ²	3 W/cm ²	1 W/cm ²
DO Version: Output voltage max.	400 V			
DO Version: Load impedance	10 MΩ			
DO Version: Output frequency	5 – 250 Hz			
Dimensions (W x H x D)	260 x 380 x 370 mm (monitor unfolded)			
Weight	10.2 kg			

STANDARD ACCESSORIES

[2] Elastic velcro straps (10 x 125 cm)

[2] Elastic velcro straps (6 x 80 cm)

[1] Electrode test pen

[1] Mains cable

[1] Manual release key

[1] Operating instructions

[1] Patient lead

[2] Plate electrodes EF 10

[4] Plate electrodes EF 50

[1] Short introduction to electrotherapy

[1] Short introduction to ultrasound therapy

[1] Ultrasound gel 1 l

[1] Ultrasound transducer 360° 1/3 MHz 5 cm² or 2.5 cm²

[2] Viscose covers EF 10

[4] Viscose covers EF 50

Additionally for IONOSON-DO-Evident

[1] Applicator handhold

[2] Connection cables DEEP OSCILLATION®

[1] Connection cable grey for adhesive electrodes

[1] Oscillator head Ø 5,0 cm

[1] Oscillator head Ø 9,5 cm

[1] Patient lead DEEP OSCILLATION®

[1] PHYSIOPADS adhesive electrode for DEEP OSCILLATION® (set of 4)

[1] Powder

[1] Special gloves size M (100 pcs.)

[1] Titanium neutral element



IONOSON-Expert IONOSON-IF-Expert

Professional electro-, ultrasound and simultaneous therapy
for hospitals, rehab and physiotherapy centres



With the brand new
PHYSIOMED App
treatment protocols
can be created, archived
and processed!



Combination therapy unit IONOSON-Expert and vacuum application unit PHYSIOVAC-Expert on an Expert trolley



Super-fast and clear working - the new user interface

SPECIAL FEATURES

ELECTROTHERAPY

Two-channel electrotherapy (21 currents) with basic settings on top level and detailed parameter settings in the expert menu (with visualization of the current shape parameters)

6 diagnostic menus (incl. quick I/T curve representation): the user-guided navigation makes the diagnostic evaluation self-explanatory and effective

Alternating and simultaneous stimulation

- ① Spasticity treatment acc. to Hufschmidt or Jantsch
- ② Manual release key for emergency shut-off or intentional exercises (accessory option)

ULTRASOUND THERAPY

- ③ The ergonomic ultrasound transducers offer maximum safety and reliability in terms of power output. They combine 1 and 3 MHz ultrasound in an extremely durable and biocompatible titanium transducer, thereby excluding metallurgical deposits and are also suitable for subaqueous treatment.

Continuous or pulsed energy output (4 duty cycles [1:10, 1:5, 1:3, 2:5])

GENERAL FEATURES

Perfected user guidance through combination of touch screen and PHYSIOMED one-button operation

7" colour monitor incl. screensaver, visualizing all main parameters of the active channels

Favorites menu with speed-dial memory for individual device functions

Comprehensive overview of the therapy parameters including all therapy timers

Fastest therapy start: direct, through program memory or indications index

Treatment index with intelligent filtering functions based on body region, therapy form, desired therapy effect or per alphabet (incl. auto-complete of indication names) for quick location of the desired treatment proposal

Extensive therapy and dosage suggestions

Easy-to-use and extensive memory menu with cocktail and history function

Multifunctional intensity controls allowing for fast intensity reduction and quick switching between channels

Logical colour coding of electrotherapy and vacuum application accessories for quick and accurate allocation of channels and polarity

Vacuum application with PHYSIOVAC-Expert (option)

Simultaneous therapy

SD card slot for product updates

TECHNICAL DATA

Protection class	1, type BF	
Power connection	100 – 240 VAC ±10 %	
Mains frequency	50 – 60 Hz	
Current consumption	0.6 A / 1.2 A	
Power consumption	120 VA	
Power output stimulation current max.	GMC, MENS = 1.000 µA, G = 25 mA, HV, HVS, TENS = 140 mA, DF, MF, CP, LP = 70 mA, UR, IG30, IG50, FM, STOCH, FaS, T/R = 75 mA, IF, AMF, MT, KOTS = 100 mA (at 500 Ohm)	
Power output ultrasound max.		
Effective surface	2.5 cm ² transducer	5 cm ² transducer
Ultrasound frequency	1 MHz 3 MHz	1 MHz 3 MHz
Mean power density	3 W/cm ² 1 W/cm ²	3 W/cm ² 1 W/cm ²
Dimensions (W x H x D)	315 x 175 x 370 mm	
Weight	7.4 kg	

STANDARD ACCESSORIES

- [1] Elastic velcro strap (10 x 125 cm)
- [1] Elastic velcro strap (6 x 80 cm)
- [1] Mains cable
- [1] Operating instructions
- [1] Patient lead
- [4] Plate electrodes EF 50
- [1] Short introduction to electrotherapy
- [1] Short introduction to ultrasound therapy
- [1] Ultrasound gel 250 ml
- [1] Ultrasound transducer 1/3 MHz 5 cm² or 2.5 cm²
- [4] Viscose covers EF 50



Ultrasound therapy

Ultrasound therapy, along with electrotherapy, is one of the popular treatment forms of physical therapy. Therapeutic ultrasound is used at a frequency of 1 MHz or 3 MHz, as continuous output or pulsed output in different duty cycles. Ultrasound therapy is classified as mechanical thermal therapy due to its complex effects. Depending on therapy parameters (therapy frequency, output type, dose, therapy duration and mode), the emphasis is on a thermal effect that results from ultrasound therapy (thermal growth and reflection from tissue barriers such as bones or joints) or a micromassage in the treated tissue segments. The effects of ultrasound therapy can be summarised as follows:

- » Hyperemiasation
- » Acceleration of metabolic function (microcirculation, diffusion processes)
- » Increasing the tensibility of connective tissue structures (collagen fibres)
- » Alleviation of pain
- » Muscular relaxation and spasm resolution
- » Acceleration of the healing process
- » Stimulation of fracture healing

Since ultrasound is reflected by air, you should use a coupling agent (ultrasound gel) or connect under water (subaqueous) for optimum conduction of the ultrasonic waves from the transducer to the tissue.

