

AVIATION GROUND POWER UNIT GPU



The GPU (Ground Power Unit) product line from MEGABOOST AVIATION provides an extensive range of solutions for powering your aircraft.

The Continuous Supply Stations range (SA), the Starter Stations range (SD) and the Combi Starter and Supply Stations range (SAD) meet the auxiliary power supply needs for aircraft during ground phases for updating software, general maintenance, flight preparation, training, and starting engines.

The SD Stations range and SAD Stations range come with internal 24V, 26V or 28V batteries, delivering voltage levels tailored to meet the needs of different aircraft: FADEC, minimum starter voltage drop, starter speed, etc.

For maintenance, the Starter and Supply Stations range - SAD serie - is particularly practical, with the internal batteries instantly supplying back-up power during aircraft tests which may require higher currents, such as turbine ventilation, engine flushing, tests on the landing gear, winch, etc.

The latest innovation from BV Corporation is a "100% electric" GPU range: the e-GPU. Clearly targeting the current diesel GPU market, the e-GPU from MEGABOOST AVIATION boasts an "all-electric" Starter and Supply Station feature with three main advantages: it makes no noise, offers zero emissions and costs much less to run.

In much the same way as electric vehicles, the autonomy of the e-GPU means it can be used for continuous supply and starter throughout the day. The e-GPU is then charged between uses and overnight. The e-GPU is particularly popular with airports and aircraft fleet managers seeking equipment that is easy and quiet to use and doesn't generate pollution.

You know it's a MEGABOOST AVIATION product when you see the retroreflective red strip on the unit.

Not only does this strip make it easier to locate the unit

Not only does this strip make it easier to locate the unit in the darkness of a hangar or outside late in the day, but it is also the signature design of a MEGABOOST AVIATION unit.

The batteries used to power MEGABOOST AVIATION units are exempt from IATA restrictions regarding dangerous goods in the air transport sector. A safety data sheet explaining the terms is available on request.

All MEGABOOST AVIATION equipment is manufactured in Europe, adhering to high standards when it comes to selecting components, following ISO Quality processes for manufacturing and complying with the relevant regulations.

At the end of the catalogue you will find a questionnaire, the aim of which is to understand the expected use in order to determine the choice of equipment.

MEGABOOST has been a registered trademark of BV Corporation since 1996, with a reputation for delivering high-quality starter assistance equipment for combustion engine crafts.















Continuous supply station

Continuous supply stations for avionics: 50A, 100A, 200A, 300A, 400A, voltages ranging from 5V to 30VDC variable or 28.5VDC stabilised

REFERENCE	SA25	SA50	SA50 DUAL	SA50-VAR	SA100	SA200	SA300	SA400
Output voltage	14,2VDC & 28,5VDC by selector	28,5VDC	14,2VDC & 28,5VDC by selector	Variable 5V-30VDC & 28,5V DC	28,5VDC	28,5VDC	28,5VDC	28,5VDC
Current output (Peak)	25 (34) Amps	50 (67) Amps	50 (67) Amps	50 (67) Amps	100 (135) Amps	200 (270) Amps	300 (405) Amps	400 (540) Amps
Input supply voltage	90V to 240V 50/60Hz	90V to 240V 50/60Hz	90V to 240V 50/60Hz	90V to 240V 50/60Hz	230V/50Hz	400V / 3 Phases 50Hz	400V / 3 Phases 50Hz	400V / 3 Phases 50Hz
Input supply current	4A	8A	8A	8A	16A	16A/3 phases	16A/3 phases	32A / 3 phases
Output cable : NATO aircraft plug	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m
Operating Temperature	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C
External protection	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55
Trolley fitted with castor wheels						•	•	•
Length	420 mm	420 mm	420 mm	420 mm	420 mm	420 mm	420 mm	420 mm
Height	200 mm	200 mm	200 mm	200 mm	320 mm	340 mm	340 mm	340 mm
Width	160 mm	160 mm	160 mm	160 mm	160 mm	320 mm	320 mm	320 mm
Weight	6 Kg	6 Kg	7 Kg	6 Kg	9 Kg	15 Kg	22 Kg	26 Kg
OPTIONS								
Output cables with a Piper type aircraft connector	•	•	•	•				
Optional Input cable	25 m (3 core)	25 m (3 core)	25 m (3 core)	25 m (3 core)	25 m (3 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)
Cable extension on request 50 m input cable, 3, 4 or 5 m output cable	•	•	•	•	•	•	•	•



