

MultiPlus-II

Comparison sheet

Specifications



	MultiPlus-II 24/3000/70-32 PMP24205010 HW rev. 01 and up	MultiPlus-II 48/3000/35-32 PMP482305010 HW rev. 08 and up	MultiPlus-II 48/5000/70-50 PMP482505010 HW rev. 03 and up	MultiPlus-II 48/3000/35-32 PMP482305000 HW rev. < 08	MultiPlus-II 48/5000/70-50 PMP482505000 HW rev. < 03	MultiGrid 48/3000/35-50	MultiPlus 48/3000/35
PowerControl & PowerAssist	Yes						
Transfer switch	32A	32A	50A	32A	50A	50 A	16A or 50A
	INVERTER						
DC Input voltage range	19 – 33 V	38 – 66 V					
Output	Output voltage: 230 VAC ± 2%			Frequency: 50 Hz ± 0,1% (1)			
Cont. output power at 25°C (3)	3000 VA	3000 VA	5000VA	3000 VA	5000VA	3000 VA	
Cont. output power at 25°C	2400 W	2400 W	4000W	2400 W	4000W	2400 W	
Cont. output power at 40°C	2200 W	2200 W	3700W	2200 W	3700W	2200 W	
Cont. output power at 65°C	1700 W	1700 W	3000W	1700 W	3000W	1700 W	
Maximum apparent feed-in power	2500VA	2500VA	4000VA	2500VA	4000VA	2500VA	
Peak power	5500 W	5500 W	9000W	5500 W	9000W	6000 W	
Maximum efficiency	95 %	95 %	96%	95 %	96%	95 %	
Zero load power	11 W	11 W	18W	11 W	18W	25 W	
Zero load power in AES mode	7 W	7 W	12W	7 W	12W	20 W	
Zero load power in Search mode	2 W	2 W	2W	2 W	2W	12 W	
	CHARGER						
AC Input	Input voltage range: 187-265 VAC			Input frequency: 45 – 65 Hz			
Charge voltage 'absorption'	28,8 V	57,6 V					
Charge voltage 'float'	27,6 V	55,2 V					
Storage mode	26,4 V	52,8 V					
Maximum battery charge current (4)	70 A	35 A					
Charge current starter battery (A)	4 A	n.a.					
Battery temperature and voltage sensor	Yes	Yes	Yes	VE.Bus Smart dongle (optional)		Yes	
	GENERAL						
Auxiliary output	Yes (32 A) Relay with 2 minutes turn on delay			Yes (32 A) Directly connected to the AC input		Yes (16 A) Relay with 2 minutes turn on delay	
External current sensor (optional)	50A	50A	100A	50A	100A	No	
Programmable relay (5)	Yes						
Protection (2)	a - g						
VE.Bus communication port	For parallel and three phase operation, remote monitoring and system integration						
General purpose com. ports	Yes, 2x						
Remote on-off	Yes, 2 pole					Yes, 3 pole (Incl. remote Charger only)	
Operating temperature range	-40 to +65°C (fan assisted cooling)						
Humidity (non-condensing)	max 95%						
	ENCLOSURE						
Material & Colour	Steel, blue RAL 5012					Aluminium, blue RAL 5012	
Protection category	IP21					IP20	
Battery-connection	Two M8 Bolts			Two M6 bolts	Two M8 Bolts	Four M8 bolts	
230 V AC-connection	Screw terminals 13 mm² (6 AWG)						
Weight	18 kg	18 kg	29 kg	18 kg	29 kg	18 kg	
Dimensions (hwxwd)	499 x 268 x 141 mm	499 x 268 x 141 mm	560 x 320 x 141 mm	499 x 268 x 141 mm	560 x 320 x 141 mm	362 x 258 x 218 mm	

1) Can be adjusted to 60 Hz

2) Protection key:

