



# **Product Catalogue**



**INTELLI-MIXER**



**SHAKERS**



**WATER  
THERMOSTATS**



**CENTRIFUGE-VORTEX**



**VORTEX**

**contact us**

21-133 Aizkraukles Str.  
Riga. LV-1006, Latvia  
T. +371 755 87 43  
F. +371 755 19 34  
E. [info@elmi-tech.com](mailto:info@elmi-tech.com)  
W. [www.elmi-tech.com](http://www.elmi-tech.com)



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laboratory equipment



# INTELLI-MIXER RM-2

## PERSONAL ROTATOR, VORTEX & BLOTTER

INTELLI-MIXER RM-2 is a combination of variable speed rotator, advanced multiple tube vortex in one machine. Vast selection of racks and operation regimes allow to accommodate the mixer for virtually any kind of mixing from gentle low speed hybridization up to strong test tube vortexing in a whole range of tubes from 0.5ml up to 50ml. Superior performance and flexibility allows to mix almost any kind of laboratory samples of any density with amazing efficiency. It also allows to program up to 3 personal custom regimes by user to insure always the best up to date functionality.

### PRODUCT FEATURES

- ▶ 3 Models selection.
- ▶ Easy to operate interface.
- ▶ Supports whole range of test tubes from 0.5ml up to 50ml.
- ▶ Rotation speed range from 1 - 99 RPM.
- ▶ **18** different programs of rotation and vortexing.
- ▶ **2** variable intensity vortexing programs.
- ▶ **2** additional custom programs that could be created by user.
- ▶ Specially designed blotting mode
- ▶ FLASH memory on-board for storing personal settings and saving new programs.
- ▶ Maintenance-free high performance stepper motor.
- ▶ Standby low energy consumption mode SLEEP.



### PRODUCT BENEFITS

INTELLI-MIX is easy to accommodate the current lab requirements by attaching different racks and selecting appropriate operation regimes. All the adjustments could be made very easily and within seconds. It makes INTELLI-MIXER a perfect mixing-assistant in the diagnostical center, medicine, biology, chemistry and vast variety of different laboratories.

### 3 SIZES OPTION



SPECIALLY DESIGNED BLOTTING MODE



18 GREAT MIXING REGIMES SELECTION.



2 REGIMES OF ULTRA EFFECTIVE VORTEX



2 BONUS CUSTOM PROGRAMMABLE REGIMES

FLASH MEMORY



ANY KIND OF TEST TUBES from 0.5 ml up to 50 ml



# V-SPIN™ WESTERN BLOT PROTOCOL.

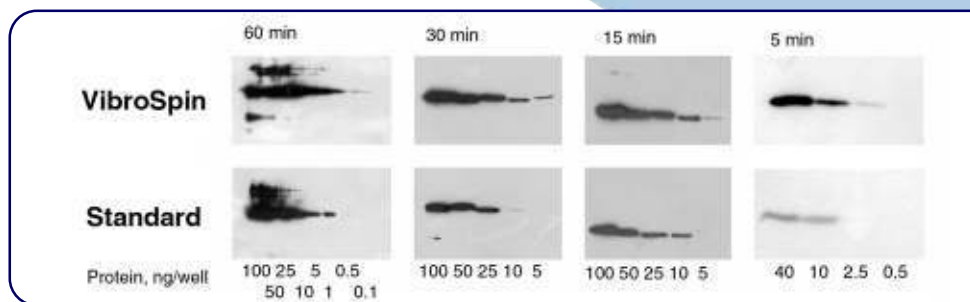
SPECIALLY DESIGNED PATENT PENDING TECHNOLOGY



This protocol is developed for usage with the orbital vibration rotator, Intelli-Mixer series with a specially designed program for Western Blotting. This incredible new feature insures significant advantages in comparison to the plastic bag or routine orbital shaker application.

The results may vary according to the particular antibody but in any case there are several visible advantages:

- ▶ better sensitivity: according to our studies, the sensitivity of the method is up to 20 times higher;
- ▶ higher specificity: reduces cross-reactivity up to 4 times;
- ▶ faster procedure: the method is 3 to 5 times faster;
- ▶ significant economy: the usage of reagents is up to 12 times less. In case of expensive or unique antibody it may play a crucial role in your experiments.



