EUROPEAN MANUFACTURER OF SWIMMING POOL DEHUMIDIFIERS AND HEAT PUMPS





Servin Million

Product Portfolio

"We conceive new possibilities, shape new technologies, and make our products forerunners."



Ing. Tibor Kovacs, CEO

Microwell, spol. s r.o. is a European designer, developer and manufacturer of dehumidification and heating system solutions. Founded in 1992 in Slovakia, Microwell is ISO certified and specialised in advanced products with proven top performance results. Recognised by customers, appreciated by partners and rewarded by industry's professionals and experts, Microwell takes pride in being technology leader with extensive industry experience setting the trends that are yet to come.



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HOW WE WORK

INNOVATIVE SOLUTIONS & TECHNOLOGICAL ADVANTAGE

Microwell develops and manufactures well-rounded product assortment with two key specialisation areas - **dehumidification and heating systems**. Through continuous improvement and permanent focus on our customer, our products achieve results that push them in the lead. Ingrained in every step of the development process from research to assembly and final installation, Microwell products display innovation, sophisticated engineering, outstanding quality and craftsmanship. Distinguished as trendsetters, Microwell products are built on our core commitment. We are committed to efficiency.

EFFICIENCY THAT MATTERS

We constantly focus on energy efficiency in each part of our products. Our goal is to be the most energy efficient on the market being able to save money on energy bill for our customers. Our products are equipped with features unique to Microwell machines.





LEADING TECHNOLOGY

Based on a review done in 2016 and ISO17025 lab testing of products by various manufacturers across all models, Microwell devices came on top, outperforming the others by up to 30%. Our machines are better, more powerful and of higher quality.*

SMARTER FUNCTIONALITY

Inspired by the pace of progress, all Microwell products are continuously evolving to reach the full potential of ultimate usability, intuitive operation, feature sophistication and compliance to all the most challenging demands and expectations.

APPEALING DESIGN

Microwell product design is recognised in more than 30 countries globally. Over the years products have been awarded several prizes. Thanks to wide make & finish options our products can blend in, stand out or perfectly fit in any environment.

GREATER PRODUCT RANGE

Based on close relationship with customers, Microwell provides functionality and benefits that consumers desire throughout matchless selection of products, their make, design and accessory options. There is no pool or customer that could not be served by a Microwell product.

HIGHER MONEY SAVING

Thanks to outstanding design, leading technology and upto-date concepts, Microwell products achieve up to 36% lower* energy consumption than the others. Our product saves you money every day and helps to keep your bill under control.





We develop intelligent products with inspiring efficiency performance for superior experiences.



DRY SIREN - CEILING SWIMMING POOL DEHUMIDIFIER

Innovative swimming pool dehumidifier with modern features, low energy consumption and internet control. Designed to control humidity in swimming pools.

SWIMMING POOL DEHUMIDIFIERS

Operating on the condensation principle, DRY swimming pool dehumidifiers are advanced and visually attractive solution for an effective humidity control.

SWIMMING POOL HEAT PUMPS

Designed on the principle of renewable energy source, Microwell heat pumps are designed for highly efficient pool water conditioning.

HIGH CAPACITY POOL DEHUMIDIFIERS

Capable of performing the greatest humidity extraction high-capacity pool dehumidifiers are the most efficient solutions for large swimming pool areas.

QMAX TESTER

Completely portable Qmax Tester is a unique device for measurement and optimisation of heat pump's performance, ready to assist pool specialists on site.

INDUSTRIAL DEHUMIDIFIERS

Suitable for use in various environments, industrial dehumidifiers series T40 to TE120 are robust and durable, yet very easy to handle and move around.

MUSEUM DEHUMIDIFIERS

Compactly designed DRY GALLERY museum dehumidifiers deliver reduced vibration and noise operation especially for closed exhibition environment.

MICRO+

We constantly focus on energy efficiency in each part of our products. Our goal is to be the most energy efficient on the market being able to save money on energy bill for our customers. Our products are equipped with features unique to MICROWELL machines.

MICROWELL DRY SIREN is the ultimate superstar, the first ceiling swimming pool dehumidifier in the world. Combining all what Microwell technology has to offer, DRY Siren is an intelligent and visually captivating solution of paramount performance, setting a new tide in the industry. Breathtaking dehumidifier with extra features.

ULTIMATE PERFORMANCE MEETS SUPERIOR DESIGN

MICROWELL DRY Siren is built on inverter compressor designed as split system. The unit also uses DC high energy efficient fan. Operations are microprocessor controlled and the control provides with 24/7 surveillance from around the globe.

4 PRODUCTS IN 1

Pushing the boundaries of what is possible, DRY Siren combines functionality that surpasses current standards. As highly effective dehumidifier, DRY Siren is equipped with a loudspeaker and LED lamp. Also, it serves as microclimate protection, detecting and displaying the level of humidity in real time.

STANDING AMONG THE STARS

Placed on the ceiling, MICROWELL DRY Siren tackles the humidity directly at the evaporation source, preventing the humidity to accumulate and condensate.





DRY SIREN - CEILING SWIMMING POOL DEHUMIDIFIER

STANDING AMONG THE STARS

cool light range

low humidity

ideal humidity

high humidity

 \mathbb{D}

warm light range





DEHUMIDIFIER

Microwell DRY Siren is cutting edge dehumidifier, designed to meet the highest standards and user experience. As the first round ceiling dehumidifier DRY Siren is constructed as dual split unit, capable of all round and thorough humidity extraction.