According to current knowledge an objectively reproducible dosing in ultrasound therapy, thus also valid for scientific works, is only possible with the innovative ultrasound dosing TPS (more information on page 27).

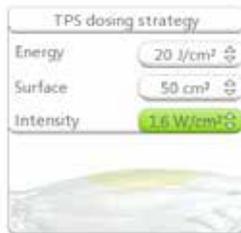
For more detailed information, please read our comprehensive brochure "Short introduction to ultrasound therapy", which contains many practical examples.



Simultaneous therapy

The transducer acts as the electrical stimulation cathode and a plate or vacuum electrode acts as anode in simultaneous therapy using electrotherapy and ultrasound (with a cumulative therapy effect). Simultaneous therapy is available by using combination units as well as by combining any electrotherapy unit with the related ultrasound therapy unit. Simultaneous therapy is used particularly in pain therapy. Current selection combined with ultrasound parameters ensure a wide variety of treatment combinations.

Ultrasound dosing strategy with TPS



The acronym TPS is a compilation of the Spanish words "Tiempo" (time), "Potencia" (output) and "Superficie" (surface). The innovative dosing strategy of the Spanish electrotherapy specialist Prof. J. M. Rodríguez Martín guarantees the delivery of a well-defined amount of energy in J/cm² to the tissue taking into account the treatment area and all treatment parameters. In order to obtain a precise surface indication, the treatment area is graphically defined and measured, for example using a skin marker. After entering the area into the therapy unit, the required treatment time corresponding to the desired energy quantity is calculated, taking into account dosage, energy output, size of the treatment head and frequency. Thus, TPS allows for the first time ever, for an objectively reproducible dosage in ultrasound therapy, thus also valid for scientific works.





Electrotherapy

Electrotherapy is an important element of physical therapy. Current stimulation treats the tissue via electrodes (plate electrodes, adhesive electrodes, vacuum electrodes, or special electrodes such as punctiform or pad electrodes) on the selected areas. Depending on the current mode and the selection of parameters (i. e. impulse form, impulse duration, pause time, frequency, intensity) the stimulation current may have significant effects in the following areas of treatment:

- » Pain reduction
- » Stimulation of blood circulation and trophic enhancement
- » Nerve stimulation, for example the training of innervation and treatment of paralysis
- » Muscle stimulation to build up/maintain muscles
- » Muscular relaxation
- » Iontophoresis

The different electrotherapy currents can be classified according to their generation and specific method of treating the tissue:

- » Medium-frequency current: this is an alternating current, derived from superposition of a basic frequency (2–9.5 KHz) and a modulation frequency (0-250 Hz). This superposition takes place within the equipment for AMF current (amplitude modulated medium frequency current) as well as for medium-frequency currents for muscle stimulation (e. g. KOTS). The previously modulated current can therefore be applied via only two electrodes on the patient. With classic interference current IF,

however, superposition delivers both frequencies when it reaches the patient's tissue. For this reason, in this case it is essential to always apply four electrodes for treatment. The high therapeutic effectiveness of the medium-frequency current is achieved with minimum skin irritation and broad penetration and is more acceptable to patients.

- » Low-frequency current: an impulse current with frequencies under 1000 Hz is classified as a low-frequency current. The total range of application is covered by the different low-frequency currents DF, MF, CP, LP (diadynamic currents), UR (ultrastimulation current), HV (high voltage current), FaS (faradic current), TENS (mono- or biphasic rectangular impulse), MENS (variable microcurrent), IG 30 and IG 50 (impulse galvanisation), FM (frequency-modulated current), STOCH (stochastic current) and T/R (exponential current). In contrast to medium-frequency current, low frequency current can also be used for treatment of peripheral paralysis.
- » Galvanic current (G) is a direct current that ensures a constant energy current flow through the tissue. Galvanic current is primarily used for stimulation of blood flow and pain reduction as well as iontophoresis (diffusion of medicaments into the tissue with the aid of current).

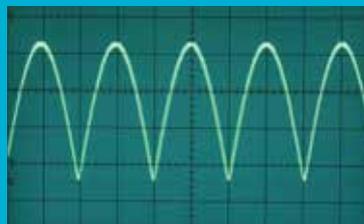
For more detailed information, please read our comprehensive brochure "Short introduction to electrotherapy", which contains many practical examples.

"Clean currents" for better therapy results

Quite a few electrotherapy instruments today no longer emit stimulation currents in the form described in teaching manuals, and on which efficient electrotherapy is proven to be based.

Instead of this – and in many cases due to cost savings – similar, but not identical, curve forms are used. Nobody knows exactly whether these cause the desired effects in tissue in the same way as the original currents. Instead of medium frequency currents, for example, low frequency ones are generated, and vice versa. In a direct comparison, the difference between "genuine" and "similar" currents can often be felt, but it only becomes visible when the current curves are viewed on an oscilloscope. Galvanic currents with spikes can be found, distorted instead of harmonic sinusoidal curves, or even deformed envelopes of diadynamic currents.

PHYSIOMED distances itself firmly from this trend of compromising therapeutic success only for the sake of maximising profits. PHYSIOMED instruments therefore only supply 'clean' currents. This also explains the often heard opinion of competent electrotherapy users, that despite using the same parameters, they obtain better therapeutic results with PHYSIOMED instruments than with other stimulation current instruments.



Electrotherapy units

PHYSIOMED electrotherapy units enable you to start therapy with maximum speed and ease: direct selection of current, over the indication index or program memory. During treatment you have a constant overview of all parameters and timers. With decades of proven use, PHYSIOMED one-button operation permits fast intuitive control. A wide variety of safety features prevent malfunctions on all levels. For instance, a warning signal can be emitted when the recommended intensity is exceeded in relation to the selected electrode size. The emergency shut-off function can be activated over the intensity control and manual keys to ensure increased safety for both therapists and patients.

Thanks to the individual selection of additional parameters (pulse length and form, frequency, bursts, biphasic application, galvanic base etc.) the characteristics of current forms can be precisely adjusted to the desired treatment. Diagnostics programs, exhaustive indication lists with practical information, diagrams and treatment animations and patient database with 'potpourri' function simplify electrotherapy treatment.

Please see page 21 for an overview of the specifications for the individual units.