### SPECIFICATIONS

Rotation speed	RPM	from 1 up to 99
Rotation speed settings step	RPM	1
Overall number of operation regimes		23
Environmental temperature	°C	from 2 up to 50
Relative air humidity (at 20 °C)	%	up to 80
Power supply adaptor	⊖ ⊕	DC in 12V, 1000 mA

### ACCESSORIES

Test tube diameters	Number of test tubes in the rack		
	RM-2S	RM-2M	RM-2L
8-11 mm	28	32	42
13 mm	24	28	38
16 mm	14	16	22
30 mm	8	10	14





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## DIGITAL ORBITAL SHAKERS

The 'Sky Line' generation of orbital and rocking shakers is amazingly flexible, reliable and high performance line of universal laboratory equipment. Great selection of accessories and attachments allow easily accommodate shakers to different laboratory applications. Nice design, high performance, user-friendly interface and maintenance-free non-stop operation make this line of shakers perfectly applicable to vast variety of medical, chemical, biological and other laboratories.

### PRECISION DIGITAL CONTROL



#### FEATURES

- Optimal platform rotation amplitude for intensive mixing.
- Advanced stepper motor control system.
- Digital timer.
- High precision digital rotation speed controller.
- Great selection of different accessories and attachments.
- Sound notification when timer is out.
- Memory onboard for storing user settings.
- Possibility of continuous operation non-stop during days and days.

### MANUAL CONTROL



#### FEATURES

- Optimal platform rotation amplitude for intensive mixing.
- Simple and easy to operate controls.
- High precision digital rotation speed controller.
- Great selection of different accessories and attachments.
- Possibility of continuous operation non-stop during days and days.

## DIGITAL ROCKING SHAKER

Weight distribution on the platform



Attachable multi-level platforms

#### FEATURES

- Variable shaking angle from 1 up to 12 degrees.
- Shaking speed from 1 up to 50 shakes per minute
- Soft run stepping motor for top performance.
- Digital timer.
- High precision operation controller.
- Sound notification of timer program end.
- Memory onboard for storing user settings.
- Quiet and maintenance free mechanism insures possibility of continuous operation non-stop during days and days.

### SHAKERS ACCESSORIES



**ATTACHABLE MULTI LEVEL PLATFORM FOR DRS-12**

Allows to attach several levels to the rocking platform to increase the capacity of shaker. Is very effective and handy to operate.



4x 8x

**MICROPLATE ADAPTER**

Insures maximal convenience and efficiency working with different kinds of microplates. Depending on the size of a platform accommodates up to 8 and up to 4 micropates



**UNIVERSAL ROLLER CLIPS**  
Very effective universal solution for fixing different flat-bottom laboratory flasks and extra high and unstable laboratory flasks.



**UNIVERSAL MAGNETIC CLIPS**  
Excellent universal solution for easy and fast fixation of any kind of flat bottom laboratory flasks and bottles. Can be used in a combination with roller clips.



