



# 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

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

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.



## Technical specifications

### Required power supply

Supply voltage	21-27 V DC
Electricity consumption	Max. 0,9 A
Setpoint	4- 20 mA, 220 Ω internal resistance
Connection	M12 connector, 5-pin

### Output

Output voltage	0-20 kV negative
Output current	Max. 0,4 mA

### Environment

Operating environment	Industrial, internal use
Ambient temperature	0- 55 °C
Protection class	IP54

### Signalling

HV OK	Supply voltage -1 V (max. 50 mA)
Remote on/off	15-30 V

### Mechanical

Dimensions (lxbxh)	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

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

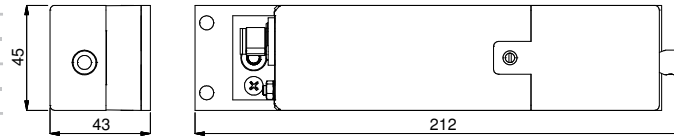
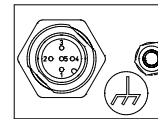
- ⊕ Supply voltage 24V DC
- ⊕ Miniaturised Design
- ⊕ Compact and robust, capable of withstanding G-forces
- ⊕ No high voltage cable running through the cable channel
- ⊕ HV OK signal
- ⊕ Detachable high voltage distribution block
- ⊕ LED's on both sides
- ⊕ Microprocessor controlled
- ⊕ External Setpoint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



External control kit optional



External control unit optional



Technical drawing CM Tiny

### Simco-Ion Netherlands

Postbus 71  
 Lochem, The Netherlands NL-7240 AB  
 Tel: +31 (0)573 288333  
 Fax: +31 (0)573 257319  
 general@simco-ion.nl  
 www.simco-ion.nl