PHYSIODYN-Expert

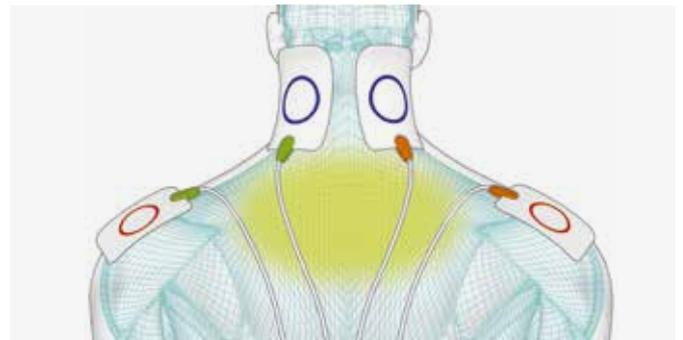
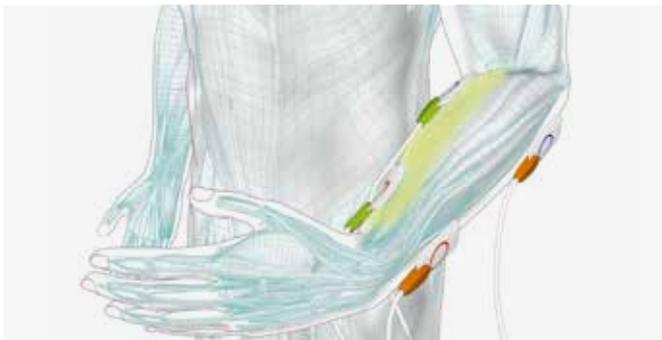
Professional electrotherapy and diagnostics for hospitals, rehab and physiotherapy centres



COMING
SOON



With the brand new PHYSIOMED App treatment protocols can be created, archived and processed!



Detailed illustrations facilitate even complex stimulation current treatments

SPECIAL FEATURES

ELEKTROTHERAPIE

Two-channel electrotherapy (21 currents) with basic settings on top level and detailed parameter settings in the expert menu (with visualization of the current shape parameters)

6 diagnostic menus (incl. quick I/T curve representation): the user-guided navigation makes the diagnostic evaluation self-explanatory and effective

Alternating and simultaneous stimulation

Spasticity treatment acc. to Hufschmidt or Jantsch

Manual release key for emergency shut-off or intentional exercises (accessory option)

GENERAL FEATURES

Perfected user guidance through combination of touch screen and PHYSIOMED one-button operation

①

7" colour monitor incl. screensaver, visualizing all main parameters of the active channels

Favorites menu with speed-dial memory for individual device functions

Comprehensive overview of the therapy parameters including all therapy timers

Fastest therapy start: direct, through program memory or indications index

Treatment index with intelligent filtering functions based on body region, desired therapy effect or per alphabet (incl. auto-complete of indication names) for quick location of the desired treatment proposal

Extensive therapy and dosage suggestions

Easy-to-use and extensive memory menu with cocktail and history function

Multifunctional intensity controls allowing for fast intensity reduction and quick switching between channels

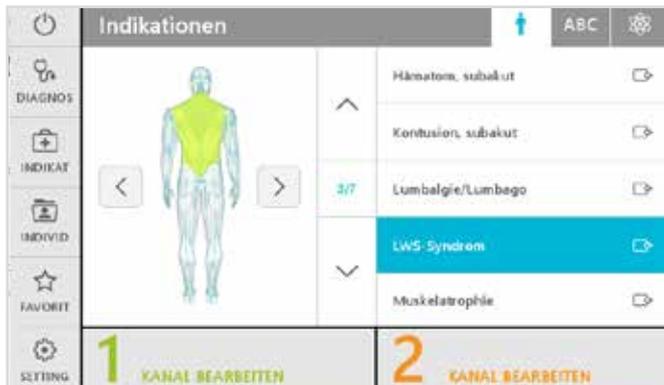
Logical colour coding of electrotherapy and vacuum application accessories for quick and accurate allocation of channels and polarity

Vacuum application with PHYSIOVAC-Expert (option)

Simultaneous therapy

SD card slot for product updates

A detailed specifications overview of the PHYSIODYN-Expert can be found on page 21.



The comprehensive indication menu with practical filter functions



In addition to the standard I/T curve, the diagnostics menu also offers a time-saving quick test



TECHNICAL DATA

Protection class	1, type BF
Power connection	100 – 240 VAC ±10 %
Mains frequency	50 – 60 Hz
Current consumption	0.6 A / 1.2 A
Power consumption	120 VA
Power output stimulation current max.	GMC, MENS = 1.000 µA, G = 25 mA, HV, HVS, TENS = 140 mA, DF, MF, CP, LP = 70 mA, UR, IG30, IG50, FM, STOCH, FaS, T/R = 75 mA, IF, AMF, MT, KOTS = 100 mA (at 500 Ohm)
Dimensions (W x H x D)	315 x 175 x 370 mm
Weight	6.2 kg

STANDARD ACCESSORIES

[1]	Elastic velcro strap (10 x 125 cm)
[1]	Elastic velcro strap (6 x 80 cm)
[1]	Mains cable
[1]	Operating instructions
[1]	Patient lead
[4]	Plate electrodes EF 50
[1]	Short introduction to electrotherapy
[4]	Viscose covers EF 50



Vacuum application

Vacuum application devices make it possible for you to apply stimulation currents via vacuum electrodes. The vacuum electrodes are gently affixed to the patient's skin with the help of adjustable underpressure. This method is especially suited for affixing electrodes to the buttocks, since there is no need for expensive fixation aids.

The suction action and the associated blood flow stimulation result in improved conduction qualities for the currents. With smooth adjustments, pulsing waves of suction permit enhanced stimulation during therapy.

Thanks to special suctionwave cups (Luran), vacuum application units are also suited for manual suction wave massage.

Examples of accessories for vacuum application



Luran suctionwave cups (set) in four different sizes (2, 3, 4 und 6 cm in diameter) for suctionwave therapy.



Thanks to their soft shape, the self-closing Vacustop electrodes adapt ideally to the curves of the body; available in three sizes (3, 6 and 9 cm in diameter).

