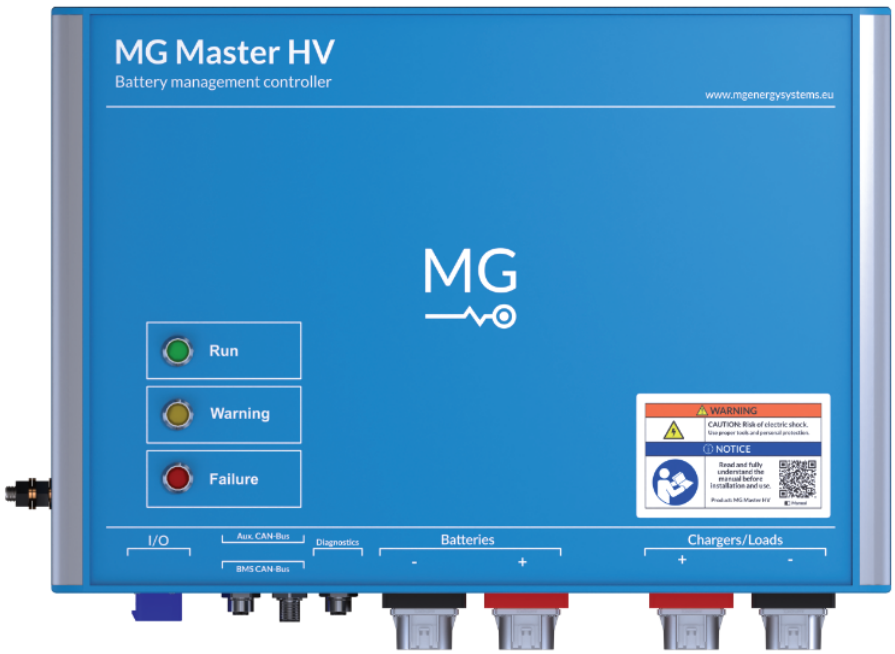
Product Data Sheet

2026-11-09



MG Master HV 900V/300A

MGMHV800300

Description

The Master HV is the safety and control unit for high voltage battery systems. This high voltage BMS is suitable in the range of 48 Vdc up to 900 Vdc. Each battery string requires a Master BMS. To increase the system capacity, connect multiple strings in parallel. As a result your system voltage and capacity are fully scalable. This means: flexible in design and system integration made easier. Besides the safety and control functions, the Master HV monitors and tracks all relevant parameters to provide insight into the battery status and energy consumption. The compact design makes it ideal for use in applications with limited space.

Product downloads

https://downloads.mgenergysystems.eu/masterhv

Specifications

Environmental

Humidity (Non-Condensing)	≤ 95 %
Operating Temperature Range	-20 to +50 °C

IO

Allow-to-Charge (Relay Output)	1.5 A at 30 Vdc, fused
Allow-to-Discharge (Relay Output)	1.5 A at 30 Vdc, fused
Digital Input 1	24 V / 5 mA
Digital Input 2	24 V / 5 mA
Digital Input 3	24 V / 5 mA
Emergency Switch Connection	Yes
Programmable Contact (Relay Output)	1.5 A at 30 Vdc, fused

Mechanical

Data Connection	CAN Bus M12
Height	121 mm
IP-Protection Class	IP65
Length	430 mm
Power Connection	PowerLok 300
Weight	9.9 kg
Width	329 mm

Standards

Approvals	DNV-GL IEC-EN62619 (ES-TRIN) Lloyds
EMC: Emission	CISPR 16-2-1:2014 CISPR 16-2-3+A1+A2:2010 EN-IEC 61000-6-3:2007/A1:2011/C11:2012
EMC: Immunity	IEC 60533:2015 IEC 61000-4-2:2008 IEC 61000-4-5:2014 IEC 61000-4-6:2013

Technical Specifications

Main Safety Contactor Current	300 A
Maximum Voltage	900 Vdc
Supply Current	2.5 A
Supply Voltage Range	18 - 32 Vdc
System Voltage	48 V 72 V 96 V ≥ 120 V

The specifications provided are for informational purposes only and are subject to change without notice. While every effort has been made to ensure the accuracy and completeness of the specifications, MG Energy Systems assumes no responsibility for any errors or omissions.

Logistics

HS code	8537109199
Country of origin	Netherlands
Shipping weight	13.5 kg
Classified as dangerous goods	No