

Multi-bay-charger stations for Li-Ion,  
Ni-MH and Ni-Cd power tool batteries

# HST-MV3



- 2- and 4-bay-charger versions
- Special HST frequency modulation impulse charging process® for Li-Ion, Ni-Cd and Ni-MH batteries
- Standby < 0,75 Watt
- IFCS - Intelligent Full Charge System for Li-Ion batteries
- Capacity-related charge reception mode for Li-Ion, Ni-Cd and Ni-MH batteries
- Automatic battery adapter recognition  
Battery adapter exchange without board software update possible
- High voltage range  
from 3,6 V up to 50,4 V  
(43,2 V nominal voltage)
- Charging even at battery temperatures > 45° C
- Separate power electronics for each charger slot
- Updates via USB
- Software for evaluations
- Batteries from the following brand manufacturers can be charged  
HS-Technik, Makita, Bosch, Fein, Titgemeyer, Gesipa, AtlasCopco, Cooper Power Tools, Panasonic,...



**Standby < 0,75 Watt**

EU regulation no. 1275/2008  
EN55022:2006  
VPG: 278/2009



**Maximum of efficiency**

up to 95 % charging efficiency



**Short charging periods**

thanks to the latest technologies







Innovation is our passion

30 years experience in battery charging technology



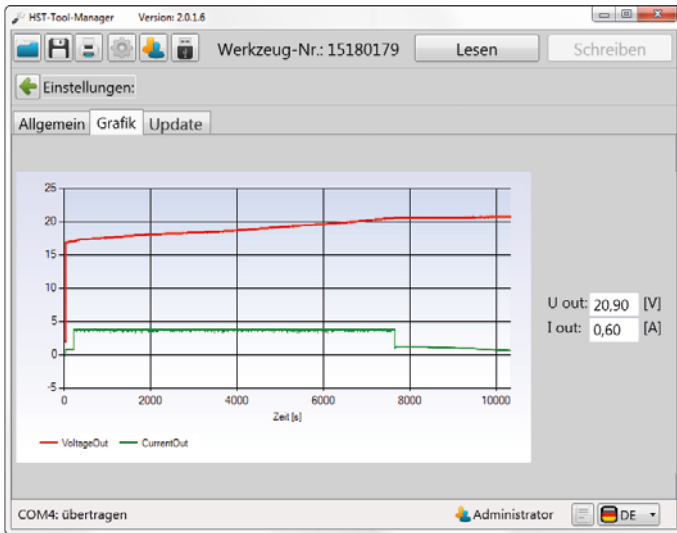
# Features

<ul style="list-style-type: none"> <li>• <b>2- and 4-bay-charger versions</b></li> <li>• <b>IFCS - Intelligent Full Charge System for Li-Ion batteries</b> Charge Li-Ion batteries up to 95% full</li> <li>• <b>Special HST frequency modulation impulse charging process® for Li-Ion, Ni-Cd and Ni-MH batteries</b> Absolutely no memory effect thanks to variable, frequency-modulated impulse charging current with large amplitude</li> <li>• <b>Special charging mode</b> For deep-discharging or sleeping Ni-Cd and Ni-MH batteries</li> <li>• <b>No voltage conversion required</b> Battery voltage is detected automatically</li> <li>• <b>Up to 5 Ah charging current</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Capacity-related charge reception mode for Ni-Cd and Ni-MH batteries</b></li> <li>• <b>High voltage range</b> from 3,6 V up to 50,4 V (43,2 V nominal voltage)</li> <li>• <b>Automatical battery adapter recognition</b> Battery adapter exchange without software update possible</li> <li>• <b>Own diagnosis</b> Testing of the supply voltages</li> <li>• <b>Ventilator for cooling</b> Demand-driven, whenever charging current is flowing the ventilator also runs; therefore charging is possible even at temperatures above 45° C</li> <li>• <b>Separate power electronics for each charging bay</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Reverse polarity protection</b> Current switch off of charging bay, separation of charging bay and battery thanks to a relay</li> <li>• <b>Charging even at battery temperatures &gt; 45° C</b> Dynamic temperature evaluation due to gradient formation</li> <li>• <b>Software updates via USB</b></li> <li>• <b>Can be used worldwide</b> Thanks to clocked power supply 90 – 260 V, 50 – 60 Hz</li> <li>• <b>Robust and maintenance-friendly housing</b></li> <li>• <b>Batteries from the following brand manufacturers can be charged*</b> HS-Technik, Makita, Bosch, Fein, Titgemeyer, Gesipa, AtlasCopco, CooperPowertool, Panasonic, Dessouter, ...</li> </ul>
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- **Dynamic temperature monitoring**  
Temperature gradient evaluation
- **Battery analysis and characteristics control**  
Before and during charging  
Final charge parameters are detected and specified automatically depending on the battery pack
- **Initialization of the battery pack**  
Automatic cell determination whether e.g. a 12.0 V Ni-MH or a 14.4 V Li-Ion battery was plugged in
- **Capacity-related full detection™**  
Battery packs from 500 mA to 10,000 mA can be charged
- **ΔU detection and voltage gradient evaluation**  
Automatic parameter detection depending on the charge state of the battery pack
- **Plausibility check™**  
Check to see whether battery parameters are logical in relationship to one another
- **Automatic evaluation of the temperature contacts**  
For NTC contact there is a dynamic temperature evaluation, this does not depend on the battery adapter
- **PFC (Power Factor Control)**
- **Multi-Color-LED**  
  -  Charging
  -  Battery full
  -  Temperature NOK
  -  Battery voltage NOK
- **Standby - Power save function**  
If all batteries are charged or the station is not in use it automatically switches in the power save function.  
Consumption of current < 0,75 watt  
**Complies with:**  
**EU regulation no. 1275/2008**  
**EN55022:2006**  
**EVPG: 278/2009**