MICROCLIMATE PROTECTION

Overseeing DRY Siren at work and monitoring the levels of humidity in real time is Microwell microLIGHT+technology that transmits the humidity reading into a multi-LED light system to deliver complete microclimate protection.

LOUDSPEAKER

Most convenient extension of DRY Siren functionality is a Bluetooth speaker with output of 80W. Easily paired with any Bluetooth device, built-in Bluetooth speaker streams music, radio or podcast, enabling full and rich multimedia experience.



LED LAMP

Z

Built-in LED lighting system is using 50W LED LAMP. With user-friendly options for adjusting light brightness and colour temperature the LAMP can be easily adjusted to meet any customer's demands.

GLOBAL REACH | 24/7 REACH

DRY SIREN is connected to live internet via WIFI. This allows a user to reach hers or his DRY SIREN 24/7 from any place on Earth with internet connection. This global coverage is ensured by 99,9% availability of DRY SIREN server where application and system are operated. Being out of your home or out of your property, you can still see the actual humidity and air temperature in your pool. Also you will see if your DRY SIREN is working, currently drying or in stand-by.

microSAFETY+

microSAFETY+ is a supervision system included by standard in DRY SIREN swimming pool dehumidifier models. The system monitors each DRY SIREN on constant basis. In the case of a sign of technical problem or possible malfunction, the system creates a comprehensive report with technical data and sends it to Microwell automatically. Microwell has then the ability to advise the distributor, reseller or installer upper hand to take necessary measures to rectify the problem and avoid further damages. microSAFETY+ effectively protects your property 24/7. The data transfer is securely ciphered.

NO NOISE OR VIBRATION

DRY SIREN is a split dehumidifier with the compressor out of pool hall. The only sound you can hear while the unit is running is a DC fan. This is extremely quiet (35dB(A) from 1m).





FULL CONTROL

DRY SIREN mobile application allows you to actively take control of dehumidification process, LED lamp, Bluetooth speaker, microLIGHT+ and unit's self-diagnosis. From anywhere in the world, anytime, you are able to observe your unit's current status and air relative humidity and air temperature.



	Pool surface	Extraction rate 30°C / 60%RH	Extraction rate 30°C / 80%RH	Air flow	Noise evel (at 1 m dist.)	Power consumption	Compressor	Heat output	Refrigerant	Dimensions netto (W x H x D)	Weight netto / brutto
SERIES	m²	l/24hrs	l/24hrs	m³/h / Pa	dB (A)	W		W		mm	kg
DRY Siren Mono	60	67	104	1000	35	1200	ON/OF	4500	R410A	Ceiling unit 1205 x 278 Compressor unit 251 x 467 x 404	40 / 46
DRY Siren Due	120	134	208	2000	35	2300	ON/OF	8750	R 410 A	Ceiling unit 1205 x 278 Compressor unit 251 x 467 x 404	50 / 56

Microwell reserves the right to change the technical data without notice.



INSTALLATION

DRY SIREN is a split dehumidifier with ceiling unit and compressor unit. Ceiling unit is equipped with evaporator, condenser, fan, Bluetooth speaker, LED light and microLIGHT+. Ceiling units are connected to compressor unit with refrigerant copper tubes.

CEILING UNIT PLACEMENT

Ceiling unit is designed to be fixed directly on concrete or wooden ceiling structure or into lower ceiling using adjustable bar.

CONDENSATE DRAIN

DRY SIREN ceiling unit is equipped with condensation drain pump with 40 cm vertical discharge. The pump is of energy A+ class.



COMPRESSOR UNIT

SWIMMING POOL DEHUMIDIFIERS

DRY 300

Series DRY 300 provides full swimming pool environment control by monitoring and regulating humidity and air temperature. Units are suitable for small pools, wellnesses or hot tubs.

DRY 400

Series DRY 400 provides full swimming pool environment control by monitoring and regulating humidity and air temperature. Units are suitable for smaller pools, wellnesses or hot tubs.

DRY 500

Series DRY 500 provides full swimming pool environment control by monitoring and regulating humidity and air temperature. Units are suitable for medium pools, wellnesses or hot tubs.

DRY 800

Series DRY 800 provides full swimming pool environment control by monitoring and regulating humidity and air temperature. Units are suitable for bigger pools, wellnesses or hot tubs.

DRY 1200

Series DRY 1200 provides full swimming pool environment control by monitoring and regulating humidity and air temperature. Units are suitable for big pools, wellnesses or hot tubs.

- up to **30 m²**

— up to **45 m**²

up to **60 m**²



MICROWELL DRY swimming pool dehumidifiers are

an innovative and visually attractive solution for indoor pools. Working on the principle of condensation, they are removing humid air from swimming pool hall, replacing it with dry and warm air. Their effective performance is proven to be the best in class. They solve humidity problems and maintain healthy environment by removing condensation and providing free heating through heat recovery up to 3,5 times!

5 PRODUCT LINES FOR EVERY POOL

MICROWELL DRY range of swimming pool dehumidifiers are designed to fit every pool, from hot tub through residential bath to leisure centre pool and effectively extract humidity. Consisting of 5 product lines, the DRY range is designed to meet the functionality indoor swimming pool owners require.

BEST EFFICIENCY IN CLASS

Conceived and designed to deliver more, MICROWELL DRY swimming pool dehumidifiers are a highly innovative solution for indoor pools. Operating on the condensation principle, they provide constant, reliable and effective heat recovery with the highest efficiency.

ATRACTIVENESS TAILORED

Technologically advanced DRY swimming pool dehumidifiers with their trendy appearance are made to satisfy high expectations of pool owners. Offering an extensive selection of cover materials and colours, they fit any environment, application and use.