**LABORATORY FLASKS FIXATION ADAPTERS**  
An excellent solution to process big volumes of laboratory samples at a time.

### SPECIFICATIONS

	DOS-20S	DOS-10M/DOS-20M	DOS-10L/DOS-20L	DRS-12
Size of working space of platform:	mm 168 x 168	355 x 235	418 x 297	255 x 305
Amplitude of rotation of the platform(rocking angle):	mm(degree) 20	10 / 20	10 / 20	(1 - 12)
Type of rotation:	orbital	orbital	orbital	rocking
Time controller:	min 1-999 & timer off	1-999 & timer off	1-999 & timer off	1-999 & timer off
Speed of rotation (rocking):	RPM 10 - 250	from 50 to 500 / 300	from 50 to 500 / 300	(from 1 to 50)
Environmental temperature:	°C from +4 to +55	from +4 to +55	from +4 to +55	from +4 to +55
Relative moisture of atmosphere (at the temperature of 20 °C):	% up to 80	up to 80	up to 80	up to 80
Power supply (adapter)	⊖ ⊕ (DC in 12V, 1000 mA)	(DC in 12V, 1000 mA)	(DC in 12V, 1000 mA)	(DC in 12V, 1000 mA)
Size of the device (length x width x height)	mm 193 x 170 x 70	347 x 275 x 100	420 x 310 x 100	307 x 275 x 110
Weight	kg 1,4	5,5	7,5	3,5
		<b>S-3.02M.10M/S-3.02M.20M</b>	<b>S-3.02M.10L/S-3.02M.20L</b>	
Size of working space of platform:	mm	355 x 235	418 x 297	
Amplitude of rotation of the platform(rocking angle):	mm(degree)	10 / 20	10 / 20	
Type of rotation:		orbital	orbital	
Manual handle speed adjustment	RPM	from 50 to 500 / 300	from 50 to 500 / 300	
Environmental temperature:	°C	from +4 to +55	from +4 to +55	
Relative moisture of atmosphere (at the temperature of 20 °C):	%	up to 80	up to 80	
Power supply (adapter)	⊖ ⊕	(DC in 12V, 1000 mA)	(DC in 12V, 1000 mA)	
Size of the device (length x width x height)	mm	347 x 275 x 100	420 x 310 x 100	
Weight	kg	5,5	7,5	



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# DIGITAL THERMOSTATIC SHAKERS DTS-2 & DTS-4

# DIGITAL THERMOSTAT MT-2



## FEATURES



### 2 or 4 IMMUNEPLATES

Allowing to use simultaneously 2 or 4 microplates, digital thermostatic shakers DTS-x gives a beautiful increase in processed volume, while saving the lab's space and keeping the quality and performance on the highest level.



### 1.5 mm ROTATION ORBIT.

Optimally chosen orbit of rotation gives an exceptionally good performance while working with any kind of standard microplate.



### BI-DIRRECTIONAL HEATING SYSTEM.

The hermetic thermostatic container of the digital thermostatic shakers DTS-x is equipped with a bi-directional heating system with heaters in the platform and in the lead heating the whole volume uniformly. This insures undependability of the room temperature, excellent temperature uniformity across the plates and eliminates any condensation, giving only the best results even if micro-volumes of samples are used.



### SIMULTANEOUS DISPLAY OF ALL THE ADJUSTMENTS AND PARAMETERS.

By having a separate display for each adjustable parameter, digital thermostatic shakers DTS-x make it amazingly simple to control Time, Temperature and RPM settings, giving maximal comfort and flexibility.



### AUTONOMOUS MEMORY FOR STORING USER SETTINGS.

Even if the machine is unplugged from the power supply, all the user settings will remain in the energy-independent memory, adding extra protection and user comfort.



### TECHNICALLY GUARANTEED ABILITY FOR ROBUST DURABLE OPERATION.

All the elements of the Digital Thermostatic Shakers DTS-x are specially designed for daily hard-duty, long-lasting operation, that makes it a reliable partner in the lab.

MT-2 is great accuracy thermostat for 2x different micro-plates. Advanced double heating system which insures heating from the lead and from the platform together with the hermitic aluminum container and digital platinum sensors allow to achieve incredible heating accuracy.

## FEATURES

- Bi-dirrectional heating system
- 2 microplates capacity
- Two independent digital timers
- Alarm signal indication timer programs' end
- Celsius / Fahrenheit temperature management

## BENEFITS

Specially designed bi-directional heating system and user friendly controls integrates the device perfectly into various analytical laboratory applications.

## TECHNICAL SPECIFICATIONS

	DTS-2	DTS-4	MT-2
Maximal number of microplates on the platform.	2	4	2
Standard supported microplates dimensions	86 x 128 x 15	86 x 128 x 15	86 x 128 x 15
Temperature range:	ambient +5 to 60	ambient +5 to 60	ambient +5 to 60
Temperature control accuracy	0,1	0,1	0,1
Platform rotation type	orbital	orbital	-
Platform rotation orbit	1.5	1.5	-
Platform rotation speed	100 - 1300	100 - 1300	-
Timmer	continuos / 1min - 999min	continuos / 1min - 999min	continuos / 1min - 999min
Ambient temperature range	from +4 to + 40	from +4 to + 40	from +4 to + 40
Relative atmosphere moisture at 20 °C	max 80	max 80	max 80
Power suply	220V; 50/60Hz	220V; 50/60Hz	220V; 50/60Hz
Power consumption (at maximal speed)	max 90	max 125	max 75
External dimensions (length x width x height)	347 x 275 x 115	420 x 310 x 115	347 x 275 x 115
Weight	6.2	7.8	5.3