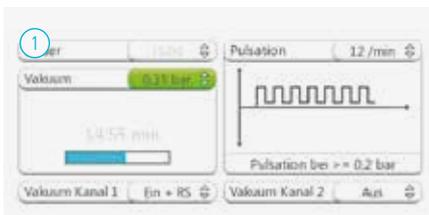




Vacuum application

PHYSIOVAC-Evident

User-friendly vacuum application with Evident-Line devices



TECHNICAL DATA

Protection class	1, type BF
Power connection	100 – 240 VAC ±10 %
Mains frequency	50 – 60 Hz
Current consumption	0.2 A (at 230 V) or 0.4 A (at 115 V)
Power consumption	55 VA
Vacuum	0 – 0.6 bar
Pulsation	0 – 30 pulsations/min
Dimensions (W x H x D)	300 x 105 x 325 mm
Weight	5.5 kg

STANDARD ACCESSORIES

[1]	Blind plug
[1]	Connection cable (electrotherapy/vacuum)
[1]	Mains cable
[1]	Operating instructions
[4]	Vacustop vacuum electrodes 6 cm
[2]	Vacustop vacuum electrodes 9 cm
[4]	Vacuum hoses
[4]	Viscose sponges 6 cm
[2]	Viscose sponges 9 cm

SPECIAL FEATURES

VACUUM APPLICATION

Pulsation adjustable in steps of 2 per minute

Vacuum adjustable in steps of 0.05 bar

Vibration and noise-optimised

Electric lock mechanism for channels for operation without blind plugs (simultaneous therapy excepted)

Water separator with safety switch for automatic shut-off (with audible and visual warning)

Autonomous suctionwave therapy

Any desired vacuum application can be selected in each stimulation current channel, while in the remaining channel (channels) a free choice of the desired therapy form is simultaneously possible

- ① Operation directly over the connected electro- or combination therapy unit or autonomously

GENERAL FEATURES

Fastest therapy start

- ② Logical colour coding of electrotherapy and vacuum application accessories for quick and accurate allocation of channels and polarity

PHYSIOVAC-Expert

User-friendly vacuum application with Expert-Line devices

NEW



SPECIAL FEATURES

VACUUM APPLICATION

Vacuum and pulsation adjustable in 10 steps

Individually adjustable lower limit of vacuum power during pulsation mode for optimum sticking of the electrodes in any therapy situation

Self-adjusting vacuum pump ensures constant vacuum

Vibration and noise-optimised

Water separator with safety switch for automatic shut-off (with audible and visual warning)

Autonomous suctionwave therapy

GENERAL FEATURES

Fastest therapy start

① Logical colour coding of electrotherapy and vacuum application accessories for quick and accurate allocation of channels and polarity

TECHNICAL DATA

Protection class	1, type BF
Power connection	100 – 240 VAC
Mains frequency	50 – 60 Hz
Current consumption	0.1 A (at 230V) or 0.2 A (at 115V)
Power consumption	60 VA
Vacuum	0 – 0.6 bar
Pulsation	0 – 60 pulsations/min, adjustable in 10 steps
Dimensions (W x H x D)	250 x 100 x 350 mm
Weight	6 kg

STANDARD ACCESSORIES

[2]	Bypass hoses single
[1]	Connection cable (electrotherapy/vacuum)
[1]	Operating instructions
[1]	Power connection lead
[4]	Vacustop vacuum electrodes 6 cm
[4]	Vacuum hoses
[4]	Viscose sponges 6 cm



Laser therapy

Laser therapy is used in various therapy fields. In contrast to hard lasers used in surgery (30 W and higher), laser therapists work with the athermal, therapeutic, low level laser (less than 700 mW). As for physical therapy, the infrared diode laser is now the common means of treatment. This laser excels over other types of lasers in penetration depth, bio-stimulative effect and ease of handling. The assignment of laser therapy to light therapy is based on its various complex photobiological effects. These effects can be summarised as follows:

- » Enhanced cellular energy balance
- » Antiphlogistic effect
- » Antiedematous effect
- » Microcirculatory effect
- » Tissue reparative effect
- » Analgetic effect

You can choose between two forms of application according to the indication. An ultra-precise laser pen is used to treat tender points, trigger points, paraspinal points, etc. if laser application on a very small area (less than 1 cm²) is required. Laser pens are also the ideal medium for gentle laser acupuncture, which like needle acupuncture, uses the direct interaction between the body's meridians and related functions. For the treatment of larger areas of skin in cases like traumas, joint inflammations or dermatologic indications, we recommend using the laser shower, which can be moved over/along the treatment area, if necessary. The laser comb attachment is especially well-suited to treat regions with body hair, such as the scalp.

For more detailed information please read our comprehensive brochure "Short introduction to laser therapy", which contains lots of practical examples.





LASP-Expert

Effective laser therapy with laser pen for mobile use



COMING
SOON



The therapeutic laser pen LASP-Expert allows for comfortable treatment of pain, trigger and acupuncture points. For therapy continuous output, multi, alpha, Bahr, Reininger and Nogier frequencies as well as freely programmable frequencies are available (software extension optionally available). LASP-Expert features an infrared diode laser with a wavelength of 808 nm, which is scientifically proven to provide the best values of penetration depth and biostimulation efficiency. Its battery operation enables easy, mobile use of treatment.

TECHNICAL DATA

Protection class	Internal power supply
Laser class	3B
Power supply	Interchangeable NiMH batteries with charging station
Laser type	Infrared semiconductor laser
Wavelength	808 nm
Power output max.	200 mW
Dimensions (W x H x D)	35 x 32 x 210 mm
Weight	0.2 kg
Battery charger:	
Power connection	100 – 240 VAC ±10 %
Mains frequency	50 – 60 Hz
Current consumption max.	0.35 A
Weight	0.2 kg

STANDARD ACCESSORIES

[1]	Charging station
[2]	Laser protection glasses
[1]	Metal case with inlay
[1]	Operating instructions
[1]	Optical waveguide straight
[1]	Plexi holder
[1]	Short introduction to laser therapy
[1]	Standard battery

SPECIAL FEATURES

LASER THERAPY

Wavelength of 808 nm – best value for penetration depth and biostimulation

Continuous output, multi-, alpha, Bahr, Reininger and Nogier frequencies

Software extension optionally available with Solfeggio frequencies, Fl bands, sweeps and Cranio program

20 memory locations for freely programmable frequencies (1 to 9,999 Hz)

Dose, intensity and therapy time individually adjustable

Laser pen for key point treatment and laser puncture (including high-resolution acupuncture search function with automatic start/stop function)

- ① Optionally optical waveguides are available as autoclavable attachments for the laser pen for treatments in the fields of dentistry and ENT

GENERAL FEATURES

Fastest therapy start

Display of the selected setting on the colour display

Battery-driven

With battery and metal case for mobile use

LASS-Expert

Effective laser therapy with laser shower

COMING
SOON



The therapeutic laser shower LASS-Expert is used for application on larger surfaces (e. g., in trauma, arthropathy, hypertonia of large muscles and dermatology). It works with 21 laser diodes and offers continuous output, alpha, Nogier, Bahr, Reinger and multifrequency or freely selectable frequencies (software extension optionally available). The infrared diode laser with a wavelength of 785 nm provides the best values of penetration depth and biostimulation efficiency according to latest scientific conclusions.

