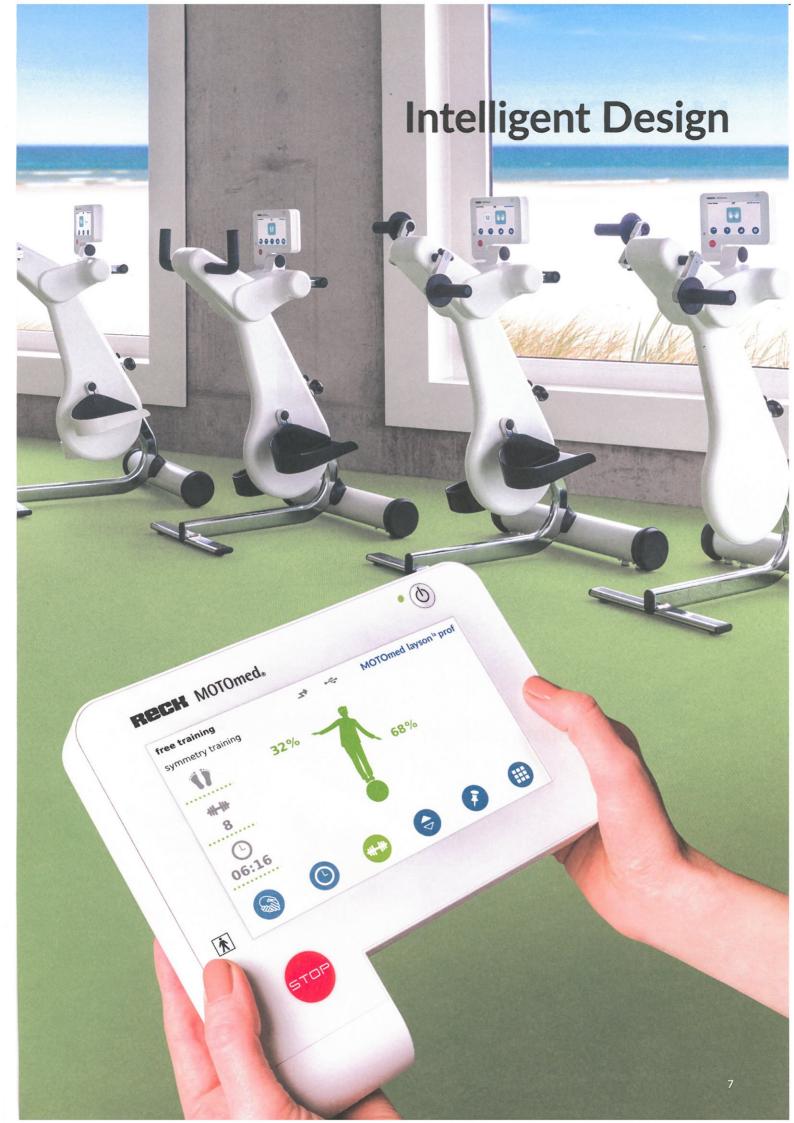


# movement - differently.

### Reck

Strong for people who value professional support in their movement.



## **Three Therapy Modes**

### passive

The motorized movement without physical effort is especially suitable for regulating muscle tone, loosening muscles, reducing spasms, maintaining joint flexibility and improved blood circulation and mobilization. The user can regulate the passive movement speed individually.

#### assistive

MOTOmed function ServoCycling enables a smooth transition from passive to active training mode. Even with minimal muscle strength, active training becomes possible due to this function. Residual muscle strength is detected and built up without overstraining.

### active

The MOTOmed training against finely adjustable resistance levels strengthens the muscles of legs, arms and upper body as well as the cardiovascular system. Strength, endurance and coordination can improve remarkably.

## **Therapy Programs**

The therapy programs are designed by educated sports scientists on the basis of therapeutic aspects. According to indication, therapy plan and endurance, your MOTOmed can be adapted to individual therapy goals.

#### Loosening program

The loosening program is a purely passive training, which moves and loosens the user's legs and/or arms/upper body with the help of a motor. The loosening program reduces the muscle tone in people with cramps or spasms.