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## WATER THERMOSTATS TW-2.02 AND TW-2.03

## MAGNETIC STIRRER MS-01

TW-2.02 and tw-2.03 are 8.5 liter stainless steel and plastic bath high accuracy thermostats.

### PRODUCT FEATURES

- High accuracy defined temperature control in the bath.
- Automatic water level detection for heater protection.
- Variable water circulation speed.
- External water circulation pump for heating outer objects.
- Intensive water intermixing for accurate temperature maintenance.
- Slim design for convenient disassembling and cleaning.

### PRODUCT BENEFITS

TW-2.03 is very easy handled, reliable and high performance thermostat for various laboratory needs.

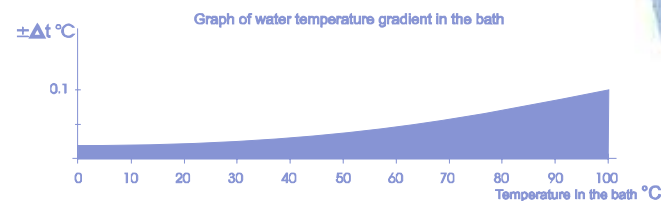
### WATER THERMOSTAT TW-2.02

UP TO 100°C



### WATER THERMOSTAT TW-2.03

UP TO 90°C



**MAGNETIC STIRRER MS-01  
CAN BE USED IN  
A COMBINATION WITH  
WATER THERMO-BATH**



**MAGNETIC STIRRER MS01** is a powerful and simple to use four position stainless still magnetic stirrer.

### PRODUCT FEATURES

- Four positions for effective mixing in different size flat bottom laboratory flasks.
- Compatibility with ELMI thermostat TW-2.03
- Stainless still highly resistible body.
- Can be easily integrated in different lab processes.

### PRODUCT BENEFITS

It is specially designed to operate with ELMI water thermostat TW-2 series. Together with TW-2.03 heating functions it becomes possible to maintain highly accurate temperature maintenance as well as mixing efficiency control. Reliability, simple operation and noiseless operation make MS01 perfect assistant in any laboratory.

### WATER THERMOSTATS SPECIFICATIONS

SPECIFICATIONS		TW - 2.02	TW - 2.03
Temperature range in the bath:	°C	from environmental to 100	from environmental to 90
Accuracy of temperature maintenance in the bath:	°C	±0,1	±0,1
Max time of set temperature achievement:	min	50	50
Max bath capacity	L	8,5	8,5
Temperature stabilization above the environmental	°C	3	3
Water circulation speed (variable)	L/min	1-4.5	1-4.5
Voltage and frequency:	V; Hz	220V; 50Hz	220V; 50Hz
Power consumption	kW	up to 1,5	up to 1,5
Size of the device (length x width x height)	mm	320 x 265 x 260	320 x 265 x 260
		4,9	2,8

### MAGNETIC STIRRER MS01 SPECIFICATIONS

Speed range	RPM	80 - 1 500
Liquid volume range for one mixing place	L	from 0.2 up to 2L
Power adapter output	⊖ ⊕	DC in 12V, 1 000 mA
Dimensions (length x width x height)	mm	210 x 270 x 35
Weight	kg	1.8



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# CENTRIFUGE-VORTEX CM-70M-12



This compact personal equipment is a unique combination of 1000 - 12000 rpm (10 000g) table centrifuge and tunable shaking device in one tool. Just forget boring procedures of taking out and putting in the series of Eppendorf tubes or PCR tube strips to shake your samples then spin them down in order to shake them again. Use your attention for something more creative than that mechanistic work!