PLENTY OF OPTIONS

Microwell DRY swimming pool dehumidifiers are designed with customer in mind. Built with best materials, modern equipment and carefully executed processes on every step of product development, they offer advanced functionality and the widest selection of accessories for customer's satisfaction.



New Design DRY 300/400/500 PLASTIK WAVE

We would like to introduce the **new design** of our favourite product Dry 300 plastic. The original model was redesigned into state of the art shape of waves.



Check our new product in new 360° view mode on **Microwell.eu**





WAVE

Microwell acryl swimming pool dehumidifier line are entry level economy models providing with necessary humidity control at the most strict energy efficiency. They can be equipped with all accessory options and are suitable for every installation.

METAL

METAL swimming pool dehumidifiers come in exclusive metal cover with built-in digital dehumidifier control. Metal has 3 protection layers to ensure 100% corrosion free and reliable material. METAL design is available in any RAL colour.

SILVER

Microwell offers the most fashionable line of swimming pool dehumidifiers coming in stainless steel cover. The material, AISI 316L stainless steel, is designed to withstand chemical environment of a swimming pool. Built-in digital dehumidifier control is standard.

STREET, STREET

DUCT

Microwell offers line of ducted swimming pool dehumidifiers. Their advantage is that they are small and powerful. They are designed to be installed in technical room and provide with comfort humidity control along with air heating via floor or ceiling grills.

THROUGH-THE-WALL SET

Through-the-wall adapters are elegant ductwork solution for behind the wall installation of a dehumidifier. They are designed to supply and exhaust air through the ducts most effectively, especially in smaller pool rooms. Anodised aluminium grills have flashy design.



COMPATIBILITY DRY 300, DRY 400, DRY 500 COMPATIBILITY All DRY range COMPATIBILITY DRY 300, DRY 400, DRY 500

COMPATIBILITY 500 All DRY range

COMPATIBILITY All DRY range

IDEAL HUMIDITY

Humidity is not an enemy when controlled but can cause serious troubles otherwise. Ideal humidity for pool or spa users is when they feel comfortable. This feeling is achieved by a relative humidity from **55%** to **65%** Humidity above **70%** is detected by condensation on windows and walls and continuously deteriorates the pool or spa environment. It is also a perfect environment for mould and bacteria to grow. Humidity lower than 45% actually causes a reversed problem to bathers in the form of dry feeling and possible harm to mucous tissue. The innovative series of Microwell dehumidifiers keep the humidity at ideal 55%-65%.

HEAT RECOVERY

Every dehumidifier is built on heat recovery principle providing up to **3.5** times more energy than it consumes.

0.05€ per liter at average rate 0,15€/kWh

+5°C | +40°C

application

WIDEST selection of models, accessories and finishes

the

DRY Product Portfolio



The widest selection of models, finishes and accessories.

FRESH AIR SUPPLY

Each Microwell dehumidifier has fresh air supply possibility. The air inlet is located under the condenser, that way the incoming fresh air is effectively heated at no cost thanks to heat recovery.

WIDE COLORS OPTIONS

Microwell offers wides options of colors on market.

AIR FILTER

Although a pool is a generally very clean place, hotels or public venues may suffer from fluff and dust. Each Microwell dehumidifier can be equipped with an effective air filter on demand. Filter is designed to withstand harsh environment conditions of a pool chemical air content. The structure is made from fiberglass supported on an aluminum frame.

MOBILE STAND

Microwell mobile stands are highly practical and lightweight mobile mounting solution for dehumidifiers. Designed to provide more flexibility, even distribution of weight and safe transport, mobile stands are made from metal frame mounted on four rotation casters. The frame is covered with anti-corrosive powder coating and can be additionally coloured in any RAL colour on demand.









available in 2 SIZES

COMPATIBILITY All DRY 300, DRY 400, DRY 500 models

COMPATIBILITY All DRY range

COMPATIBILITY All DRY Metal range COMPATIBILITY All DRY range

The widest selection of models, finishes and accessories.

REMOTE WIRELESS HUMIDISTAT & THERMOSTAT

EASY 300 is a remote wireless device for monitoring and controlling humidity and air temperature. It communicates wirelessly through 866MHz interface with the dehumidifier and is able to set the requested humidity and air temperature in real time. Unit consists of the transmitter with highly intuitive digital display, receiver and antenna. Signal transmission works up to 30m in buildings or up to 100m in free spaces.

REMOTE WIRED HUMIDISTAT

HYG 6001 is a remote wired device for monitoring and controlling of humidity. The unit is mounted on any surface and at any distance from a dehumidifier, communicating through a signal wire, which is directly connected to electro control box of a dehumidifier. It enables very easy management and regulation of required humidity level in real time with rotary humidistat, working within the range 30 to 100% Rh.

BUILT-IN DIGITAL HUMIDISTAT & THERMOSTAT

Built-in digital humidistat & thermostat is a convenient, accurate solution for temperature and humidity control. It is supplied by standard to all Metal, Silver and Duct swimming pool dehumidifier models. It helps to minimise the energy consumption and maintains normal humidity levels in any environment. The unit is also designed to be intuitive and selfexplanatory.

FLOOR GRILLS

Floor grills are elegant slotted inlet solution for pool hall air supply. Placed next to the windows, they enable air flow in swimming pool hall, creating an air curtain, which prevents vapour condensation. They are made of highly durable and corrosion free aluminium and come in symmetrical, asymmetrical and removable design with a variety of equipment, such as mounting rail, substructure channel, diffusers, corners, end parts, etc..