#### Endurance program

Endurance training is an effective cardiovascular therapy with a low, continuous training stimulus over a longer period of time. Endurance training helps to build up or sustain basic fitness and improves the general state of health.

#### Strength endurance program

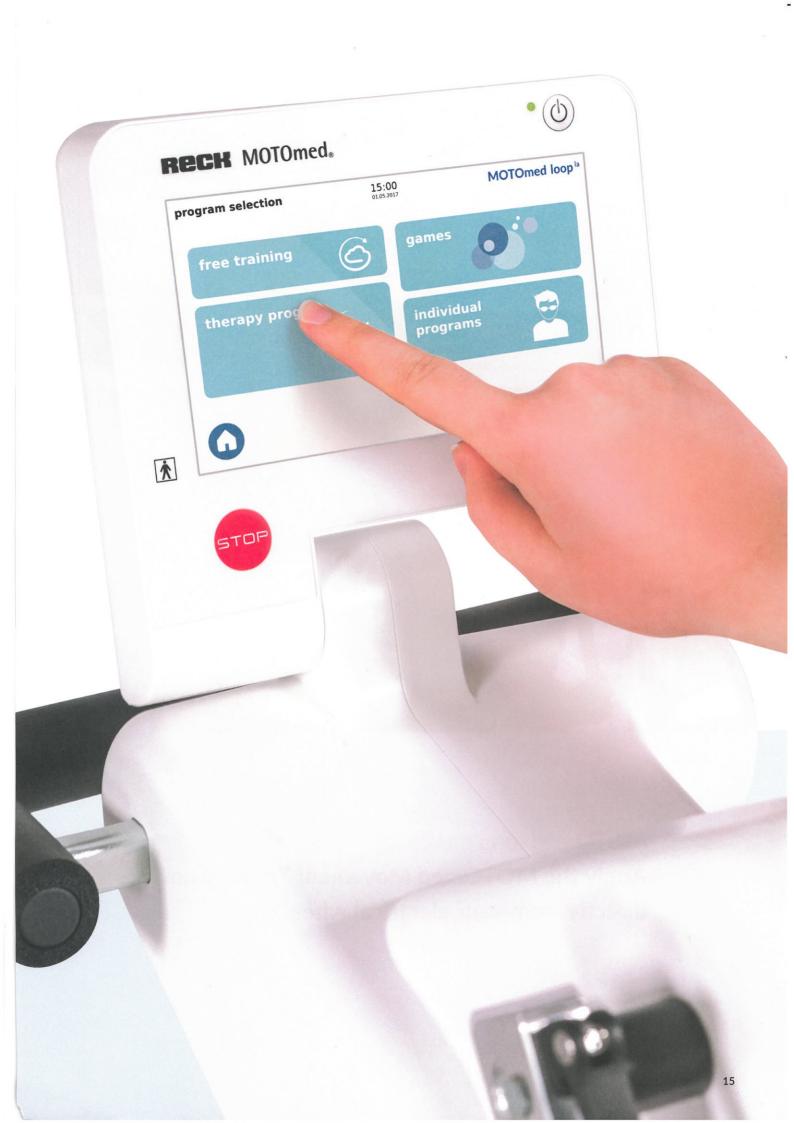
The strength endurance training is a combination of endurance and strength training. In comparison to pure endurance training, the training stimulus is higher while the training time is shorter. This training protocol focuses on targeted muscle training in order to build up muscle strength.

#### Individual programs

Aside from the therapy programs with pre-defined sequences such as loosening, endurance, strength endurance, Parkinson's, stroke and multiple sclerosis, the user can create and save his own therapy sequences.

#### **SymmetryTraining**

In active training a graphic display indiquates whether the users apply more strength on the right or on the left side or whether they train symmetrically. Particularly hemiplegic patients (e.g. stroke recovery or weight issues) profit greatly from this sensory-motor perception and coordination training.



## **Safety Concept**

#### SmoothDriveSystem

The smooth drive technology can loosen higher tones, slowly easing muscle pain. A gently adjusted belt drive enables a fluent movement.