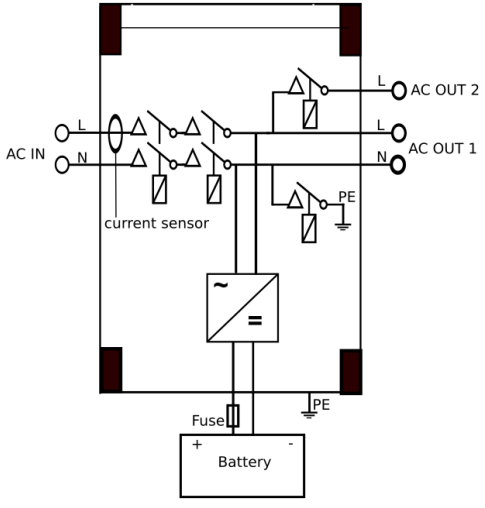
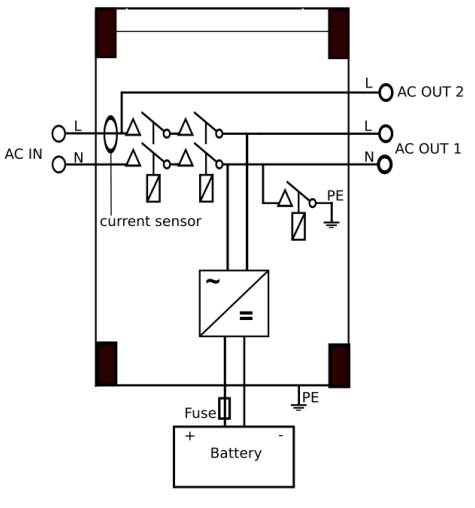
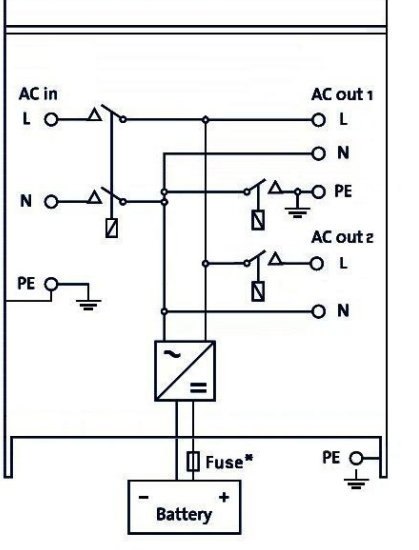
a) output short circuit b) overload c) battery voltage too high d) battery voltage too low e) temperature too high
f) 230 VAC on inverter output g) input voltage ripple too high

3) Non-linear load, crest factor 3:1

4) At 25°C ambient

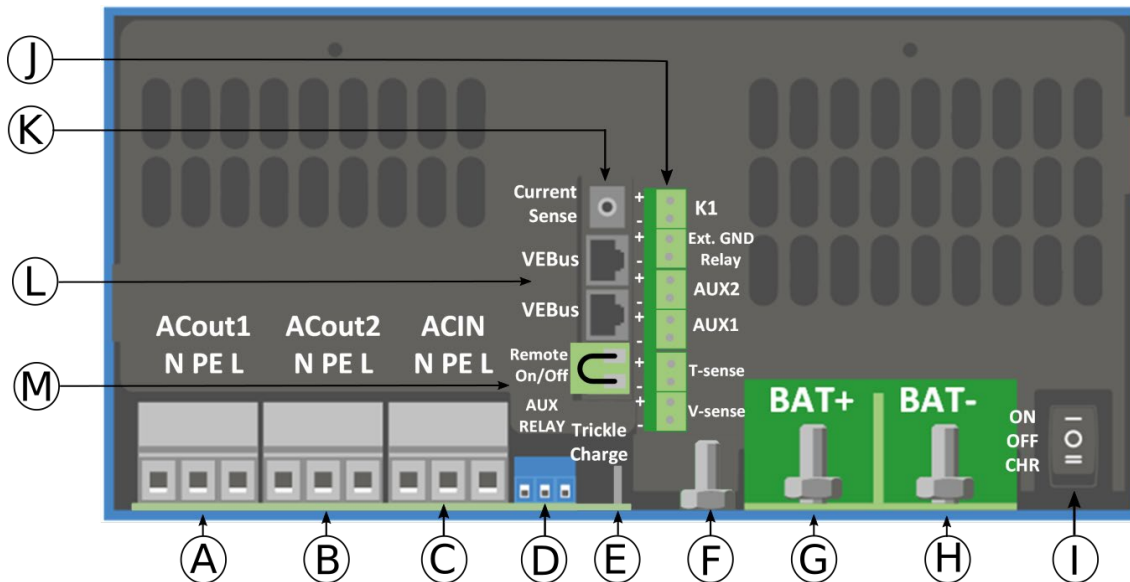
5) Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function

AC rating: 230V / 4A, DC rating: 4A up to 35VDC and 1A up to 60VDC

PMP242305010 PMP482305010 PMP482505010	PMP482305000 PMP482505000	MultiGrid MultiPlus
		
AC-out-2 is connected to the AC output	The AC-in current sensor (internal current sensor) of the MultiPlus-II is placed directly on the AC input. AC-out-2 is connected to the AC input, 'downstream' of the current sensor.	