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Starter station

Starter stations autonomous up to 5000A at peak of 26VDC, 28VDC and 30VDC

REFERENCE	SD1224	SD241	SD242	SD28	SD281	SD282	SD288
Output voltage	12V/24VDC	25,8VDC	25,8VDC	30,1VDC max	30,1VDC max	30,1VDC max	30,1VDC
Starting current (PHCA at 5s)	1100 Amps	1100 Amps	2200 Amps	520 Amps	1100 Amps	2200 Amps	5000 Amps
Peak current (short-circuit current)	2450 Amps	2450 Amps	4800 Amps	1800 Amps	2450 Amps	4800 Amps	10000 Amps
Battery capacity	45A/H	45A/H	90A/H	17A/H	45A/H	90A/H	480A/H
Input voltage for charging	90V to 240V 50/60Hz						
Input Current (charging)	2A @230V	2A @230V	4A @230V	2A @230V	2A @230V	4A @230V	16A @230V
Charger	4A, 3 stage charger	4A, 3 stage charger	8A, 3 stage charger	4A, 3 stage charger	4A, 3 stage charger	8A, 3 stage charger	50A, 3 stage charger
Operating Temperature	-20°C to +50°C						
External protection	IP55						
Output cable : NATO aircraft plug	2 m	2 m	2 m	2 m	2 m	2 m	5 m
Trolley	•	•	•		•	•	(with HD wheels)
Length (Unit only)	450 mm	450 mm	450 mm	460 mm	450 mm	450 mm	1200 mm (Trolley Incl.)
Height (Unit only)	380 mm	380 mm	380 mm	320 mm	460 mm	460 mm	1100 mm (Trolley Incl.)
Width (Unit only	160 mm	160 mm	320 mm	290 mm	160 mm	320 mm	750 mm (Trolley Incl.)
Weight (Unit only)	28 Kg	28 Kg	54 Kg	25 Kg	32 Kg	62 Kg	400 Kg (Trolley Incl.)
OPTIONS							
Output cable fitted with HD Rubber NATO plug	3 m	3 m	3 m		3 m	3 m	
Parallel junction connector		•		•	•	•	



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24V starter and supply station

28.5V continuous supply stations with 5000A backup power supply at peak levels

REFERENCE	SAD51	SAD51 DUAL	SAD52	SAD101	SAD101 DUAL	SAD102	SAD201	SAD202	SAD301	SAD302	SAD305	SAD405
Output voltage (Continuous Mode)	28,5VDC	14,2VDC & 28,5VDC by selector	28,5VDC	28,5VDC	14,2VDC & 28,5VDC by selector	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC
Output current (Continuous Mode)	50 Amps	50 Amps	50 Amps	100 Amps	100 Amps	100 Amps	200 Amps	200 Amps	300 Amps	300 Amps	300 Amps	400 Amps
Output starting voltage (full charged battery	25.8VDC	12,9 VDC & 25,8 VDC by selector	25,8VDC	25,8VDC	12,9VDC & 25,8VDC by selector	25,8VDC	25,8VDC	25,8VDC	25,8VDC	25,8VDC	25,8VDC	25,8VDC
Starting current (PHCA at 5s)	1100 Amps	1100 Amps	2200 Amps	1100 Amps	1100 Amps	2200 Amps	1100 Amps	2200 Amps	1100 Amps	2200 Amps	2250 Amps	2250 Amps
Peak current (short-circuit current)	2450 Amps	2450 Amps	4800 Amps	2450 Amps	2450 Amps	4800 Amps	2450 Amps	4800 Amps	2450 Amps	4800 Amps	5000 Amps	5000 Amps
Battery capacity	45A/H	45A/H	90A/H	45A/H	45A/H	90A/H	45A/H	90A/H	45A/H	90A/H	126A/H	126A/H
Input supply voltage	90V to 240V 50/60Hz	90V to 240V 50/60Hz	90V to 240V 50/60Hz	230V/50Hz	230V/50Hz	230V/50Hz	400V 3 Phases / 50Hz					
Input supply current	8A	8A	8A	16A	16A	16A	16A / 3 phases	32A / 3 phases				
Operating Temperature	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to+50°C	-20°C to+50°C	-20°C to+50°C	-20°C to +50°C				
External protection	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55
Output cable NATO aircraft plug	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m
Trolley - Fitted with castor whee - Fitted with rubber tyres		•	•	•	•	•	•	•	•	•	•	•
Length (Unit only)	420 mm	420 mm	560 mm	420 mm	420 mm	560 mm	420 mm	560 mm	500 mm	560 mm	500 mm	500 mm
Height (Unit only)	320 mm	320 mm	470 mm	320 mm	320 mm	470 mm	400 mm	470 mm	600 mm	470 mm	600 mm	600 mm
Width (Unit only)	320 mm	320 mm	410 mm	320 mm	320 mm	410 mm	320 mm	410 mm	400 mm	410 mm	400 mm	400 mm
Weight (Unit only)	30 Kg	31 Kg	57 Kg	33 Kg	34 Kg	60 Kg	38 Kg	75 Kg	57 Kg	82 Kg	90 Kg	95 Kg
OPTIONS												
Output cable fitted with I Rubber NATO plug	HD 2 m	2 m	2 m	2 m	2 m	2 m	2 m	2m	2 m	2 m	2 m	2 m
Optional Input cable	25 m	25 m	25 m	25 m	25 m	25 m	25 m	25 m	25 m	25 m	25 m	25 m
Optional Trolley fitted with rubber tyres			•			•	•	•	•	•		
Cable extension on reque 50 m input cable, 4 or 5 m output cable	st •	•	•	•	•	•	•	•	•	•	•	•