100m outside - 30m in buildings

COMPATIBILITY All DRY range



range **30%** to **100% RH**

COMPATIBILITY All DRY range



range **5%** to **100% RH**

COMPATIBILITY All DRY range



variety of equipment

COMPATIBILITY All DRY DUCT models

The widest selection of models, finishes and accessories.

EXPANSION VALVE

Thermostatic expansion valve (TEV) controls the amount of refrigerant flow into the evaporator. By preventing the overheating, it allows dehumidifier to work effectively in ambient air temperature up to 42°C. This is effective mainly in spa and sauna areas. Thermostatic expansion valve (TEV) can be combined with Antifreeze thermostat to create the widest operational temperature range in the market from 15°C to 42°C.

ANTIFREEZE THERMOSTAT

Antifreeze thermostat is a coil temperature sensor designed to prevent the dehumidifier's coils from freezing. It allows dehumidifier to work effectively in ambient temperatures down to 15°C. Antifreeze thermostat can be used together with a thermostatic expansion valve (TEV) to create the widest operational temperature range of dehumidifier from 15°C to 42°C.

HOT GAS DEFROST

Microwell dehumidifiers can be equipped with hot gas defrost function to provide with an effective and continuous humidity control by ambient air temperatures from +5°C. Hot gas defrost uses four-way valve to reverse the refrigerant cycle and can effectively defreeze the dehumidifier with hot gas. Hot gas defrost is used in low temperature applications.

AIR HEATING

Each Microwell dehumidifier can be equipped with additional air heating on the top of heat recovery, either as Low Pressure Hot Water or Electrical heater. LPHW is designed as high temperature heating for heated water up to 90°C providing capacities 3.5kW, 5kW and 7kW. Electrical heating is an aluminium resistance 230V AC coil with capacities 2kW and 4kW. LPHW can be combined with Solenoid valve to result in completely automated heating system.

7

operational temperature to + 42°C

COMPATIBILITY All DRY 300 and DRY 500 models



operational temperature from **+ 15°C**

COMPATIBILITY All DRY range operational temperature from + 5°C

COMPATIBILITY All DRY 300 and DRY 500 models



El. heater up to **4kW** - LPHW up to **7kW**

COMPATIBILITY All DRY range

The widest selection of models, finishes and accessories.

SOLENOID VALVE

Solenoid valve is a 2-way electromagnetic valve designed to control the heated water flow to and from the LPHW coil. Each Microwell dehumidifier can be also equipped with a no-current contact for heat source, e.g. boiler or gas stove. Thus the system with solenoid valve together with thermostat (built-in digital or DRY EASY 300) enables completely autonomous and fully automated heating system.

OUTDOOR SET

Sometimes a specific set of pool parameters require a dehumidifier unit to be installed in exterior. Microwell offers a complete solution with 40mm aluminum covered insulation, condensate tray defrost and winter module allowing operations down to **-15°C**.

microLIGHT+

Microwell microLIGHT+ is a unique LED technology, designed for accurate measurement and intuitive reading of humidity level present in indoor environment. Working on the principle of relative humidity reading, microLIGHT+ uses LED light to project colour instead of a measured figure. The colour moves in continuous gradient with blue indicating low humidity, green ideal humidity and red high humidity.



1/2" thread 230 V

COMPATIBILITY All DRY models with LPHW coils



COMPATIBILITY All DRY range



COMPATIBILITY All DRY model

		Pool surface	Extraction rate 30°C / 60%RH	Extraction rate 30°C / 80%RH	Air flow	Noise level (at 1 m dist.)	Power consumption	Heat output	Refrigerant	Dimensions netto (W x H x D)	Weight netto / brutto	
SERIES	Model	m²	l/24hrs	l/24hrs	m³/h / Pa	dB (A)	W	W		mm	kg	
DRY 300	PLASTIk Wave									780 x 660 x 255	40 / 46	
	SILVER	30	36	48	550	42	700			780 x 642 x 300	50 / 56	
	METAL	50	50	40	550	42	700	1900	R410A	780 x 642 x 500	06106	
	TTW									780 x 660 x 255	40 / 46	
	DUCT	30	32	43	500/200	54	800			780 x 000 x 255	40740	
DRY 400	PLASTIk Wave									780 x 660 x 255	40 / 46	
	SILVER	45	48	58	600	42	700			780 x 642 x 300	50 / 56	
	METAL	45	40	50	000	42	700	1900	R410A	780 x 042 x 500	507 50	
	TTW									780 x 660 x 255	40 / 46	
	DUCT	40	43	56	500/200	54	800			/00 / 000 / 255	40740	
DRY 500	PLASTIk Wave									1245 x 660 x 255	60 / 73	
	SILVER	60	66	101	800	44	1000	3500		1245 x 660 x 300	77 / 90	
	METAL	00	00	101	000		1000	5500	R410A	1245 x 000 x 500	,,,,,,,	
	TTW									1245 x 660 x 255	60 / 73	
	DUCT	50	52	68	1000 / 200	56	1150	3500		1245 x 660 x 253	75 / 88	
DRY 800	METAL	90	90	136	1100	46	1600	5100		1250 x 950 x 310	100 / 133	
	TTW	,,,	,,,	150	1100	40	1000	5100	R410A	1247 x 950 x 300	1007155	
	DUCT	80	88	135	1100 / 170	58	1700	5100			102 / 135	
DRY 1200	METAL	120	120	181	1200	46	2150			1250 x 950 x 310	104 / 136	
	TTW	120	120	101			2150	5250	R410A	1247 x 950 x 300	103 / 136	
	DUCT	110	112	170	1200 / 145	60	2250				1057-150	