\* not all batteries from these manufacturers can be charged

50% more cycles



## Software

With the user-friendly software HST-Tool-Manager all settings e.g. as the stand by function can be changed fast and easy. At each charging bay the complete charging process can be recorded and documented. With this feature we are able to adjust the charging parameters. A firmware update can be implemented via USB with a few clicks.

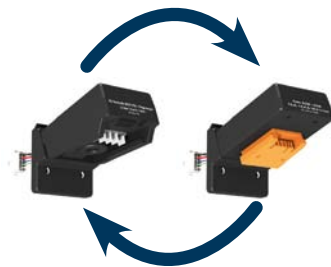


## Feet for a foothold

The feet of the MV3 charging stations are designed to stack several charger stations safely one above the other. The mechanical interlock ensures a safety foothold. Always four pieces can be mounted under and on top of the charging station. Four feet are in the delivery content.

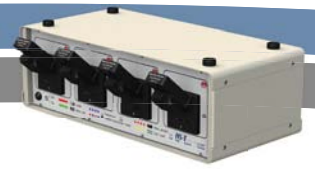
Order no.: MV3-4L-110 | MV3 rubber foot

## Automatical battery adapter recognition



Battery adapter exchange without update of the board software possible. The board recognizes the battery adapter and performs the corresponding charging cycle.

extended lifetime



## Technical Data

Model	HST-MV3-02 / HST-MV3-04 / HST-MV3-04W
Input	85 - 260 V AC, 47 - 63 Hz
Power output	max. 624 W
Level of efficiency	> 89 %
Output	56 V / 624 VA
Power supply ventilator	≤ 45°C (AUS) ≥ 50°C (EIN)
Weight	HST-MV3-02 approx. 4,7 kg HST-MV3-04 row form approx. 7,6 kg HST-MV3-04 cube form approx. 7,6 kg
Dimensions (W x H x D) in mm without battery adapter	HST-MV3-02 289 x 182 x 260 mm (incl. feet) HST-MV3-04 (row form) 539 x 182 x 260 mm (incl. feet) HST-MV3-04W (cube form) 289 x 330 x 260 mm (incl. feet)
Tested	CE, EN55022B, EN61000-3-2,-3, EN61000-4-2, 3, 4, 5, 6, 8, 11 EN60950 Standby function: EU regulation no. 1275/2008 EN55022:2006 EVPG: 278/2009

## Battery adapters

Order no.	for battery types
M-MV3-PR	HS-Technik HST-PR, 14.4 V & 18 V Li-Ion Titgemeyer TIOS-LIO, 18 V Li-Ion
M-MV3-BH	Makita slide battery (BL), 14.4 V & 18 V Li-Ion Makita slide battery (BH), 9.6 V - 24 V Ni-MH HST-BL, 14.4 V & 18 V Li-Ion HST-BH, 9.6 V - 24 V Ni-MH
M-MV3-BO-LI	Bosch, 14.4 V, 18 V & 36 V Li-Ion
M-MV3-BO-10	Bosch 10.8 V Li-Ion
M-MV3-BO-NI	Bosch, 7.2 V - 18 V Ni-Cd & Ni-MH
M-MV3-FEIN	Fein ASM / ASW 10.8, 14.4 & 18 V Li-Ion
M-MV3-CPN	Atlas Copco, 18 V & 36 V Li-Ion Dessouter, 18 V & 36 V Li-Ion
M-MV3-CPT	Cooper Powertools, 26 V & 44 V Li-Ion
M-MV3-UNI	Makita 7.2 - 24V Ni-Cd und Ni-MH Bosch 7.2 - 18V Ni-Cd und Ni-MH Gesipa 12 V Ni-Cd und Ni-MH Gesipa 14.4 V Li-Ion
M-MV3-GE	Gesipa 18 V Li-Ion
M-MV3-MA-10	Makita slide battery (BL), 10.8 V Li-Ion
M-MV3-MA-72	Makita block form (BL), 7.2 V Li-Ion
M-MV3-PA-36	Panasonic, 3.6 V Li-Ion
M-MV3-PA-LI**	Panasonic 7.2 V, 10.8 V, 14.4 V, 18 V, 21.6 V, 28.8 V Li-Ion

\*expected available: October 2016

## Available types



Order no.:  
HST-MV3-02  
2-bay-charger station



Order no.:  
HST-MV3-04W  
4-bay-charger station  
cube form



Order no.:  
HST-MV3-04  
4-bay-charger station  
row form



M-MV3-PR



M-MV3-FEIN



M-MV3-CPN

Notice: The charger always comes without adapters, please select the required adapters and order separately.

HS-Technik GmbH | Im Martelacker 12 | D-79588 Efringen-Kirchen  
Phone +49 7628 - 91 11 - 0 | Fax +49 7628 - 91 11 - 90 | info@hs-technik.com | www.hs-technik.com

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