

Worldwide Leaders in Electrostatics

Active ionisation equipment operates on high voltage. The power units transform the mains voltage to the high voltage required by the ioniser. There are different types of power units available. Power units are easily connected and operated and don't need any maintenance.

MPM

The MultiPowerMaster (MPM) is an addition to the range of high voltage powers units. It features electronically stabilised output voltage and a wide range of input voltages. Input voltages range from 100–240 V AC, 50–60 Hz.

Output voltage is preset at the factory to 3.3, 4.0, 5.0, and 7 kV.

Green and red LED's are incorporated in the top face of the MPM. Optionally the MPM can be fitted with a I/O connector for interfacing with f.e. a PLC.

Optional I/O signals are available for remote on/off, high voltage present and overload. The I/O connector also contains a 24 V power source for use with the Typhoon airpressure sensor.



Advantages of MPM

- Simple to connect and operate.
- The MPM has four high-voltage outputs to which ionisation equipment can be connected.
- Its broad input voltage range (100–240 V AC, 50–60 Hz) means the MPM can be used around the world.
- The MPM is available in four output voltage models with an output voltage of 3.3 kV, 4.0 kV, 5.0 kV or 7.0 kV.
- The high-voltage output has a "softstart", which means that an overshoot will never occur when the high voltage is switched on.
- The high voltage is controlled and stabilised electronically, which ensures that the high voltage is not sensitive to changing loads.
- The output current is limited electronically to prevent overloads.
- Indicator LEDs on the cover report the status of the MPM, so that you can see whether the MPM is switched on, whether a malfunction has occurred and whether there is a high voltage present on the outputs.
- The MPM is available with IO connector as an option (MPM-xxR). This option offers the following functions: remote switching on/off of high voltage, remote signalling of high voltage on, remote signalling of overloads, external 24 V DC voltage, ion balance control and biphase (master/slave) control.



Options (MPM-xxR)

R: Remote switching on/off of high voltage (not wireless):

The high voltage of the MPM can be switched on remotely by supplying a 24 V DC voltage to the opto-coupler input of the I/O connector.

0 V DC = MPM high voltage off.

10-30 V DC (max. 20 mA) = MPM high voltage on.

H: High voltage ON remote signalling:

The MPM has an opto-coupler output for high voltage ON remote signalling. Maximum load of the opto-coupler output: 30 V DC, 50 mA.

O: Overload remote signalling:

The MPM has an opto-coupler output for remote signalling of overloading or short-circuiting of the high voltage. Maximum load of the opto-coupler output: 30 V DC, 50 mA.

P: External 24 V DC voltage:

The I/O connector has an external 24 V DC supply voltage for connecting the various remote control options. Specifications for external supply voltage: 24 (±0.5) V DC, max. 100 mA), short-circuit protected.

B: Ion balance control:

The Ion balance control can control the positive and negative ion balance of the connected ionisation equipment. This allows the remaining charge on the material to be discharged to be greatly reduced. This works with directly connected ionisation equipment and NOT for capacitive (shockless) anti-static bars such as (E)P-Sh-N and MEB anti-static bars. The Ion balance can be gradually controlled with a voltage of 0-10 V DC.

M: Biphase control (master/slave):

With Biphase control it is possible to switch the output voltage of two MPM power units to opposite phase. By using two MPM power units in Biphase mode, both positive and negative ions will be produced on the connected ionisation equipment at the same time, which means that the material is neutralised even at high material speeds.

240				Power	O N ()			
				Remote	0			
				High Voltage	0			
				Overload	0			
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Power M

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Indicator LEDs on cover

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LED [POWER] on:	MPM is switched on				
LED [POWER] flashes quickly:	External 24 V DC is overloaded (MPM-xxR)				
LED [POWER] flashes slowly:	MPM is in "Biphase Slave mode" and receives a				
	synchronisation signal from the MPM in "Biphase Master				
	mode" (MPM-xxR)				
LED [REMOTE] on:	The remote high voltage on/off option is switched on				
	(MPM-xxR)				
LED [HIGH VOLTAGE] on:	The high voltage is switched on				
LED [OVERLOAD] on:	The high voltage is overloaded or short-circuited				



Technical specifications

	мрм
Housing	Aluminium and steel, powder coating
Weight	3 kg
Dimensions	240 x 125 x 95 mm (L x W x H)
HV connections	4
On/off switch	Yes
On/off indication	Yes, LED in cover
High voltage indication	Yes, LED in cover
Overload indication	Yes, LED in cover
Remote control indication	Yes, LED in cover
Connection cable	1.8 m
Ambient temperature	0–50°C, max. 90% RH, non-condensing
Operating environment	Industrial, internal use
Rated input voltage	100–240 V AC
Input current:	max. 0.7 A
Frequency	50–60 Hz
Output voltage	MPM-23x: 3.3 kV AC ±5% MPM-24x: 4.0 kV AC ±5% MPM-25x: 5.0 kV AC ±5% MPM-27x: 6.4 kV AC ±5%
Output current	3 mA max.
Maximum capacitive load	1500 pF
Output frequency	50 ± 0.5 Hz
Protection class	IP 54
Current power	36 Watt
Options (MPM-xxR)	R: Remote switching on/off of high voltage H: High voltage ON remote signalling O: Overload remote signalling P: External 24 V DC voltage (max. 100 mA) B: Ion balance control M: Biphase control (master/slave)

Contact

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