#### MovementProtector

In case of a muscle cramp, spasticity or a simple movement freeze during the course of the training, this function automatically stops the pedals. Due to sensitive sensor technology the MovementProtector perfectly adapts to any change in tone.

#### **SpasmControl**

The automatic rotation change feature of the SpasmControl can ease spasms which are recognized by the MovementProtector. Legs and arms are relieved and the direction of rotation is switched following a brief resting period. The process is repeated until the spasm is loosened. This function is based on the therapeutic principle (antagonistic inhibition), that a bending spasm is loosened by stretching, while a stretching spasm is loosened by bending.



### Training feedback

The intelligent MOTOmed models give feedback: in real time during and after the training. The user receives information on the achieved duration, distance, symmetry, metabolic rate, tone, average and maximum active performance as well as the proportion of active to passive performance. To receive information, the user can choose between a total overview or a large individual presentation.

### **Innovations**



#### MOTOmed loop on Top

With the new and innovative height adjustment the user can adjust the height of the MOTOmed loop models without tools. Therefore, the movement trainers offer an optimal adaptation to the user for leg and arm training.

Ideally, the height adjustment expands the selection of seating positions for the MOTOmed Movement Therapy. That way the user trains at the MOTOmed loop from either active wheel chair, electrical wheel chair, nursing wheelchair, seat shell or chair.

The special advantage of the height adjustment for the user is the individual adjustment of the arm/trunk angle. This ensures an optimum training of shoulder, neck and back muscles. In addition. the users profit from the slightly elevated supine position that enhances the venous reverse flow.

### **Ergo handles**



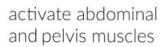








strengthen shoulder muscles



improve lymphatic flow





### Individualizing

Everything that is part of sports, can also be applied to movement therapy: MOTOmed accessories enable an ideal adaptation to individual training requirements.



### Hygiene concept

The high-quality material with smooth shaped surfaces of the MOTOmed Next Generation fulfills the high standards as part of the hygiene management in everyday clinical routine.



## **Intuitive and Digital**



#### Games

The training with its entertaining motivation games guarantees fun and good entertainment. The user engages in training that consists of strengthening, endurance, coordination and concentration. This can support the creation of new synapses and encourages the mental performance capability.

#### Videos

Video sequences with different scenes from nature accompany the users during their regular training with the MOTOmed loop and thus ensure relaxation and diverse training sessions.

#### Slideshow

Via a USB drive the users can import photos to the MOTOmed. Looking at their own photos gives the training an additional entertaining value.



position of handles for arm/upper body training



different positions of the handles for holding on to during leg training with MOTOmed loop.la

# Software coordinated change of training

#### Software coordinated change of training

At the MOTOmed loop.la the user can control the change between leg and arm training per touch on the display. The MOTOmed loop.la automatically changes the training mode.

#### Color touch screen

The users navigate the user surface in a simple and spontaneous way per touch and intuitively achieve their goal. The new 7" colour touch display offers intelligent functions in innovative form. Naturally, the display is suitable for wipe disinfection.

#### Upgrade bundle

Through upgrade bundles users can easily upgrade the MOTOmed loop.l or the MOTOmed loop.a to a MOTOmed loop.la.



## **Facilities and Clinics**

The MOTOmed *Professional Series* are customized models for diverse application fields in clinics and facilities.

#### Special Equipment of the MOTOmed loop.la prof

- 1 pneumatic spring supported height adjustment in 5 steps
- 2 QuickFix: Self-operated foot holders
- 3 leg guides with plastic-coated calf shells
- 4 all fixation straps are made from elastomer and are disinfectable