26V starter and supply station

28.5V combined continuous supply stations with 5000A backup power supply at peak levels

REFERENCE	SAD51-26	SAD101-26	SAD102-26	SAD105-480-26	SAD201-26	SAD202-26	SAD205-480-26	SAD301-26	SAD302-26	SAD405-26
Output voltage (Continuous Mode)	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC
Output current (Continuous Mode)	50 Amps	100 Amps	100 Amps	100 Amps	200 Amps	200 Amps	200 Amps	300 Amps	300 Amps	400 Amps
Output starting voltage (full charged battery	27,9VDC	27,9VDC	27,9VDC	27,9VDC	27,9VDC	27,9VDC	27,9VDC	27,9VDC	27,9VDC	27,9VDC
Starting current (PHCA at 5s)	1100 Amps	1100 Amps	2200 Amps	5000 Amps	1100 Amps	2200 Amps	5000 Amps	1100 Amps	2200 Amps	2250 Amps
Peak current (short-circuit current)	2450 Amps	2450 Amps	4500 Amps	10000 Amps	2450 Amps	4500 Amps	10000 Amps	2450 Amps	4500 Amps	5000 Amps
Battery capacity	45A/H	45A/H	90A/H	480A/H	45A/H	90A/H	480A/ H	45A/H	90A/H	130A/H
Input supply voltage	90V to 240V 50/60Hz	230V/50Hz	230V/50Hz	230V/50Hz	400V / 3 Phases 50Hz	400V / 3 Phases 50Hz	400V / 3 Phases 50Hz	400V / 3 Phases 50Hz	400V / 3 Phases 50Hz	400V / 3 Phases 50Hz
Input supply current	8A	16A	16A	16A	16A / 3 phases	16A/3 phases	16A / 3 phases	16A/3 phases	16A / 3 phases	32A/3 phases
Operating Temperature	-20°C to +50°C	-20°C to+50°C	-20°C to +50°C	-20°C to+50°C	-20°C to +50°C	-20°C to+50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
External protection	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55
Output cable : NATO aircraft plug	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m
Trolley - Fitted with castor wheels - Fitted with rubber tyres	•	•	•	•	•	•	•	•	•	•
Length (Unit only)	450 mm	450 mm	560 mm	1200 mm (Trolley incl.)	450 mm	560 mm	1200 mm (Trolley incl.)	500 mm	560 mm	500 mm
Height (Unit only	320 mm	320 mm	470 mm	1000 mm (Trolley incl.)	400 mm	470 mm	1000 mm (Trolley incl.)	600 mm	470 mm	600 mm
Width (Unit only)	320 mm	320 mm	410 mm	750 mm (Trolley incl.)	320 mm	410 mm	750 mm (Trolley incl.)	400 mm	410 mm	400 mm
Weight (Unit only)	35 Kg	36 Kg	62 Kg	360 Kg (Trolley incl.)	41 Kg	66 Kg	365 Kg (Trolley incl.)	60 Kg	85 Kg	95 Kg
OPTIONS										
Output cable fitted with HD Rubber NATO plug	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m	2 m
Optional Input cable	25 m (3 core)	25 m (3 core)	25 m (3 core)	25 m (3 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)
Optional Trolley fitted with rubber tyres		•	•		•	•		•	•	•
Cable extension on request 50 m input cable, 3, 4 or 5 m output cable	•	•	•	•	•	•	•	•	•	•

100% rechargeable autonomous station (continuous supply and starter)

Combined mains-powered or 100% rechargeable electric stations, high autonomy, 28.5V continuous supply and starter up to 5000A at peak levels.