TECHNICAL DATA

Protection class	II
Laser class	3B
Laser type	Infrared semiconductor laser
Wavelength	785 nm
Power connection (external power supply)	110 – 240 VAC ±10 %
Mains frequency	50 – 60 Hz
Current consumption	0.1 A – 0.2 A
Power consumption	20 VA
Power output max.	21 x 50 mW
Dimensions (W x H x D)	105 x 47 x 310 mm
Weight (inclusive power supply)	0.43 kg

STANDARD ACCESSORIES

[2]	Laser protection glasses
[1]	Metal case with inlay
[1]	Operating instructions
[1]	Plexi holder
[1]	Power supply unit
[1]	Short introduction to laser therapy
[1]	Shower adapter

SPECIAL FEATURES

LASER THERAPY

Wavelength of 785 nm – best value for penetration depth and biostimulation

Continuous output, alpha, Nogier, Bahr, Reinger and multi-frequencies

Software extension optionally available with Solfeggio frequencies, FI bands, sweeps and Cranio program

20 memory locations for freely programmable frequencies (1 to 9,999 Hz)

- ① Laser shower with 21 high performance laser diodes for application on larger surfaces

High laser density on 55 cm² treatment area

Dose, intensity and therapy time individually adjustable

Interchangeable adapter with integrated protective glass for hygienic and fast working

Visualization of the treatment area by four red light diodes

- ② Can be converted into a laser comb by clicking (comb adapter optional accessory)

GENERAL FEATURES

Fastest therapy start

Display of the selected setting on the colour display

With metal case for mobile use



Shockwave therapy

Shockwave therapy has been successfully used in urology for around three decades. For some time now it has also proved successful in modern pain therapy and trigger point treatment. The term 'shockwave therapy' refers to mechanical pressure pulses that are used in the human body for a therapeutic effect. The pulses expand as a wave, and when applied to the areas for treatment, stimulate the body's regenerative capabilities.

Shockwaves influence large areas of the disease-affected body areas and speed up the self-healing process in a targeted manner. The metabolism is improved and blood circulation is stimulated locally to allow inflamed or damaged tissue to regenerate faster. Furthermore painful calcific deposits in joints can be dissolved with shockwave therapy, so that in time they are absorbed, transported and released from the body over the bloodstream. Another application area is the treatment of trigger points. Triggers are painful knots around muscles and sinews. They often cause pain that need not necessarily occur near the trigger point, but in completely different areas of the body (remote trigger points).





Shockwave therapy

PHYSIOIMPACT-Evident

High-energy shockwave therapy



The high-energy PHYSIOIMPACT-Evident permits targeted gentle and effective extracorporeal shockwave therapy. Besides starting therapy over indication and trigger point index or the patient database, all parameters can also be selected individually.

The ingenious coupling of shockwave intensity and treatment frequency in alternating or phased treatment is an outstanding achievement. During the treatment cycle a continuous controlled alternation of intensity and frequency is effected, which may

protect cells. Even during treatment, the body's self-healing powers are triggered, as demonstrated by the tolerance of higher energy levels.

The ergonomically designed handpiece with superior material qualities can be fitted with three different sized applicator attachments, which are specially adjusted to the different indications.

SPECIAL FEATURES

SHOCKWAVE THERAPY

High-energy shockwave maximum 0.58 mJ/mm²

Linear, individually adjustable alternating or phased treatment coupled with shockwave intensity and treatment frequency

25 intensity levels

Pulse mode from 1–12 Hz

- ① Ergonomically designed lightweight handpiece

No limitation of shockwaves, guaranteed for 24 months of use

- ② Three different applicator attachments adjusted for the indications

GENERAL FEATURES

Intuitive touch screen operation

9,4" colour monitor

Swivel and tilt mount for optimum monitor alignment at all times

Comprehensive overview of the therapy parameters

Fastest therapy start: direct, through program memory or indications index

Extensive treatment index featuring therapeutic information, dosage proposals and application graphics

- ③ Trigger point index with detailed illustrations

Patient database

Remote maintenance



Trigger point treatment of the deltoid



TECHNICAL DATA

Protection class	1, type BF
Power connection	108 V~ – 240 V~
Mains frequency	50/60 Hz
Current consumption	0.7 A
Power consumption max.	200 VA
Energy flow density max.	0.58 mJ/mm ²
Intensity levels	25
Impulse frequency	1-12 Hz
Dimensions (W x H x D)	245 x 450 x 350 mm
Weight	10.8 kg

STANDARD ACCESSORIES

[1]	Applicator attachment S
[1]	Applicator attachment M
[1]	Applicator attachment L
[1]	Contact gel
[1]	Handpiece with tubing connection
[1]	Mains cable
[1]	Operating instructions
[1]	Revision kit
[1]	Wipe and pen for touch screen



Shortwave therapy

The application of shortwave therapy generates warmth in tissue for which electric and magnetic fields are used. Shortwaves are applied either using the condenser field method or the coil field method.

With the condenser field method the treated body part is placed between two condenser plates (shell electrodes or soft rubber electrodes). A periodic charge exchange process occurs in the treated tissue under the influence of high frequency electrical alternating fields, which results in uniform heating through of all levels of the treated tissue segments.

The coil field method uses a coil in the form of a vortex current electrode (monode or diplode). The high frequency current flows through the coil, which creates a variable magnetic field in its environment. The magnetic field causes a predominant warming in tissue with good conductive structure, such as connective tissue and muscles.