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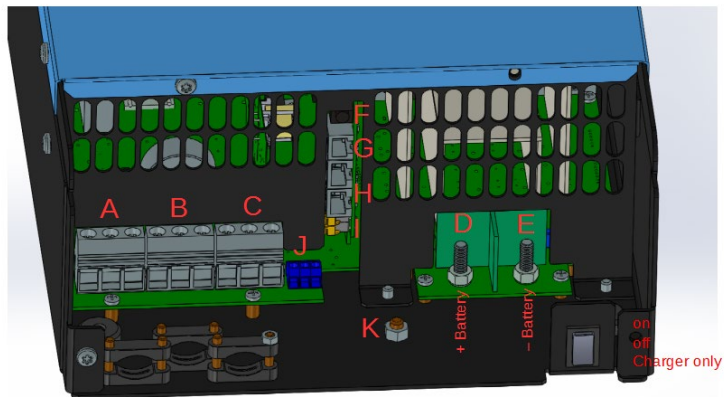


A	Load connection. AC out1. Left to right: N (neutral), PE (earth/ground), L (phase)
B	Load connection. AC out2. Left to right: N (neutral), PE (earth/ground), L (phase)
C	AC input: Left to right: N (neutral), PE (earth/ground), L (phase)
D	Alarm contact: (left to right) NO, NC, COM.
E	Trickle charge (12 and 24V model only)
F	Primary ground connection M6 (PE).
G	M8 battery positive connection.
H	M8 battery minus connection.
I	switch: 1=On, 0=Off, =charger only
J	Terminal for: top to bottom: <ul style="list-style-type: none"> 1. 12V 100mA 2. Programmable contact K1 open collector 70V 100mA 3. External ground relay + 4. External ground relay - 5. Aux input 1 + 6. Aux input 1 - 7. Aux input 2 + 8. Aux input 2 - 9. Temperature sense + 10. Temperature sense - 11. Battery voltage sense + 12. Battery voltage sense -
K	External current sensor
L	2x RJ45 VE-BUS connector for remote control and/or parallel / three-phase operation
M	Connector for remote switch: Short to switch "on".

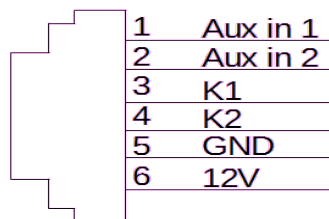
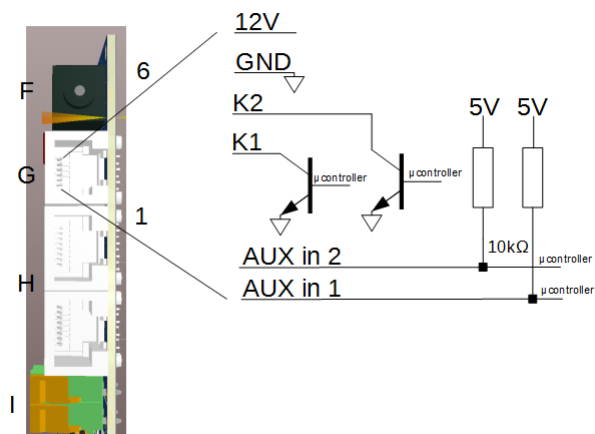
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PMP482305000

PMP482505000



A	Load connection. AC out1. Left to right: N (neutral), PE (earth/ground), L (phase)
B	AC input: Left to right: N (neutral), PE (earth/ground), L (phase)
C	Load connection. AC out2. Left to right: N (neutral), PE (earth/ground), L (phase)
D	M6 battery positive connection.
E	M6 battery minus connection.
F	External current sensor (not available on MultiGrid)
G	RJ12 additional IO connector (see below)
H	2x RJ45 VE-BUS connector for remote control and/or parallel / three-phase operation (VE.Bus)
I	Connector for remote switch: Short to switch "on".
J	Programmable relay (left to right) NO, NC, COM.(virtual switch in VE.Configure)
K	Primary ground connection M8 (PE).



