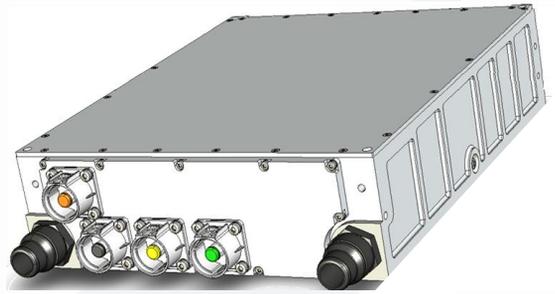


# HVI MP

HIGH FREQUENCY DC TRANSFORMER  
 Input-output galvanic isolation  
 Voltage up to 1000V<sub>DC</sub>, current 240A  
 Cutting-edge power density

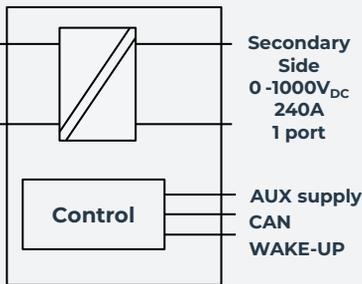


## KEY FEATURES

- > Input and output range: 0 to 1000V<sub>DC</sub>
- > Bidirectional current capability
- > Isolated stage: 240A / 200kW max
- > Ultra-high end-to-end efficiency
- > CAN remote communication and monitoring
- > Liquid cooling
- > Weight: <12kg
- > Can be paralleled for increased power
- > Connectors and Busbars options for electrical interface

## TECHNICAL SPECIFICATION

<b>Power</b>	
Max number of ports	1 each side
Voltage range	0V <sub>DC</sub> to 1000V <sub>DC</sub>
Voltage ratio	1:1
Voltage accuracy	+/-1% of full scale
Current capability	+/-240A
Current accuracy	<3% of full scale
Short circuit protection	Short-circuit protected
X Capacitance	Preliminary Side : 2µF Secondary Side : 2µF No inrush current limitation (precharge needed)
Y Capacitance	<1µF
Passive discharge time	<5 min to reach 60V
Efficiency	99% at full load
<b>Control</b>	
Auxiliary supply	9V <sub>DC</sub> – 60V <sub>DC</sub> <100µA disable mode current consumption <30W
Enable function	ON/OFF signal. Tie to ground for start-up. Internal pull up
Inrush current limitation	Not included
<b>Environment</b>	
Environmental protection	IP67
Altitude	Up to 4000m
Max cooling temperature	65°C outlet
Operating temperature range	From -40°C to 70°C ambient
Storage temperature range	From -40°C to 100°C
<b>Dielectric withstand</b>	
HV - case isolation	1950V <sub>DC</sub> Basic isolation
HV - LV isolation	2500V <sub>DC</sub> Reinforced isolation



## BrightLoop Converters

221 Boulevard Davout  
 75020 Paris – France  
 Tel +33 1 83 62 63 59

[www.brightloop.fr](http://www.brightloop.fr)