In the impulse mode during the shortwave therapy, the focus is on the athermal effect with trophic enhancement and reflective influences on the vascular system. The local thermal effect dominates in continuous operation, causing improved cell metabolism, reduced viscosity of bodily fluids, higher tensibility of collagen fibres, circulation stimulation and manipulation of the nervous system. Shortwave therapy is therefore used predominantly in the fields of orthopaedics, traumatology, rheumatology as well as in ENT, urology, gynaecology and internal medicine for:

- » Treatment of chronic inflammations
- » Pain reduction
- » Spasm reduction and muscular relaxation
- » Treatment of acute and chronic infections





Shortwave therapy

PHYSIOTHERM-S

Perfected shortwave therapy

The PHYSIOTHERM-S high-end shortwave therapy unit enables continuous and pulsed energy output for thermal and athermal applications. You can choose between the capacitor field method for uniform heating of all the tissue layers as well as the coil field method (optional) for selective treatment of tissue with good conductive structures, such as connective tissue and muscles. In addition to the graphic display of the effective power output, the ingenious automatic matching feature (dynamic matching) ensures the steady development of heat and prevents over-dosage by reducing the power if there is a problem. The extremely well-shielded, high-frequency connection cables provide trouble-free operation.

The easily adjustable supporting arms ensure quick and exact electrode placement. The smooth running castors with latches ensure good mobility and secure positioning of the PHYSIOTHERM-S.



Shoulder treatment with a diplode



Ankle joint treatment with a monode



Direct-axis component of magnetomotive force with plate and rubber capacitor electrodes

SPECIAL FEATURES

SHORTWAVE THERAPY

Continuous or pulsed power output

Matching function for steady development of heat and prevention of overdosage

ACCESSORIES

- ① Plate electrodes available in three sizes (8, 12 and 16.5 cm in diameter)
- ② Rubber capacitor electrodes for treatment using capacitor technology (18 x 12 cm or 25 x 14.5 cm)
- ③ Dipole for shortwave therapy with coil field method
- ④ Monode (special eddy current electrode) for short-wave therapy with coil field method

GENERAL FEATURES

Intuitive PHYSIOMED one-button operation

Fastest therapy start: direct, through program memory or indications index

Extensive treatment index by medical fields featuring therapeutic information, dosage proposals and application graphics

Patient database



TECHNICAL DATA

Protection class	1, type BF
Power connection	230 V \pm 10% or 115 V \pm 10%
Mains frequency	50 – 60 Hz
Current consumption	6 A (at 230 V) or 12 A (at 115 V)
Power consumption	1400 VA
Operating frequency	27.12 MHz
Power output max.	
Continuous operation	400 W
Impulse mode	1000 W
Impulse frequency	10 – 300 Hz
Impulse duration	200 – 600 μ s
Dimensions (W x H x D)	420 x 970 x 410 mm
Weight	60 kg

STANDARD ACCESSORIES

②	Cable holder
②	Electrode supporting arms
②	HF connection cables
①	Mains cable
①	Operating instructions
②	Plate electrodes 16,5 cm



Microwave therapy

Therapy with microwaves is classified as high frequency therapy. The one thing the varying frequencies used in high frequency therapy have in common is the fact that warmth is created in the tissue under their influence. Microwaves are applied using the radiation field method, which applies beams of electromagnetic waves to the tissue depending on the usage of emitters of varying shapes and sizes. The energy from these waves is directly absorbed in the tissue and makes it warm. The penetration of the microwaves is inferior compared to shortwaves. Microwave therapy is the preferred application if you want local heating of the muscles or connective tissue structures, such as ligaments, sinews, capsules, etc.





Microwave therapy

PHYSIOTHERM-M

High-standard microwave therapy

The modern PHYSIOTHERM-M microwave therapy unit enables continuous and pulsed energy output for thermal and athermal applications and features automatic output limitation. The extremely well-shielded, high-frequency connection cable provides troublefree operation. The smooth running castors with latches ensure good mobility and secure positioning of the PHYSIOTHERM-M.

The easily adjustable supporting arms ensure quick and exact emitter placement. The high-quality and precisely manufactured connectors make it easy to change the emitter.



Knee treatment with an omnidirectional emitter



SPECIAL FEATURES

MICROWAVE THERAPY

Continuous or pulsed energy output

Automatic output limitation

ACCESSORIES

- ① Synclinal emitter for medium and large treatment areas
- ② Omnidirectional emitter (diameter: 16 cm) for local disease processes
- ③ Small emitter (diameter: 6.5 cm) for small areas and ENT applications

GENERAL FEATURES

Intuitive operation

Comprehensive overview of the therapy parameters

Fastest therapy start



ENT application with a small emitter

TECHNICAL DATA

Protection class	1, type B
Power connection	230 V \pm 10% or 115 V \pm 10%
Mains frequency	50 – 60 Hz
Current consumption	4 A (at 230 V) or 7 A (at 115 V)
Power consumption	700 VA
Operating frequency	2450 MHz
Power output max.	
Continuous operation (small emitter, automatic changeover)	25 W
Continuous operation	200 W
Impulse mode	1250 W
Impulse frequency	1 – 50 Hz
Dimensions (W x H x D)	400 x 790 x 300 mm
Weight	42 kg

STANDARD ACCESSORIES

[1]	HF connection cable
[1]	Mains cable
[1]	Operating instructions
[1]	Safety eyewear (microwave)
[1]	Synclinal emitter



Traction therapy

Traction or decompression therapy has been successfully used in physical medicine for centuries. The main application areas are cervical, lumbar and hip joint therapy. With the assistance of additional belts other joints can also be treated. The recognised spinal traction therapy effects relief to the spine and surrounding tissue. Reducing pressure on the intervertebral foramen (IVF) relieves the intervertebral discs and soothes irritated nerves. Conventional methods are mostly based on traction forces on the vertical plane, which in combination with the strong physical stressing of the patient, may cause psychogenic muscle tension and blood stasis. By contrast, horizontal traction provides patients with a pleasant treatment alternative, permitting both exact metering and pulsed or dynamic intermittent traction relief.

A combination of traction and high frequency therapy can achieve cumulative and potentiating effects.





TRAComputer/MiLi

Traction therapy with deep heat



Using the TRAComputer, traction is applied on the horizontal plane, while exact metering is possible due to the application of relief-bringing intermittent and pulsed traction. Aside from 60 programs with various traction sequences, individual therapy times, patient weight and pulse frequency can be entered over the control key pad. The gentle gradual increase of traction avoids psychogenic stress to the patient. Furthermore, during relaxation periods, minimum traction is maintained to provide permanent relief to the joint for the duration of the treatment. For safety sake, prior to treatment the patient is handed the emergency off switch.