	REFERENCE	SAD51SB25	SAD101SB25	SAD201SB25	SAD201SB35	SAD305SB35	SAD405SB22	SAD405SB35	SAD405SB55	SAD605SB55
JPPLY	Output voltage (permanent in AC Mode)	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC	28,5VDC
CONTINUOUS SUPPLY	Output current (permanent in AC Mode)	50 Amps	100 Amps	200 Amps	200 Amps	300 Amps	400 Amps	400 Amps	400 Amps	600 Amps
CON	Autonomy in DC mode	50 Amps / 4Hrs	100 Amps / 2Hrs	200 Amps / 1Hr	200 Amps / 1.5Hrs	300 Amps / 1Hr	400 Amps / 30 mins	400 Amps / 45 mins	400 Amps / 1Hr	600 Amps / 45 mins
¥	Starting battery voltage	25,8VDC	25,8VDC	25,8VDC	25,8VDC	25,8VDC	25,8VDC	25,8VDC	25,8VDC	25,8VDC
SIARIER	Starting current (PHCA at 5s)	1100 Amps	1100 Amps	1100 Amps	1100 Amps	2250 Amps				
	Peak current (short-circuit current)	2450 Amps	2450 Amps	2450 Amps	2450 Amps	5000 Amps				
	Starting battery capacity	45A/H	45A/H	45A/H	45A/H	126A/H	126A/H	126A/H	126A/H	126A/H
	Input supply voltage	90V à 230V / 50Hz	230V / 50Hz	400V / 3 Phases 50Hz						
	Input supply current	8A	16A	16A/3 phases	16A/3 phases	16A/3 phases	32A / 3 phases	32A / 3 phases	32A / 3 phases	32A / 3 phases
	Operating Temperature	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C	-20°C à +50°C
	External protection	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54
	Input cable	25 m (3 core)	25 m (3 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)	25 m (5 core)
	Output cable fitted with HD Rubber NATO aircraft plug	3 m	3 m	3 m	3 m	3 m	3 m	3 m	3 m	3 m
	Trolley - Fitted with rubber tyres - Towable trolley fitted with 76mm towing eye	•	•	•	•	•	•	•	•	•
	Length (with Trolley)	800 mm	800 mm	800 mm	800 mm	1000 mm	1000 mm	1000 mm	1200 mm	1200 mm
	Height (with Trolley)	800 mm	800 mm	800 mm	800 mm	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm
	Width (with Trolley)	500 mm	500 mm	500 mm	500 mm	750 mm				
	Weight (with Trolley)	275 Kg	280 Kg	290 Kg	370 Kg	430 Kg	335 Kg	430 Kg	580 Kg	600 Kg

 ${\tt Options:50\ metres\ input\ cable,\ 10\ metres\ output\ cable,\ stainless\ steel\ IP56\ enclosure}$

Options: 26 cells for starting voltage @27,9V in full charge



APPLICATION QUESTIONNAIRE

The purpose of this guide is to identify your expectations with regard to using the unit. Please fill it in as accurately as possible so that we can select the most appropriate product.

COMPANY	ADDRESS				
PERSON	FUNCTION				
PHONE	EMAIL				
COMPANY ACTIVITY	TYPE OF AIRCRAFT				
EXPECTED FUNCTIONS					
Continuous supply station Starter station	Combi station e-GPU (starter and continuous supply station)				
VOLTAGE					
14,2V DC 28,5V DC Variable VDC (12V	DC to 31VDC) 115V/400Hz				
CURRENT REQUIRED					
Maximum Starting Amps					
Maximum Avionic maintenance Amps					
Any other tests Amps					
TYPE OF USE					
☐ Maintenance ☐ Handling ☐ Training/simulatio	n Other				
LOCATION OF USE					
☐ Warehouse ☐ Landing strip with main power access	Landing strip without main power access Other				
CAPACITY / AUTONOMY (between two charging periods)					
Expected maximum continuous current supply					
Expected maximum time for continuous current supply					
Required time as continuous power supply before starting the engi	ne				
Number of starts expected before charging the unit					
OTHER REQUIREMENTS					



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