Now it is the simple and fun step in your experiment. Just put your samples into the machine, then choose the inbuilt program and press the button. The device will shake your samples with the intensity you need, then automatically spin down the liquid. And it will do it as many times as necessary. It simplifies your experiments and makes them more reproducible by standardizing mixing parameters. It economizes your time and removes the risk of mistakes.

You can use the device as a standard table centrifuge or as the standard shaker. You can enter the simple program of vortexing and subsequential centrifugation in different sequences for your specific needs. You can have a fun and just play with this simple but smart machine. It is flexible, reliable, compact, safe, and it is really personal.

## Key features

- 0 - 12 000 RPM in 8 sec.
- 2 Rotors option
- Safety lock
- 3 Sample Preparation modes
- 9 Vortex-Mixing modes
- Multiple Tubes Vortex-Mixing
- Manual Vortex-Mixing of an individual tube
- By touching special sockets in the rotor
- Ideal for low volume applications
- User control of all parameters insuring maximum flexibility and complete reproducibility of samples
- Decreased reagent volume without increase in error
- reduced sample preparation time
- Multiple instruments in one for reduced equipment costs



## Speed of operation

CM-70M provide a simple and effective spin-mix-spin sequence. It can be programmed to complete the cycle automatically with tubes positioned in the rotor throughout, resulting in a dramatic time saving and consequently a considerable cost saving. For example, time taken to complete the cycle with 100 tubes using Multispin is approximately 4 minutes, compared with 35 minutes for individual instruments.

## Applications

- PCR diagnostic laboratories
- biochemical clinical laboratories
- preparing samples prior to PCR reactions, gel electrophoresis and enzyme reactions
- immunoprecipitations
- cell permeabilisation by chelating or hydrophobic agents for reaction in situ
- low solubility drug testing
- cell washing from culture media after fermentation
- molecular and cell biology,
- immunology, biochemistry,
- physical and colloidal chemistry,
- study of nanoparticles,
- analytical chemistry.

## Reduced volumes

By the simple practice of spinning samples before and after mixing, lower reagent volumes can be used without any increase in sample error, and the CM-70M was developed specifically for this purpose.

- powerful G force
- timer for accurate control of spin and mix time
- accurate control of spin speed
- 9 stage control of mixing strength

## CENTRIFUGE CM-70M-12 ACCESSORIES

### Rotors

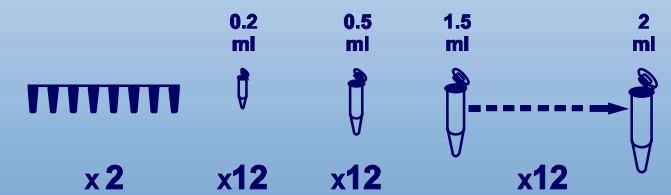


0.2 ml PCR strip rotor.



Universal rotor

### Supported test-tubes



## VORTEX MIXER V-3



### 2 TYPES OF EXCHANGEABLE VORTEX ADAPTERS

GRID-TYPE ADAPTER      CONICAL-TYPE ADAPTER



VORTEX V-3 is a pretty looking and very easy handled vortex mixer for any type of test tubes of up to 50 ml volume.

### PRODUCT FEATURES

- Amazingly strong.
- Touch or hands free mode.
- Simple vortex intensity regulation.
- 2 exchangeable vortexing adapters.
- Quiet and maintenance free mechanism.
- Half-sphere shape for maximal stability on the desktop.

### PRODUCT BENEFITS

V-3 is simple and handy solution for current laboratory tasks.



### SPECIFICATIONS

		CM-70M-12	V-3
Rotor rotation speed	RPM	from 1000 to 12 000	-
Rotor shaking speed (vibrations per minute)		140 - 3200	50 - 3400
Maximal centrifugal force	RCF	10 000	-
Timer	min	0.1 - 99	-
		9	-
Vortex rotor vibration amplitude	mm	programmable	4
Programmable Sample Preparation mode		3	-
Dimensions (L x W x H)	mm	190 x 170 x 115	130 x 60
Power supply adapter	V	100 -240 / 24 VAC	100 -240 / 12 VDC
Weight	Kg	1.4	0.6