#### MOTOmed loop.la prof

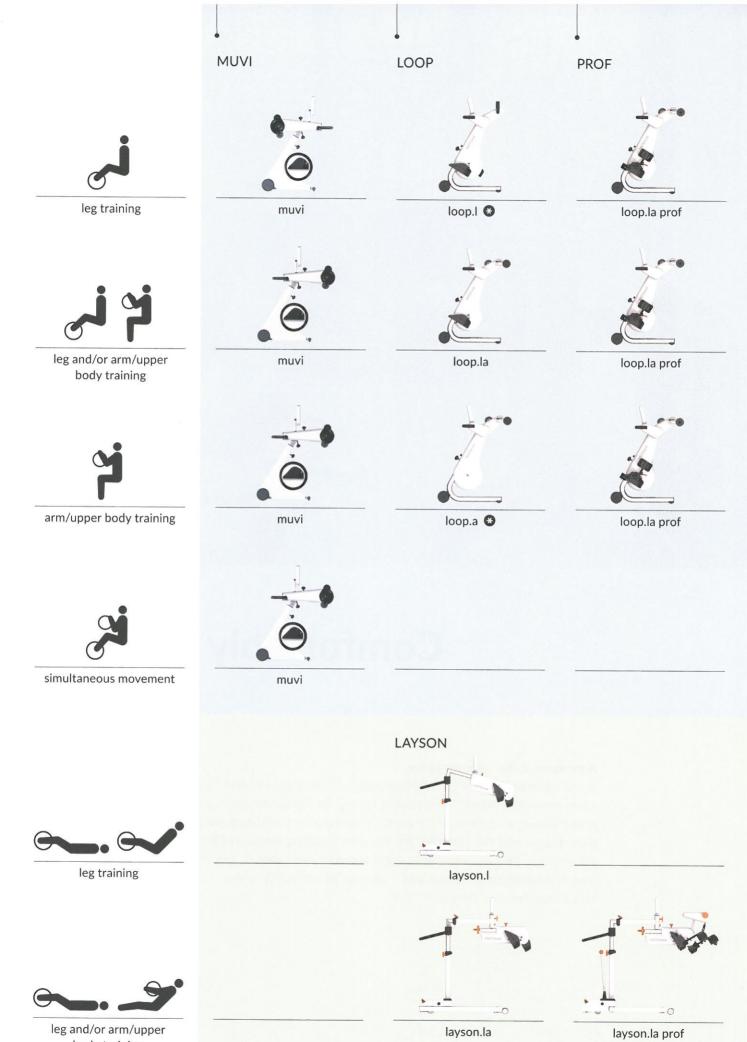
The Professional Series convinces in everyday life of facilities and rehabilitation units. The high-quality solid construction made of steel makes the devices durable and diverse in action, especially with its extended equipment. The MOTOmed loop.la prof complements the therapy spectrum for inpatient and outpatient treatments. The MOTOmed Movement Therapy supports the therapy process through targeted endurance, strength and coordination training. It can balance out or reduce consequences of lack of movement and relieving posture.

