



DC/DC CONVERTERS

Astec Modular Power Supply System (AMPSS®) offers an off-the-shelf solution to system power. Featuring high reliability and efficiency, and convenient control and monitoring functions, the AMPSS® family of DC/DC modules is designed to reduce product development time, and enhance system flexibility and performance.

The AMPSS® range enables modular design and implementation of distributed power supply systems. Here the front end converter uses input AC to generate a semi-regulated DC bus voltage of typically 300, 48, 28 or 24V. The semi-regulated bus voltage is then distributed to the DC/DC converters that are at the point of load. Output regulation is done individually by each DC/DC converter to point of use.

The AMPSS® range offers the widest choice of standard DC/DC converters in the industry from 1W to 500W. All are available in compact high density packages using fixed frequency switching to minimize noise and provide more than 1,000,000 hours MTBF. For low power (<50W), AMPSS® has a range of Micro Regulators in industry standard size packages. In the high power range, the AMPSS® Power Modules are available in a number of series. Choices include models which provide economical power conversion with basic control functions to high performance models featuring sophisticated control, programming and monitoring functions. Modules may be connected in series or parallel to meet exact power requirements. From distributed power systems to stand-alone operation, AMPSS® modules are suitable for the full spectrum of applications.

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DC/DC CONVERTERS

OUTPUT POWER	MODEL SERIES	OUTPUT VOLTAGES			PAGE
		SINGLE	DUAL	TRIPLE	
1W	AA01A	5V	12V, -12V		83
3W	AA03A	5V or 12V or 15V	12V, -12V 15V, -15V		83
5W	AA05A	5V or 12V or 15V	12V, -12V 15V, -15V		83
10W	AA10A	5V or 12V or 15V	12V, -12V 15V, -15V	5V, 12V, -12V 5V, 15V, -15V	83
15W	AA15A	5V or 12V or 15V	12V, -12V 15V, -15V	5V, 12V, -12V 5V, 15V, -15V	83
15W	AA15B	5V or 12V or 15V	12V, -12V 15V, -15V		83
20W	AA20A	5V or 12V or 15V	12V, -12V 15V, -15V	5V, 12V, -12V 5V, 15V, -15V	83
25W	AA25A			5V, 12V, -12V 5V, 15V, -15V	83
25W	AA25B	5V or 12V or 15V	12V, -12V 15V, -15V	5V, 12V, -12V 5V, 15V, -15V	83
25W	AA25C			5V, 12V, 12V 5V, 15V, 15V	83
25W	AA25D	3.3V			83
25W	AA25E	3.3V			83
30W	AA30A	15V	12V, -12V		83
30W	AA30C	12V or 15V	12V, -12V		83
40W	AA40A	5V			83
40W	AA40C	5V	5V, 5V		83
45W	AA45C		15V, -15V		83
50W	AJ60A	5V or 12V or 15V			85
75W	AJ60A	5V or 12V or 15V			85
100W	AJ60A	5V or 12V or 15V			85
120W	AL60A	2.2V or 3.3V or 5V or 12V or 15V			85
150W	BJ60A	5V or 12V or 15V			85
240W	AJ80A	3.3V or 5V or 12V or 15V			85
240W	AK80A	3.3V or 5V or 12V or 15V			85
240W	AL80A	2.2V or 3.3V or 5V or 6.3V or 12V or 15V			85
240W	AM80A	1.2V or 2.2V or 3.3V or 5V or 6.5V or 12V or 15V or 24V or 28V			85
300W	BM80A	3.3V or 5V			85
500W	DJ80A	24V or 48V			87
1200W	PFC	385V			88
--	Heatsinks & Accessories				89

DC/DC

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AMPSS Micro Regulators 1 to 45 Watts • AMR Series

The AMR DC/DC Converter series is part of Astec's family of advanced modular power supply components. Featuring high reliability and convenient control functions, these modules are designed to reduce product development time and enhance system performance. The AMR Series range from 1 to 45 watts and are available in industry standard size footprints with single, dual or triple outputs in a compact package. The units are ideally suited for telecommunications, industrial, computer and distributed power system applications.