BEST RESULT GARANTEED

STANDARD EQUIPMENT:

- Dehumidifier
- Wall console
- Fixation screws
- User manual
- Installation layout

- microCOMPRESSOR+

INSTALLATION OPTIONS:

- On the wall
- Through the wall
- On the floor
- Mobile
- Ducted

ACCESSORIES:

- Built-in mechanical humidistat
- Remote wireless humidistat-thermostat
- Remote wired humidistat
- LPHW without regulation
- LPHW up to 7kW + 2-way magnetic valve
 LPHW connection (back, right, left)
 Electric heater up to 4kW

- Control of the boiler
- microLIGHT+ - Cover selection
- Air filter

COLOUR OPTIONS:

- Metal in any RAL colour, glossy or matte finish

Microwell reserves the right to change the technical data without notice.

TUV

AIR TEMPERATURE RANGE:

- Standard range from 22°C to 35°C
- Antifreeze thermostat from 15°C to 35°C
- Thermostatic expansion valve from 22°C to 42°C

- Antifreeze thermostat with thermostatic
- expansion valve from 15°C to 42°C - 4-valve hot gas defrost from 5°C to 35°C





HP 1000 SERIES

Series HP 1000 are most efficient units. With 11 to 17 kW capacity they are optimised for mid-size pools.

up to **60 m**³

HP 2000 SERIES

Series HP 2000 are most efficient units. With 23 to 28kW capacity they are optimised for bigger pools.

up to **80 m**³

HP 3000 SERIES

Series HP 3000 are most efficient units. With 30kW capacity they are optimised for larger pools.

up to **120 m³**



SWIMMING POOL HEAT PUMPS

MICROWELL HP range of swimming pool heat pumps is a full capacity range operating on the principle of renewable energy, designed for continuous and stable production of water heating or cooling in any pool environment. Their exceptional efficiency, low environment impact and low costs are the result of superior technology, putting them at the industry's forefront.

6 TIMES THE ENERGY

MARKET'S MOST EFFICIENT HEATING SOLUTION

Extracting heat from the environment and converting it into warm or cold output source, Microwell heat pumps are able to generate the energy with the highest yield, producing six times more the energy they consume. Operating on the thermodynamic principle, which is considered to be one of the most energy efficient systems for water heating or water cooling, Microwell HP COMPACT and HP SPLIT are capable of extracting ambient air from any environment ensuring maximum performance with efficiency that remains unsurpassed on the market.







Great new feature what Microwell launch this year into the market will be heat pumps **HP Premium and Inventor.**



Check our new product in new 360° view mode on Microwell.eu



HP Product Portfolio



HP COMPACT

Compact heat pump is one device, one box, that provides desired water temperature in your pool. Requiring only water connection, power supply and convenient place to be installed, it's simple and affordable system for every outdoor pool.



HP SPLIT

Split heat pump consists of 2 blocks. Outdoor unit is the source of heat. It contains a compressor, ventilator and air heat exchanger. Indoor unit contains water heat exchanger and control sensors. Split heat pump provides remarkably more comfort than compact heat pump.



HP COMPACT & HP SPLIT

MICROWELL DESIGN

Microwell Split heat pump system was designed to combine all positives of a swimming pool heat pump and to eliminate all negatives. By delivering renewable energy and low energy pool water conditioning, Microwell Split heat pumps are heating warm water all year long at low cost and without any acoustic or visual disturbance. They are ideal solution for outdoor as well as indoor pools.

COMFORT FULL YEAR HEATING

While most of pools close for winter are heated with other systems, Microwell heat pumps continue to heat pools regardless of weather steadily all year long.

NO WINTERIZING

Split heat pump does not require winterizing as its water heat exchanger is placed in non-freezing location such as pool's technical room, house basement or soil.

NO NOISE, NO VIBRATION AND NO VISUAL DISTURBANCE

Heat pump's sources of noise are compressor and a fan. These are installed in split heat pump's outdoor unit which is placed away from a pool as far as 30 meters horizontally and 15 meters vertically. The result is warm water without seeing or hearing the heat pump working, effectively providing pleasant warmth.

HP OMEGA vs HP PREMIUM



Competitor

- Fine machine but performance marked at not usual conditions
- Mostly active defrost missing
- Often limited control (e.g. desired water temperature at max. 32°C)



Omega/ Inventor

- Active defrost is STANDART
- -5°C to + 60°C water temperature selection
- 15% more titanium in exchanger
- Shorter heating time and operational costs
- Higher COP and greater performance
- Perfect choice to extend the season
- COP 5,7 7,6

PERFORMANCE



Premium

- Ultimate performance
- Highest amount of titanium on the market (up to 40% more than others)
- The shortest heating time
- The lowest operational costs
- Features no other unit has
- COP 5,9 8,5

HP ACCESSORIES

The widest selection of models, finishes and accessories.



SMART WIFI CONTROL

Microwell heat pumps can be equipped with a WIFI control module on demand. This is a Android/ iOS compatible application. The add-on allows you to control your heat pump 24/7 from anywhere in the world.

WINTER MODULE

Designed to enhance heat pump operation in subzero conditions, winter module consists of several elements that help to extend operational air temperature range down to -15°C.

HEAT EXCHANGER FROST PROTECTION

Effectively protects the water heat exchanger against frost down to **-15°C.** Widens effective operational air temperature range of a heat pump and prevents any damage to occur.

CONDENSATE TRAY DEFROST

Suggested to all subzero operated heat pumps, this fully automatic addition helps to prevent the damage of a heat pump by keeping the condensate tray clean of ice.