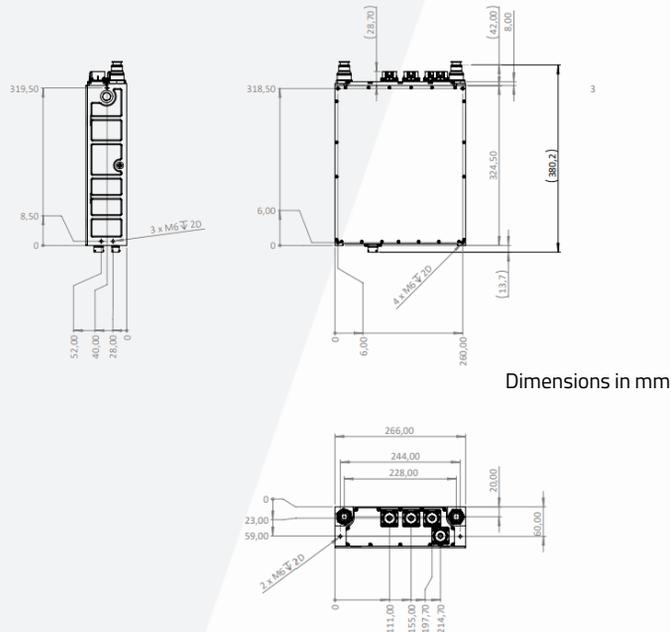
# HVI MP

## TECHNICAL SPECIFICATION

<b>CAN Interface</b>	
Bus speed	125Kbps to 1Mbps (set by CAN)
Controls	Side A Current limit +/-480A, 2A resolution
	Side A Voltage set point 0V to 950V, 1V resolution
	Side B Current limit +/-480A, 2A resolution
	Side B Voltage set point 0V to 950V, 1V resolution
	Side C Current limit +/-240A, 2A resolution
	Side C Voltage set point 0V to 950V, 1V resolution
Monitoring	Power ON/OFF
	Discharge request
	DC Transformer Status
	Voltages and currents
	Internal auxiliary power supplies voltage
Identification	Internal temperatures
	Internal protections
Software Update	Software & Hardware revision
	CAN Bootloader
<b>Liquid cooling</b>	
Pressure loss	<200mBar TBC
Maximum operating pressure*	3 barg
Maximum testing pressure	6 barg
Hydraulic connector	NORMAQUICK PS3 VDA (Mounted on NORMAQUICK PS3 NW 16-xx)
<b>Mechanical</b>	
Dimensions	< 320 x 280 x 80mm + connectors
Weight	<12kg
Interface	M8 fixations on each sides
Housing	Aluminum with conductive anti-corrosion treatment
Power connectors options	Amphenol PL500 & PL300 with HVIL
	Amphenol PL082 & PL084 with HVIL
Signals connector	Bus bar connection 8STA family (SOURIAU)

\*: for higher pressure application, please contact us

## OUTLINE DRAWING

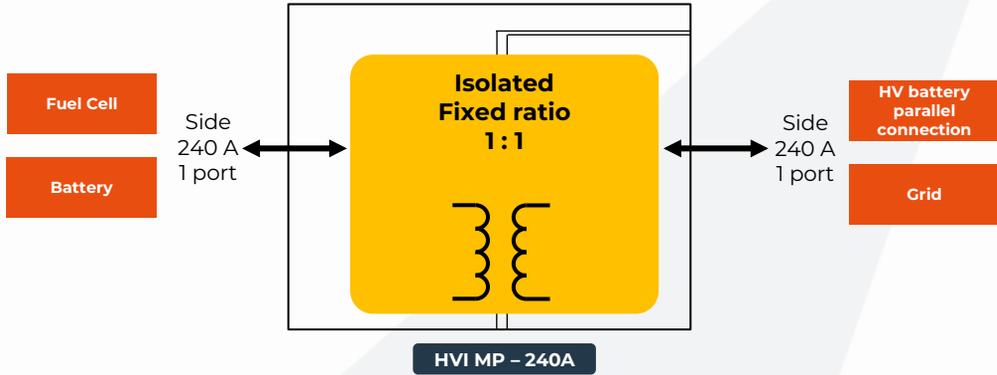


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# Ordering code logic



## Part number example :



<b>1 – Product family</b>	<b>2 – Voltage</b>
DC Transformer	HV 1000V <sub>DC</sub> max
<b>3 – Galvanic isolation</b>	
I Isolated	
<b>4 – Package size</b>	<b>5 – Product line</b>
M Medium	P Performance
<b>6 – Number of ports on side A</b>	<b>7 – Number of ports on side B</b>
S Single	S Single
<b>8 – Number of ports on side C</b>	<b>9 – Cooling option</b>
S Single	LC Liquid cooling

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