



HTM 130 AC

Air cooled

- Innovative in energy storage & Power Electronics.
- Custom-made solutions.
- Complete solution: storage & Power Electronics.
- Design and system integration.

Features

- High peak current due to low internal resistance.
- IP6X / X9, intrinsically safe.
- Balancing: passive & active.
- Monitoring of all cell voltages.
- Evaluation of the module data and adaptation.
- Module parameters via CAN possible.

Applications

- Buses
- Railway and trolleys
- Cranes and RTG's
- Utility and Mining Vehicles
- Stationary energy storage.
- Load peak reduction.



Mechanical Data

Length x Width x Height
636 x 421 x 174 mm
Approx. Weight: 48 kg

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Electrical specifications

Symbol	Parameter	Description	Value	Unit
	Capacitance			
C_r	Rated capacitance		62,5	F
	Tolerance capacity		-0/+20	%
	Voltage			
U_r	Nominal voltage		130	V _{DC}
U_{max}	Max. operation voltage		136	V _{DC}
U_{iso}	Isolation voltage	Basic Isolation: Cell – Housing Reinforced isolation : cell – Interface	1	kV _{DC}
	Current			
I_r	Nominal current	With Fan	150	A
	Max. peak current	< 5 seconds	750	A
I_{leak}	Leakage current	After 72h @ 25°C and U_r	5,2	mA
I_{sym}	Symmetrical current	@ U_r	20...400	mA
	Resistance			
ESR_{DC_ini}	Internal resistance	New condition @ 25°C	≤ 14	mΩ
	Environment			
T_n	Operation temperature		-40 to +55	°C
$T_{storage}$	Storage temperature		-40 to +55	°C
	Protection class	Without Fan With Fan	IP6X / IPX9 IP54	
	Interface			
U_{24V}	Control supply voltage	For internal module electronics*	24	V _{DC}
P_{24V}	Control capacity	Constant	5	W
U_{24VIO}	Control supply voltage	For error signal	≤ 24	V _{DC}
	Error signal	Open-collector	≤ 10	mA
	CAN	CAN Standard (CAN 2.0A)		
	Optical fiber	Optional		
	Ventilation (Fan)			
U_{48V_Fan}	Fan voltage		48	V _{DC}
P_{48V_Fan}	Fan power	Constant	44	W

* The electronics can alternatively be supplied from the module. In this case CAN and Error-output are not available!



Connectors

Communication

Mounting housing: Harting Han 3 HPR (09 40 003 0950) with socket insert Han 8 D (09 36 008 3101).

Pin	Signal	Description
1	+24V	Supply control voltage
2	0V GND*	Reference ground for control voltage
3	Error signal	open-collector, low: error / high: OK, max. 10mA
4	+24V _{IO}	Supply control voltage IO for error signal
5	0V GND _{IO} *	Reference ground for control voltage IO and error signal
6	CAN High	CAN High
7	CAN Low	CAN Low
8	CAN GND*	CAN GND

Attention: Do **NOT** connect pins **2**, **5**, and **8** together; maximum permissible voltage between pins **2**, **5**, **8** and PE = 42V.

Power

Connector: Amphenol SurLok Plus.

Pin	Signal	Description
1	Power connection (+)	Amphenol SLP IR C T P C O(R) 0
2	Power connection (-)	Amphenol SLP IR C T P C B 0
PE	Housing	M8 (max. 15Nm)

Fan

Connector: PhoenixContact SACC-E-M12MS-4CON-PG9 / 0.5 (1693762).

Pin	Signal	Description
1, 3	48V FAN	Supply fan
2, 4	0V FAN	Reference ground for supply fan

Mechanical Dimensions

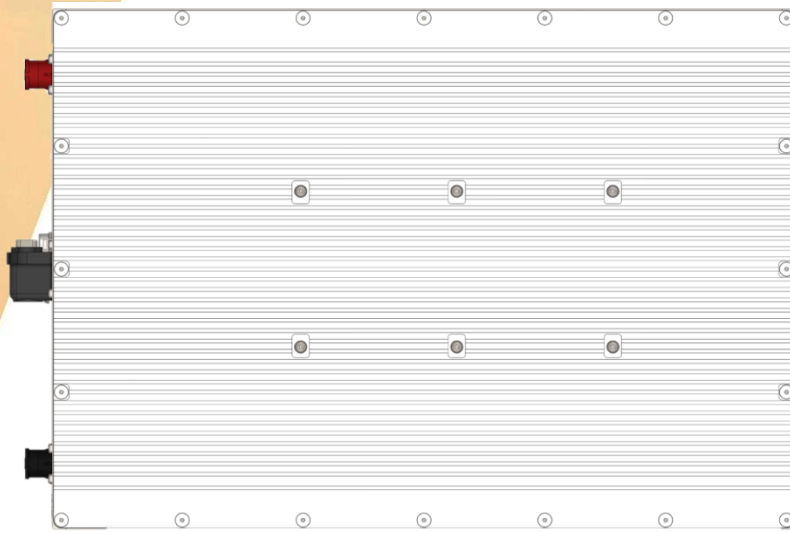


Figure 2: Top view

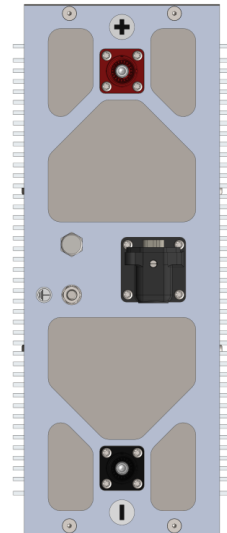


Figure 1: Front view

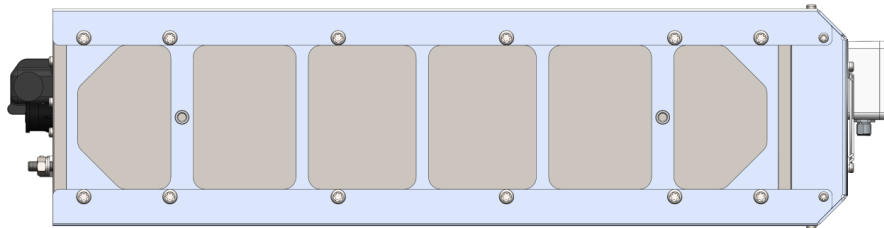
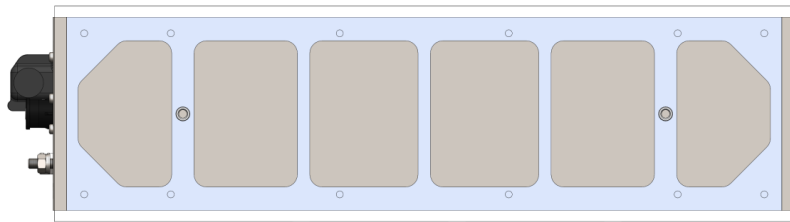


Figure 3: Side views (with and without Fan)

Mechanical Data

Symbol	Parameter	Description	Value	Unit
	Length	(without / with Fan)	636 / 718	mm
	Width	(without / with Fan)	421 / 433	mm
	Height	(without / with Fan)	174 / 184	mm
	Weight	(without / with Fan)	48 / 50	kg