IDEAL WATER TEMPERATURE ALL YEAR ROUND

Microwell has developed a set of accessories enabling the heat pump to operate down to -15°C. Operating at very low air temperatures heat pump is still an effective and comfortable source of heat although its efficiency is lower compared to that in summer months.

FREEZING PROTECTION

The common problem of heat pumps in subzero temperature is freezing. Thanks to an intelligent solution from Microwell, heat pump is protected and fully operational and stable heat source throughout the year.

PROTECTION AGAINST ICE AND SNOW

Heat pump is designed to withstand harsh outdoor conditions such as heavy snow or extreme cold. Several security and protection systems are set to constant reading mode to avoid any reliability or performance issues.

	Pool capacity (cover / no cover)	Heating output (A26/W26/63%RH)	Power consumption (A26/W26/63%RH)	COP (A26/W26/63%RH)	Heating capacity (A25/W10/35%RH))	Cooling capacity (A30/W35)	Operating temperature		ater	Power supply	Heat exchanger	Titanium surface	Acoustic pressure level	Water circuit connection	Dimensions																												
MODEL	m³	kW	kW	СОР	kW	kW	°C	m³∕h	kPa	V AC / ph	type	m²	dB (A)	mm / inch / thread	width / hight / lenght																												
HP 1000 Compact OMEGA		10,7	1,88	5.7	9,1	6,5		4 - 6	5 - 15			0.43			870×870×320																												
HP 1000 Split OMEGA	40 / 30	10 (70		10,7	1,00	5.7	9,1	с,э		4-0	2 - 12			0.45	F / // 0 // 2 /7 /		870 x 655 x 320																										
HP 1100 Compact PREMIUM	40750	117	47/		10	7.5		4 - 6	1 - 5			0.56	54/48/42/36		870×870×320																												
HP 1100 Split PREMIUM		11,3	1,74	6,5	10	7,2		4 - 6	1-2			0.56			870 x 655 x 320																												
HP 1400 Compact OMEGA			1/1	2.47		12.1	0.5			5 - 15			0 / 0			870×870×320																											
HP 1400 Split OMEGA	60 / 40	14.1	2,47	5,7	12.1	9,5		4 - 6	5 - 15	230/1	Tita	0.48			870 x 655 x 320																												
HP 1500 Compact PREMIUM	60740	14,9	2,29	6,15	17	10.7	-15 t	4 - 6	1 - 5		Titanium Gr 2 ASTM B338	0.70	55/49/43/37	50/6,4	870×870×320																												
HP 1500 Split PREMIUM		14,9	2,29		13	10,3	to +40	4-0	1-2		2 ASTM	0.70		50 / 6,4 / internal	870 x 655 x 320																												
HP 1700 Compact	70 / 50	17.01	3,47		14.7	12,21		6 - 8	5 - 15		B338	0.95	56/50/43/39		1125 x 707 x 453																												
HP 1700 Split	70750		17.01	5,47		5,47	4,9	14.7	12,21		0-0	2 - 12			0.75			1125 x 707 x 453																									
HP 2300 Compact INVENTOR		27	27	3 7			~~	~~		27	27	~~	~~	27	27	27	27	72	72	72	72	72	23	27	27	27	27	27	27	7 50		20	20.1		8 - 10	F 4F			0.05			942 x 1550 x 360	
HP 2300 Split INVENTOR		80 / 60	25	3,59	6,4	20	20,1		8-10	5 - 15			0,95			942 x 1250 x 360																											
HP 2400 Compact PREMIUM	80 / 60	80 / 60	80760		244						0.10					Ī		942 x 1550 x 360																									
HP 2400 Split PREMIUM			24,4	3,51	3,51	3,51	3,51	3,51	3,51	3,51	3,51	6,9	21,2	21,7		8 - 10	1-5	(00.17		1.2	56/50/44/38		942 x 1250 x 360																				
HP 2800 Compact INVENTOR	120 / 80	120 / 80		29.4	4,44	4,44	4,44	4,44	4,44	6.1	26	25.0		8 - 12	F 1F	400 / 3		1.1	56/50/44/58		942 x 1550 x 360																						
HP 2800 Split INVENTOR			28,4	4,44						4,44	6,4	26	25,0		8-12	-5 - 15			1,1			942 x 1250 x 360																					
HP 3000 Compact PREMIUM			70.1	171	()	277	2/ 0		0 12				1./	1.4		942 x 1550 x 360																											
HP 3000 Split PREMIUM		30,1	4,34	6,9	27,7	26,8		8 - 12	1-5			1,4			942 x 1250 x 360																												
	0	CE -	P44								Microv	vell reserv	es the right to o	change the tec		nout n																											



RECUPERATIVE DESIGN

Recuperative models (WRC and WRG) use exclusively exterior air to control the humidity. Their efficiency tops 75%. Low Pressure Hot Water or electrical heater is used to balance the heat losses.

HEAT PUMP DESIGN

WRPC series combines recuperative design with a compressor and condensing heat. By applying appropriate ratio between recirculation and fresh air, these units maintain 100% of heat.

CROSS VS. COUNTER FLOW

Two types of recuperative heat exchangers are used. A cross flow heat exchanger can achieve up to 75% heat recovery, while counter flow exchanger reaches as high as 95%. Models WRC and WRPC are equipped with a cross flow heat exchanger while WRG series uses counter flow.

MATCHLESS ACCESSORY OPTIONS

All three WRC, WRG and WRPC series are equipped with the widest range of accessories to complete their flexibility and response to onsite demands.