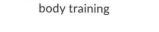


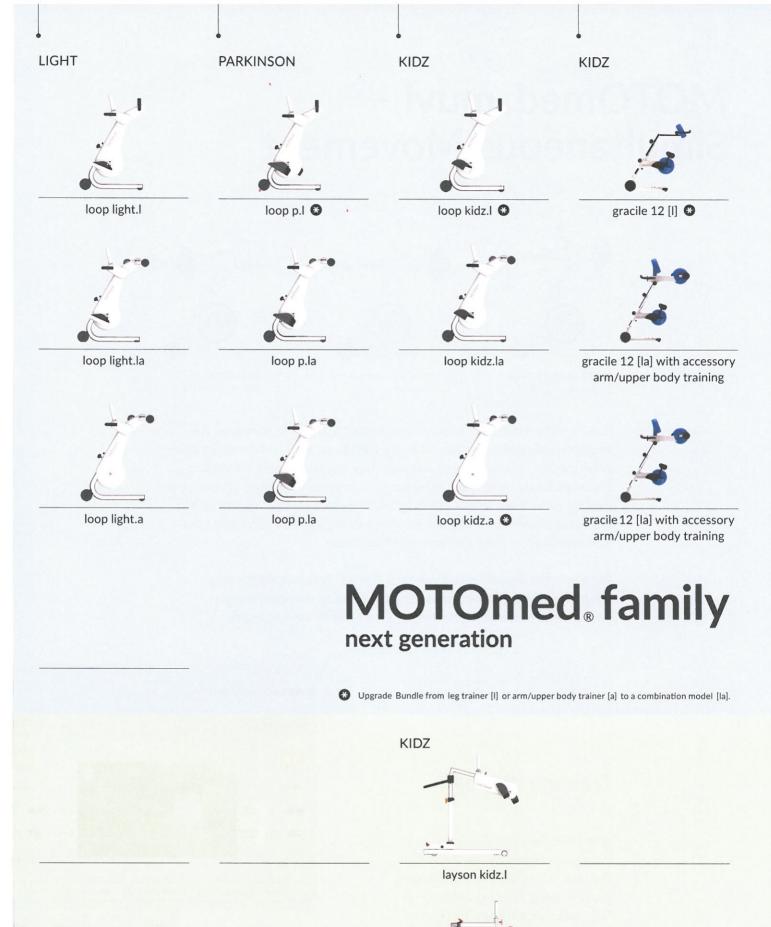
## **Comfortably at Home**

#### A movement that belongs to me

In the intensive care unit, in physiotherapy, during aftercare. And how about when you return home? The yearning for regular movement and well-being arises. People who have used the MOTOmed during the first phase of their disease feel this yearning. The need for soothing movement in everyday life is strong. Because what you have learned to appreciate during your time in rehabilitation – movement – you should not lack at home. – Get the MOTOmed for your home.







layson kidz.la

## MOTOmed<sub>®</sub> loop

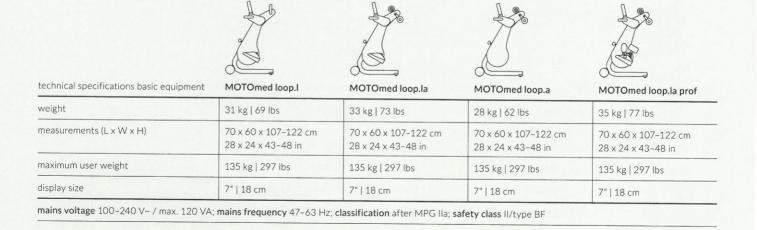
The MOTOmed models stand for future-oriented movement therapy in sitting position. Through the new design and its digital intelligence the user can experience the MOTOmed Movement Therapy in a completely new way. The MOTOmed loop is diverse and helps therapy and nursing staff with their work routine.

· plastic-coated foot shells

· Upgrade Bundle: leg or arm/upper body trainer is upgradeable

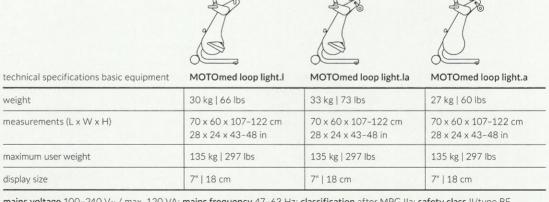
- · height adjustment
- · color touch display, inclinable
- · intuitive operation
- · MOTOmed accessories for individual requirements





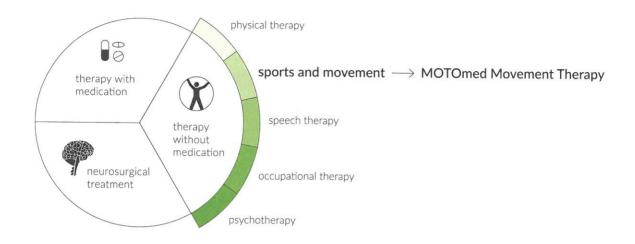
## MOTOmed<sub>®</sub> loop light





mains voltage 100-240 V~ / max. 120 VA; mains frequency 47-63 Hz; classification after MPG IIa; safety class II/type BF

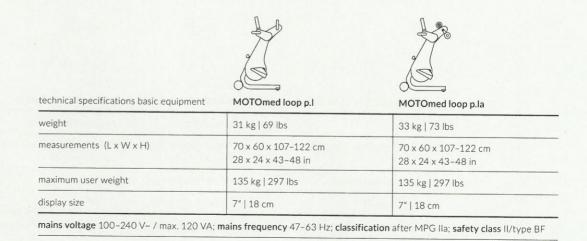
### MOTOmed<sub>®</sub> loop p **Parkinson**



#### MOTOmed in Parkinson's therapy

Regular movement therapy in combination with medication is the basis of recent Parkinson's therapy. The MOTOmed loop p has a software-controlled motor which enables a movement training with high revolution speed. The users can either train passively or actively with their own muscle strength.

