



ChargeMaster Tiny (CM Tiny)

The CM Tiny is the smallest industrial charging generator for static bonding applications. The unit has fully integrated high voltage parts and only needs a 24V DC supply. The housing is compact, robust and only weighs 500 grams which makes it perfect for small machines and applications with moving parts s.a. pick and place handling systems. It can easily withstand the high G-forces occurring during the process.

Two LED's on the side give clear indications of the status of the charging generator;

- Green : Power is on
- Green flashing : Power is on and HV output is inactive
- Red : Alarm, HV overload or HV Ok signal short circuit

Indication LED's on both sides of the end of the CM Tiny unit will display general information about the status of the unit.

Status	High voltage	Leds
Initialisation	Off	Blink green @ 10Hz
Standby	Off	Blink green @ 1Hz
Normal mode	On	Green
Overload cycle OK	On	Blink red @ 5Hz
Supply voltage < 18V	On	Blink red @ 5Hz
Overload HV	On	Red
Temperature > 90°C	Off	Blink red/green @ 1Hz

The CM Tiny can be used directly from a machine interface capable of supplying a 4-20 mA signal for the setpoint and a 24V DC signal for remote on/off.

Manual operation can be implemented by an additional control circuit. The control circuit enables you to mount a potentiometer and LED by simply providing 2 holes in the front panel of your machine interface. Connection blocks with one or four outputs are available. For the use of the quick connect ports the charging electrode has to be equipped with a special connector.



Features

- Supply voltage 24V DC
- Miniaturised Design
- Compact and robust, capable of withstanding G-forces
- No high voltage cable running through the cable channel
- HV OK signal
- Detachable high voltage distribution block
- LED's on both sides
- Microprocessor controlled
- External Setpoint control
- Remote on/off signal
- IQ version available

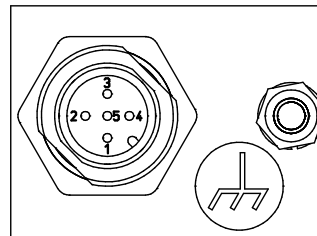


Remote control kit optional

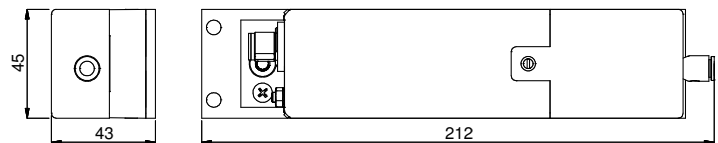


Technical specifications

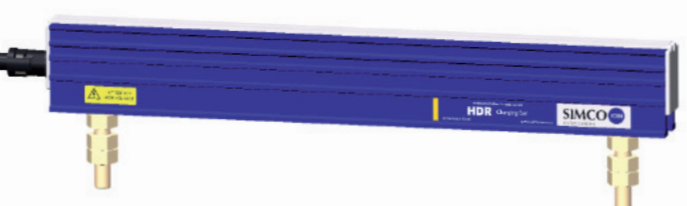
Required power supply	
Supply voltage	21-27 V DC
Electricity consumption	Max. 0,7 A
Setpoint	4 - 20 mA, 220 Ω internal resistance
Connection	M12 connector, 5-pin
Output	
Output voltage	0 - 18 kV negative
Output current	Max. 0,4 mA
Environment	
Operating environment	Industrial, internal use
Ambient temperature	0-55°C
Protection class	IP52
Signalling	
HV OK	Supply voltage -1 V (max. 50 mA)
Remote on/off	10 - 30 V
Mechanical	
Dimensions (lxwxh)	200 x 45 x 36 mm
Weight	500 g (excluding high-voltage cables)
Housing material	ABS/aluminium/PVC
Vibration resistance	≤ 6 G, ≤ 7 m/s
Output connection	1 or 4 quick connect ports (Ø 6 mm)
Options	IQ version



Pin	Name	Std. cable colour
1	+24 V	Brown
2	Remote on-off	White
3	0 V / GND	Blue
4	Cycle OK	Black
5	Usetpoint	Gray



Technical drawing CM Tiny



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