Detail of the RJ12 additional IO connector (G)

Detail of the RJ12 additional IO connector (G)

RJ12 additional IO connector

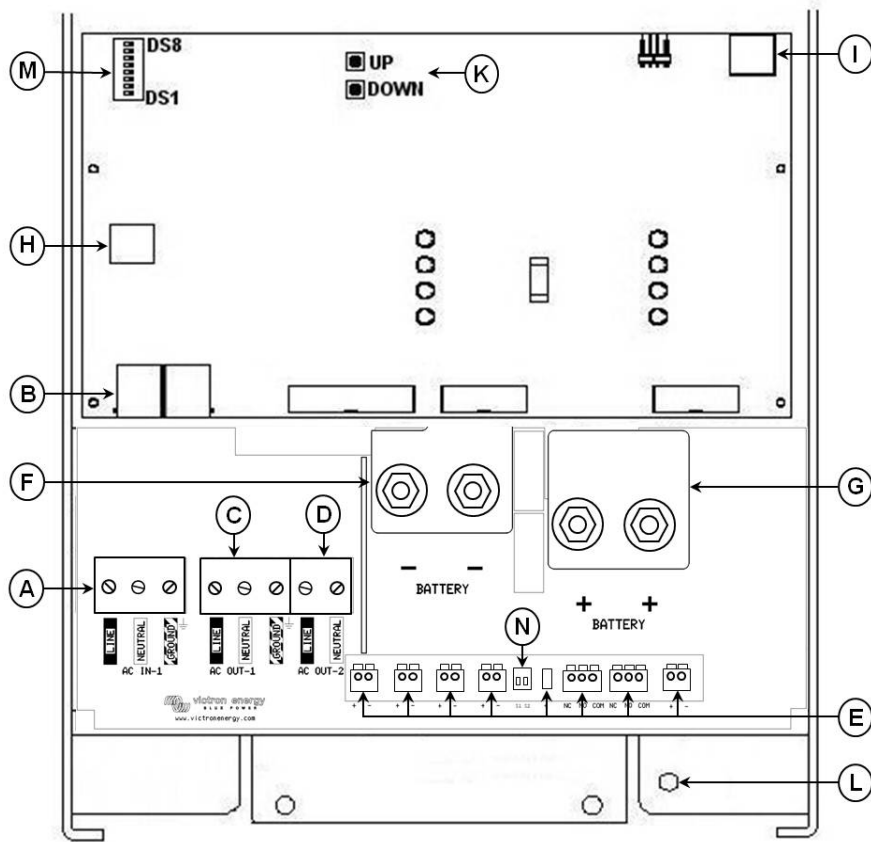
Aux in 1 and Aux in 2: 0 – 5V (same fio as in MultiGrid)

K1, K2: open collector 70V 100mA max (open collector inputs, replaces the programmable relay contacts of the MultiGrid)

12V: 12V 100mA max power supply

Gnd: common ground

MultiGrid



A	AC input: Left to right: L (phase), N (neutral), PE (earth/ground).
B	2x RJ45 connector for remote control and/or parallel / three-phase operation (VE.Bus)
C	Load connection. AC out1. Left to right: L (phase), N (neutral), PE (earth/ground).
D	Load connection. AC out2. Left to right: PE (earth/ground), L (phase), N (neutral).
E	Terminals Temperature sensor (not available on the MultiPlus-II: VE.Bus Smart dongle needed) Aux input 1 (same fio as MultiPlus-II) Aux input 2 (same fio as MultiPlus-II) Starter battery plus + (starter battery minus must be connected to service battery minus) Not available on the MultiPlus-II. Programmable relay contacts K1 Programmable relay contacts K2 Voltage sense (not available on the MultiPlus-II: VE.Bus Smart dongle needed)
F	Double M8 battery minus connection.
G	Double M8 battery positive connection.
H	Connector for remote switch: Short left and middle terminal to switch 'on'. Short right and middle terminal to switch to 'charger only'. (not available on MultiPlus-II).
I	Alarm contact: (left to right) NC, NO, COM.
K	Pushbuttons for set-up mode. Not available on MultiPlus-II.
L	Primary ground connection M8 (PE).
M	Dipswitches DS1- DS8 for set-up mode. Not available on MultiPlus-II.
N	Slide switches, factory setting: SW1= down (off) position, SW2 = down (off) position. Not available on MultiPlus-II. SW1: down (off) = internal GND relay selected, up (on) = external GND relay selected (to connect ext GND relay: see E). Not available on MultiPlus-II SW2: No application. To be used for future features. Not available on MultiPlus-II