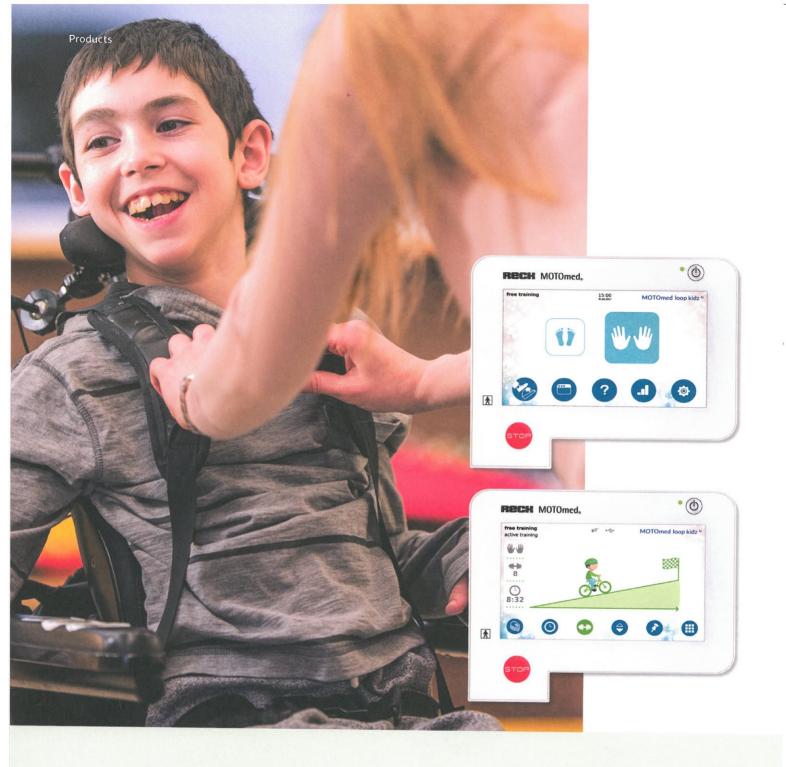
So far, positive effects of this so-called »forced excercise« were reported for gait ability, balance, akinesia, fine motor skills and posture. Regular therapy training with MOTOmed loop p also helps to improve Parkinson's-related symptoms such as tremor and rigor.





### **Forced Exercise**

Due to the therapeutic movement concept *Forced Exercise* the lower extremities of Parkinson's patients get moved noticeably faster than the symptoms of their disease would normally allow them to do. A group of researchers (Ridgel et al., 2009) from the USA found out that movement speeds up to 90 rpm help to improve the Parkinson's-related symptom of tremor. Moreover, a significant improvement of the finger's fine motor skills of about 30 % could be measured. During and after fast passive movements, brain sections which also get stimulated by Parkinson's medication, have been recognized as active. Therefore, the quick movements have an effect on the whole body.









technical specifications basic equipment	MOTOmed loop kidz.l	MOTOmed loop kidz.la	MOTOmed loop kidz.a		
weight	31 kg   69 lbs	33 kg   69 lbs	28 kg   62 lbs		
measurements (L x W x H)	70 x 60 x 107-122 cm 28 x 24 x 43-48 in	70 x 60 x 107-122 cm 28 x 24 x 43-48 in	70 x 60 x 107-122 cm 28 x 24 x 43-48 in		
maximum user weight	135 kg   297 lbs	135 kg   297 lbs	135 kg   297 lbs		
display size	7"   18 cm	7"   18 cm	7"   18 cm		