HIGH-CAPACITY POOL DEHUMIDIFIERS

from **700** to **4500 m³/h** from **700** to **9500 m³/h**

Using cross flow heat exchanger, WRC

series achieves as high as 75% heat recovery. Available in strong 7 sizes from

700m³/h to massive 9.500m³/h, units

are suitable for effective and economy

humidity control in commercial projects.

WRC SERIES

from 3000 to 9500 m³/h



WRG SERIES

Heat recovery up to magnificent 95% throughout counter flow recuperative heat exchanger places WRG series on the top of recuperative dehumidifiers. Available in 5 sizes from 700m3/h to practical 4.500m3/h, the models can serve smaller commercial projects with focus on economy.

from 4 to 60 kg/h - up to 160 m²



from 4 to 60 kg/h - up to 200 m²



Combining 2 the most efficient ways of humidity control, the WRPC models achieve 100% heat recovery throughout using recuperative and heat pump principle. Built in 4 sizes from 3.000m3/h to 9.500m3/h, the units are applied in large scale commercial projects where performance is the key.

from **17** to **60 kg/h** - up to **200 m²**

QMAX TESTER

OPERATION MEASUREMENT

After Qmax Tester is connected to swimming pool waterway between heat pump and outlet and water flows through the device, it begins measuring heat pump's performance. In only a few minutes it delivers detailed measurement, and reads off six different measurements;

Coefficient of performance (COP), Energy efficiency ratio (EER), true heating or cooling output (kW), heat pump power consumption, water temperature and water flow in m³/h.

PERFORMANCE OPTIMIZATION

With Qmax Tester it is possible to adjust and optimise the water flow for a particular heat pump in real time. Qmax Tester can be applied to brand-new or existing installations, increasing the actual performance of a heat pump by up to 30% without the change in power consumption.



WATER TEMPERATURE

IN/OUT

HEATING/

COOLING

POWER CONSUMPTION



Qmax Tester is equipped with 4" digital display, on which 6 different measurements and 8 different values are shown in real time.





Qmax TESTER. Setting the quality of pool performance.

MOBILE POOL SPECIALIST

Qmax Tester is a unique device for on-site testing and heat pump optimisation. Capable of performing various performance measurements, Qmax Tester is primarily designed to optimise particular heat pump's installation. The cost savings can reach 30% through increased heat pump's heating output and COP with not changed power consumption.

NO MORE FALSE DATA

One of the most problematic aspects of today's industry are misleading performance results. Heating outputs and COPs are unreliably increased by up to 40%. This harms both the consumer and the heat pump's image. To disclose false claims and to show real data, Microwell has designed Qmax Tester.

TRUE RESULTS

QMAX RESULTS

LOWER

ENERGY

BILL

Qmax is connected to water way between the heat pump and the pool. As the water flows through the device, Qmax performs detailed testing, displaying all technical data and performs full optimisation of the heat pump. In no more than 15 minutes!

MICROWELL



ROBUST AND DURABLE HUMIDITY EXTRACTION

Designed for drying up buildings, new construction sites, warehouses, as well as non-heated and flooded buildings with high level of humidity. Microwell industrial dehumidifiers ensure powerful and highly efficient humidity extraction. Due to their sturdy metal body and fully mobile design, they are able to deliver required results even in the toughest construction sites, preventing costly damages. Working on condensation principle they are capable of performing in extreme conditions and they guarantee continuous operation with maximum extraction rate.

FIT FOR HARSH TEMPERATURES

Equipped with a built-in electrical heating element, which ensures defrosting of the exchanger, Microwell industrial dehumidifiers are capable of operating at temperatures from 0 to 35°C in any indoor area.

APPLICATION OPTIONS

New construction sites, humid, drying up buildings, non-heated rooms, cellars, warehouses, switch rooms, museums, filling stations, sports halls, garages, buildings flooded by water after firefighting to avoid corrosion, etc.



INDUSTRIAL DEHUMIDIFIERS

3 SIZES FOR COMPLETE HUMIDITY EXTRACTION

Microwell industrial dehumidifiers are high-performance mobile appliances designed for high volume moisture extraction. With capacities of 40, 90 and 120 litres per day they are well suited for any application. Often multiple units can be combined in a single application to provide massive yet very mobile drying. Additional electrical heater can be included with a dehumidifier to help speed up the drying process. As the applications are often harsh, all machines are extremely durable.

T40 / TE40



— up to 40 l/day

EQUIPPED AND FULL MOBILE PERFORMERS

With swivel casters, handle and a 2m cable with detachable connector, Microwell industrial dehumidifiers are fully mobile and very easy to work with. Each machine is equipped with easily removed and washable dust filter. On built-in display operating status, working conditions and possible failures are shown. They use automatic defrosting technology, external humidistat on demand and an electric heater (TE models).



up to 90 l/day





MUSEUM DEHUMIDIFIERS

EVAPORATOR AND CONDENSER

DRY GALLERY 300 is an elegant and mobile solution for small exhibition spaces. With standard glossy white cabinet-like housing on wheels, it can be easily and non-intrusively placed in any environment. Specially adapted to work in exhibition spaces, the unit is especially quiet and has low vibration levels. Each unit is equipped with 20-liter condensation tank and digital humidistat and thermostat, capable of extracting 36 litres per day.

APPLICATION VARIETY

Museum properties, dehumidification of galleries also offices, storage rooms, archives, warehouses, etc.