Besides lumbar and cervical traction, with additional accessories shoulder, elbow, hip, knee, hand and thoracic spine can also be treated.

The MiLi microwave therapy unit can be used with the TRAComputer or on its own. The electromagnetic waves are directly converted into heat in the lower-lying water-containing tissue for an elasticising effect and metabolic stimulation of structures surrounding the spinal cord, coupled with hyperaemisation and increased phagocyte function.

The following configurations are available:

- » Traction therapy unit TRAComputer with couch and diathermy unit MiLi
- » Traction therapy unit TRAComputer with couch
- » Diathermy unit MiLi with couch



Cervical traction with the TRAComputer

SPECIAL FEATURES

TRACTION THERAPY / TRACComputer

Intermittent and dynamic pulsed traction

Individual setting of traction power, pulsation and treatment time

Lumbar and cervical traction

Optional: hip, knee, shoulder, thoracic vertebra, hand and elbow joint traction

Patient's weight can be taken into account

Emergency-off switch

GENERAL FEATURES

Intuitive control with touch screen and numeric keypad

Comprehensive overview of the therapy parameters

Fastest therapy start: direct program selection or over patient card (option)

① Extensive program selection with visualisation of traction charts

Option: patient card for saving personal therapy programs

MICROWAVE THERAPY / MiLi

Power output in ten steps from 20-200 W

② Three separately selectable treatment areas across couch

Stationary or cyclical automatic longitudinal treatment: easy individual adjustment of the defined treatment zone

Automatic metering monitoring

GENERAL FEATURES

Intuitive operation with touch screen

Comprehensive overview of the therapy parameters

Fastest therapy start: direct or through indications index

TRACTION COUCH

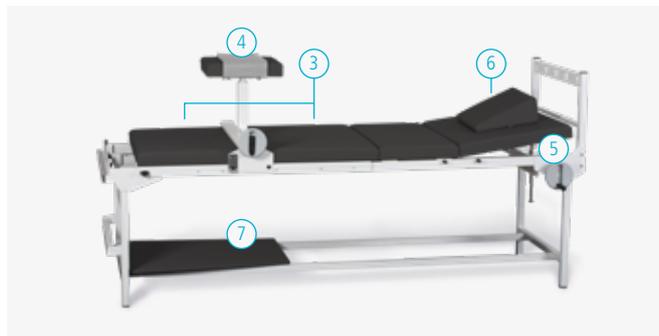
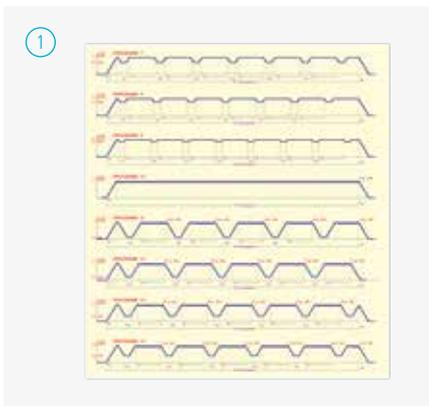
③ Rolling section to avoid frictional losses

④ Height-adjustable leg rest with belt

⑤ Height-adjustable head rest

⑥ Pillow

⑦ Shelf for accessories



TECHNICAL DATA

TRACComputer:

Protection class	1, type B
Power connection	230 V \pm 10 %
Mains frequency	50 Hz
Current consumption	350 mA
Power consumption	80 VA
Traction	1-60 daN
Dimensions (W x H x D)	190 x 1050 x 560 mm
Weight	18 kg

MiLi:

Protection class	1, type B
Power connection	230 V \pm 10 %
Mains frequency	50 Hz
Current consumption	2.2 A
Power consumption	720 VA
Operating frequency	2450 MHz
Power output max.	200 W
Dimensions (W x H x D)	340 x 250 x 850 mm
Weight	28 kg

Traction couch:

Dimensions (W x H x D, without leg rest)	830x970x2120 mm (without TRACComputer); 830x970x2240mm (with TRACComputer)
Load capacity of treatment surface	160 kg
Weight	ca. 75 kg

STANDARD ACCESSORIES

for TRACComputer, MiLi and traction couch:

[1]	Emergency-off switch
[1]	Leg rest with belt
[1]	Operating instructions
[1]	Pillow
[1]	Shelf for accessories
[1]	Traction set cervical spine
[1]	Traction set lumbar spine



Cryotherapy

Cryotherapy is based on surface cooling and thus local reduction of tissue temperature. Cold air therapy uses a continuously cooled stream of air within a constant temperature range, which results in a series of thermoregulatory effects that differ from other cold application forms (e.g. ice or cold packs) and are desirable for various indications, including acute and chronic pain (especially in sport physiotherapy) and rheumatism. Cold air therapy is also used to cool the skin surface during laser treatment.

In detail, there are the following specific physiological effects of cryotherapy with cold air flow:

- » Reduction in the sensitivity of sensory nerves
- » Reduction in nerve conduction
- » Immediate vasoconstrictive effect





FRIGOSTREAM

Environmentally friendly cryotherapy in a compact design

The compact FRIGOSTREAM cryotherapy unit offers optimised performance in a minimum of space and is available in five different versions. It generates cold air with an adjustable current of air of up to 1500 l/min and thus enables targeted cooling of body areas with the recognised advantages over CO₂ and ice packs. If used correctly the risk of cold damage is excluded.

FRIGOSTREAM operates with an energy source that costs nothing - air - and is therefore always ready for use and has no resource replenishing problems. Like an air conditioning system, the ambient air is cooled down and blown onto the skin through a treatment tube without direct contact at temperatures of up to -60 °C (see technical data). Various tubes and nozzles permit easy targeted treatment.

The de-icing function, which requires no water emptying on the user's part (with the exception of C200/C600), is particularly user-friendly. The FRIGOSTREAM line refrigerant loop is a closed system and requires no maintenance whatsoever.



Pain therapy with cooled air



SPECIAL FEATURES

CRYOTHERAPY

Cold air from -32 °C to -60 °C

Adjustable stream of air up to 1500 l/min.