 $mains\ voltage\ 100-240\ V\ {\it `~}\ /\ max.\ 120\ VA; \ mains\ frequency\ 47-63\ Hz; \ classification\ after\ MPG\ IIa; \ safety\ class\ II/type\ BF$ 

# MOTOmed<sub>®</sub> loop kidz



## **Matrix - Functions and Accessories**

MOTOmed muvi	•	•	•	•		•	•	•		•		•	•	•
MOTOmed loop.la			•	4		•	•	•	•			•	•	•
MOTOmed loop.a	•		•			•		•				•	•	•
MOTOmed loop light.l			•			•	•					•		
MOTOmed loop light.la			•			•	•	•	•			•		
MOTOmed loop light.a			•			•		•				•		
MOTOmed loop p.l	•		•			1-90 rpm	•					•	•	•
MOTOmed loop p.la			•			1-90 rpm	•	•	•			•	•	•
MOTOmed layson.l			•			•	•					•	•	•
MOTOmed layson.la			•			•	•	•				•	•	•
MOTOmed loop kidz.l	•		•			•	•					•	•	•
MOTOmed loop kidz.la			•			•	•	•	•			•	•	•
MOTOmed loop kidz.a	•		•			•		•				•	•	•
MOTOmed gracile12 [I]	•				•	•	•				•		•	•
MOTOmed gracile12 [la]					•	•	•	•			•		•	•
MOTOmed layson kidz.l			•			•	•					•	•	•
MOTOmed layson kidz.la			•			•	•	•				•	•	•
	Upgrade Bundle: leg and arm trainer are upgradeable	simultaneous movement therapy (legs and arms at the same time)	color touch display, retractable and inclinable size 16:9 (display size: 7"   18 cm)	color touch display with tactile buttons, inclinable size $26.1\mathrm{cm}\times16.3\mathrm{cm}\mid10.3\mathrm{in}\times6.4\mathrm{in}$ (screen diagonal $12.1''\mid30.7\mathrm{cm}$ )	color screen with tactile buttons size 11,3cm x 8,4cm   4,4 in x 3,3 in (screen diagonal 5,7"   14,5cm)	passive speed from 1 to 60 rpm	leg training (passive, assistive, active)	arm training (passive, assistive, active)	change from leg to arm training and back per touch through the software	flexible positioning of the operating buttons on the screen (at the bottom, on the left or on the right side of the screen)	display SymmetryTraining through a bar chart	display SymmetryTraining through an animated icon	therapy programs	games / motivation programs

•	•		•	•	0	0	0	0	0	0	0
	•	•		•	0	0	0	0			
	•	•	•	•	0	0	0	0	0	0	0
	•		•				0		0	0	0
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	•	•		•	0	0	0	0			
	•	•	•	•	0	0	0	0	0	0	0
	•	•		•	0	0					
	•	•	•	•	0	0			0	0	0
	•	•		•	0	0	0	0			
	•	•	•	•	0	0	0	0	0	0	0
	•		•				0		0	0	0
		•		0	•	0	0	0			
		•	•	0	•	0	0	0	0	0	0
	•	•		•	0	0					
	•	•	•	•	0	0			0	0	0
videos	USB interface and serial interface	leg trainer height adjustable, without tools	arm trainer height adjustable, without tools	plastic-coated safety foot shells	leg guides with calf shells	self-operated foot holders	wheelchair stabilizer	pedal radius quick adjustment	hand fixation with wrist cuff	forearm shells with arm cuffs	tetra handles

- basic equipment
- O accessories

### Functions included in all MOTOmed models:

- · resistance levels from 0 to 20 (active)
- · electronic foot insertion and removal aid
- · safety stop
- MovementProtector
- · SmoothDriveSystem
- · SpasmControl
- · SymmetryTraining
- muscle tone display (average, measurement at the beginning and at the end of the training)
- training analysis
   (passive and active proportions are displayed separately)
- $\cdot$  regulation of motor power from 1 to 10