CHERRY





DISCREET DESIGN FOR ENCLOSED EXHIBITION ENVIRONMENT

Maintaining optimal microclimate in museums, galleries, libraries, cultural institutions and other exhibition facilities, containing invaluable exhibition or archived items is guite challenging. Dehumidification in these spaces is essential for the preservation of rare objects, paintings, records, books or documents. Affected by external climate conditions, age and type of construction, as well as a number of visitors and employees exhibition environment must ensure long-term safety and preservation of the collections taking into account specific and often changeable preservation requirements.

PRESERVATION QUALITY WITH DRY GALLERY

Microwell DRY GALLERY 300 is a comprehensive solution for managing museum environment. It continuously measures the ambient temperature and humidity level present in the room. Since different collections might have different humidity requirements, DRY GALLERY offers fully adjustable control to meet a variety of relative humidity requirements.



micro +

micro CONTROL +



Technology of the most precise and most economy humidity control. It is applied for ducted types of dehumidifiers. microCONTROL+ shortens the problem solving time and overall contributes to healthier environment sooner and more effective than any other dehumidifier.



Microwell machines are designed as plug-n-play devices. Typically, installation can be comfortably performed by a single technician or pool owner himself.

micro ECONOMY +



Technology of a circulation pump control. Microwell swimming pool heat pump with microECONOMY+ ensures heating of your pool sooner and cheaper than any other swimming pool heat pump.

anti FREEZE +

Microwell unique protection to

avoid damage of your property

or the heat pump in subzero

temperatures.



Dehumidifiers marked with microENERGY+ are equipped solely with the most energy saving DC fans. These bring the necessary performance, quiet operations and save costs on energy bill every day.

anti VIBRATION +

Special vibration eliminating

silent blocks are by standard

included with all Microwell heat

pumps.

micro COMPRESSOR +



Special compressors integrated with maximally finetuned working point for the dehumidifiers and for the heat pumps achieving highest performance at lowest energy consumption.



This mark stands for exceptional silence of the unit. 42 dB (A) at 1m distance for dehumidifiers 30 dB (A) at 10m distance for heat pumps

microSAFETY +



microSAFETY+ is a supervision system in DRY SIREN models. The system monitors each DRY SIREN. In the case of a sign of technical problem or possible malfunction, the system creates a report and automatically sends it to Microwell. microSAFETY+ effectively protects your property 24/7. The data is securely ciphered.

MICROCLIMATE PROTECTION

HUMIDITY DETECTION

Not knowing the level of humidity present in the room it is difficult to protect your environment and people in it. Microwell microLIGHT+ is a simple, most effective and comfortable way to monitor and prevent excessive humidity exposure.

microLIGHT+





REAL TIME MEASUREMENT IN LED COLOUR SCALE

Microwell microLIGHT+ measures and automatically reflects current relative humidity, changing the colour gradient between blue, green and red colour. Blue LED light indicates a low level of relative humidity, green LED light marks an ideal range of relative humidity, while shiny red LED light indicates a high level of relative humidity present in the room.

microLIGHT+ APPLICATION

Microwell microLIGHT+ technology was designed to be applicable and used in a variety of environments and ways without any restrictions when it comes to application. Primarily manufactured and installed as an accessory to DRY dehumidifiers, microLIGHT+ is also being designed as a freestanding table lamp that can be placed anywhere in the room. While working as a regular light unit, microLIGHT+ lamp provides the most accurate and safe humidity reading, beneficial for every home environment.

microLIGHT+ LAMP



INTUITIVE TECHNOLOGY microLIGHT+

Microwell microLIGHT+ is a unique LED technology designed to quickly and accurately measure the level of humidity in any indoor environment. Working on the principle of relative humidity reading, microLIGHT+uses multi-LED light system to transmit gathered information. Gathered values are automatically reflected in colour gradient, are notifying the level of relative microclimate humidity in real time.

HUMIDITY PRESENTS A PROBLEM

Excessive humidity in living areas has a damaging effect on personal health, and it also affects living conditions at home. Moisture in the form of vapour condensation and general dampness is the main cause for the growth of mould, bacteria and bad odour. Prolonged exposure has a bad effect on personal heath and general quality of living conditions.



DRY REFERENCES



HP REFERENCES



VARIETY OF MODELS TO FIT EVERY POOL

WIDEST RANGE OF DESIGN AND ACCESSORY OPTIONS

EXCELLENT WORKMANSHIP

COMPETITIVE PRICES

PRODUCTS MANUFACTURED IN EUROPE

UP TO 5 YEARS WARRANTY

SELLING TO 30+ COUNTRIES WORLDWIDE

26 YEARS OF BUSINESS EXPERIENCE

ACCREDITED BY ISO 9001, ISO 14001, ISO 18001

WHY MICROWELL?

PRODUCT OF THE YEAR 2005 PRODUCT OF THE YEAR 2013



PRODUCT OF THE YEAR 2014



PRODUCT OF THE YEAR 2014



LOW ENERGY CONSUMPTION 2017



LUXURY DESIGN 2017



LUXURY DESIGN 2017









Microwell is European designer and manufacturer of dehumidification solutions and heating systems from Slovakia. From its foundation Microwell is firmly present on the global market, where it is recognised as a leading expert for swimming pool dehumidification and heating solutions.

With distributors and partners in 30+ countries across Europe, Russia, Middle East and North Africa, Microwell capitalises the flexibility and strategic position only to explore new opportunities leading to new intelligent products.

By fostering innovation, Microwell remains true to its core company value and commitment.

Committed to efficiency.



www.microwell.eu

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Widest Model Range.

Ultimate Performance.

The Lowest Energy Consumption Ever.



COMMITTED TO EFFICIENCY.