Very short cooling down phase

De-icing function

Maintenance-free refrigerant loop

Standard slotted nozzle

- ① Nozzle attachments in three sizes for effective treatment
- ② Flexible, double-wall tube (1.70 m long)
- ③ Therapy arm for fast and easy placement of the tube over a clip-on system (option)
- ④ FRIGOSTREAM is also available with a special smaller diameter tube to maintain cooling at a constant level over an extended period for thermal laser treatments

GENERAL FEATURES

Intuitive operation

Touch screen



TECHNICAL DATA

FRIGOSTREAM, FRIGOSTREAM Premium and Turbo:

Protection class	1, type B
Power connection	230 V ±10 % or 110 V ±10 %*
Mains frequency	50 – 60 Hz
Power consumption	Ø 650 W (500 W**, 850 W***)
Cooling capacity	up to -32 °C (-40 °C***)
Air capacity	350 – 1500 l/min. (350 – 1200 l/min**)
Dimensions (W x H x D)	360 x 930 x 480 mm
Weight	53 kg

*Turbo only 230 V ±10 % **Premium ***Turbo

FRIGOSTREAM C200 und C600:

Protection class	1, type B
Power connection	230 V ±10 %
Mains frequency	50 – 60 Hz
Power consumption	900 W (1400 W*)
Cooling capacity	up to -40 °C (-60 °C*)
Air capacity	350 – 1500 l/min.
Dimensions (W x H x D)	380 x 1020 x 540 mm
Weight	65 kg (80 kg*)

*C 600

STANDARD ACCESSORIES

- [1] Nozzle attachment 5 mm
- [1] Nozzle attachment 10 mm
- [1] Nozzle attachment 15 mm
- [1] Operating instructions
- [1] Slotted nozzle
- [1] Tube



Magnetotherapy

With therapeutic magnetic field devices, pulsating magnetic fields (PEMF) can be applied at various frequencies and intensities. Coils and applicators of different sizes can also be used.

Magnetic field therapy can produce the following effects:

- » Pain relief
- » Suppression of inflammation
- » Acceleration of healing processes
- » Stimulation of blood circulation





Magnetotherapy

MAG-Expert

Two-channel magnetotherapy



MAG-Expert provides magnetic field treatment with a field-strength of 1–100 Gauss (adjustable in steps of one Gauss) and a frequency range from 1–100 Hz, with two completely independent channels and a treatment timer. Cylinders of different sizes as well as high performance applicators are available to maximise the efficiency of treatment.

MFC technology focuses the magnetic fields almost entirely on the inside of the cylinder. This avoids unnecessary exposure of the treatment team.



Magnetotherapy with set of applicators

MAG-Expert is available in the following configurations:



Cylinder, Ø 60 cm and therapy couch for magnetic field therapy of the spine, pelvis and the whole body



Cylinder, Ø 30 cm for magnetic field therapy of the limbs and head



Applicator set available for local treatment



SPECIAL FEATURES

MAGNETOTHERAPY

Magnetotherapy from 1-100 Gauss

Therapy frequency from 1-100 Hz

Two independent channels

MFC technology for focussing magnetic fields

Extremely stable treatment couch with pillow and hydraulic system for opening and easy installation of the coil

Precisely manufactured sliding for easy and comfortable positioning of the coil

GENERAL FEATURES

① Intuitive PHYSIOMED one-button operation

Comprehensive overview of the therapy parameters

Fastest therapy start: direct, through program memory or indications index

Extensive treatment index with dosage proposals

TECHNICAL DATA

Protection class	1, type BF
Power connection	230 V $\pm 10\%$ or 115 V $\pm 10\%$
Mains frequency	50 – 60 Hz
Current consumption	1 A (at 230 V) or 2 A
Power consumption	400 VA
Therapy frequency	1-100 Hz
Power output	1-100 Gauss (adjustable in steps of 1 Gauss)
Dimensions (W x H x D)	345 x 133 x 348 mm
Weight	3.8 kg
Therapy couch:	
Dimensions (W x H x D)	630 x 680 x 2020 mm
Weight	63 kg

STANDARD ACCESSORIES

[1] Connection cable

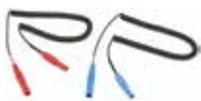
[1] Mains cable

[1] Operating instruction

[1] Test metal ring

Additional accessories for electrotherapy

» A DEVICE-RELATED OVERVIEW OF THE WHOLE RANGE OF ACCESSORIES CAN BE FOUND WITH THE PRODUCTS UNDER "Additional accessories" AT WWW.PHYSIOMED.DE

	PHYSIOPADS ADHESIVE ELECTRODES reusable, extremely conductive, 4 different sizes
	CONNECTING CABLE for PHYSIOPADS adhesive electrodes
	BERGONY MASK for electrotherapy on the face
	ELECTRODE TEST PEN for easy testing of the conductivity of plate electrodes
	ELASTIC VELCRO STRAPS for fixation of electrodes, with velcro strap, in 2 sizes (W x L 6 x 80 cm / 10 x 125 cm)
	PUNCTIFORM ELECTRODE for differentiated nerve and muscle stimulation (four attachments)
	IONTOPHORESIS FOIL special foil for iontophoresis
	GLOVE ELECTRODE for electrokinesis
	RECTAL /VAGINAL PROBES for treatment of incontinence
	PLATE ELECTRODES in 5 sizes: EF 10, 4 x 3 cm; EF 50, 8 x 6 cm; EF 100, 12 x 8 cm; EF 200, 17 x 11 cm; EF 400, 24 x 15 cm
	VISCOSE COVERS in 5 sizes: EF 10, 5 x 5.5 cm; EF 50, 11 x 9 cm; EF 100, 14 x 12 cm; EF 200, 20 x 15 cm; EF 400, 28 x 19 cm

Trolleys



Trolley Evident



Trolley Expert



Trolley Universal

The functional PHYSIOMED trolleys are characterised by their excellent stability. Lockable smooth-running castors ensure good mobility.

Additional accessories can be conveniently stored in the easily accessible swivel-out front, and the cables can be straightened without removing them. The four feet of the Evident units fit exactly into the depressions provided in the trolley and together with the locking system ensure the stability of the unit.

The Expert trolley is also equipped with a locking system for therapy devices. In the rear basket there is space for many accessories; damp viscose covers or sponges dry quickly.

The Universal trolley with its two shelves and a spacious drawer provides lots of room for your equipment and all the additional accessories.

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TECHNOLOGY FOR THERAPY

PHYSIOMED[®]