SPECIAL FEATURES

- High efficiency
- Industry standard packaging
- 100% computerized final testing
- Overvoltage protection
- Six sided shielding
- Surface mount technology
- Single, dual and triple outputs
- Regulated outputs

ENVIRONMENTAL

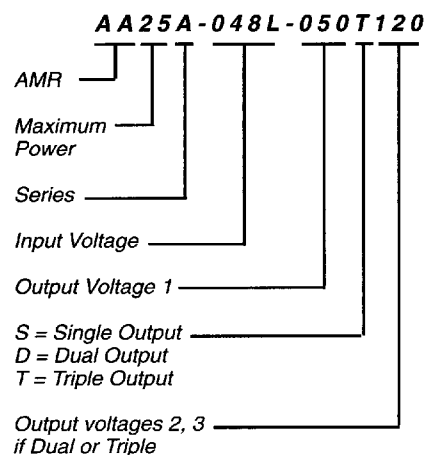
Operating Temperature: -20° to 71°C (no derating)

Storage Temperature: -25° to 105°C

SAFETY

UL UL1950
CSA CSA22.2-234M90
EN 60950

MODEL SELECTION



SERIES OVERVIEW

The AMR Series runs from 1 to 45 watts and features single, dual and triple output models. Incorporating the latest MOSFET design and state-of-the-art surface mount technology, the AMRs features include wide input voltage range (4:1) and efficiencies of 80% or greater. All models feature a TTL compatible Enable control and models rated at 10W and over allow output voltage adjustment from 90% to 110% of the nominal value.

The AMR A and B series features include wide input voltage range, continuous short circuit protection with auto restart, 500VDC input/output isolation and TTL and CMOS logic compatibility. The B series offers a different size of industry standard footprint to that of the A series.

The AMR C series are low profile, high performance, high power density modules; ideal for 0.75 inch card spacing. Adjustable outputs, overcurrent protection and high efficiency (80% typical) are just some of the C series features. Others include an MTBF in excess of 1,000,000 hours, isolated outputs (1500VDC) and remote inhibit.

The D and E series are 5V to 3.3V high efficiency, low cost DC/DC converters designed to power the latest microprocessors and 3.3V logic. These series use advanced circuit design and packaging technology to realize superior reliability and performance.

ORDERING INFORMATION

Model Series	Max Power	Input Range	Output 1	Output 2	Output 3	Dimensions (HxWxL) (inches)	(mm)	Doc. No.
AA01A	1 W	10.8 - 14.0V	5V @ 0.2A 12V @ 0.05A	-- -12V @ 0.05A	--	0.45x0.5x1.0	11.4x12.7x25.4	1330
AA03A	3W	4.5-5.25 VDC or 9-36 VDC or 20-72 VDC	5V @ 0.6A 12V @ 0.25A 15V @ 0.2A 12V @ 0.125A 15V @ 0.1A	-- -- -- -12V @ 0.125A -15V @ 0.1A	-- -- -- -- --	0.4x1.0x2.0	10.2x25.4x51.0	1331
AA05A	5W	4.5-5.25 VDC or 9-36 VDC or 20-72 VDC	5V @ 1A 12V @ 0.42A 15V @ 0.33A 12V @ 0.21A 15V @ 0.16A	-- -- -- -12V @ 0.21A -15V @ 0.16A	-- -- -- -- --	0.4x1.0x2.0	10.2x25.4x51.0	1332
AA10A	10W	9-36 VDC or 20-72 VDC	5V @ 2A 12V @ 0.83A 15V @ 0.67A 12V @ 0.42A 15V @ 0.33A 5V @ 1A 5V @ 1A	-- -- -- -12V @ 0.42A -15V @ 0.33A 12V @ 0.21A 15V @ 0.17A	-- -- -- -- -- -12V @ 0.21A -15V @ 0.17A	0.4x2.0x2.0	10.2x51.0x51.0	1333
AA15A	15W	9-36 VDC or 20-72 VDC	5V @ 3A 12V @ 1.25A 15V @ 1A 12V @ 0.625A 15V @ 0.5A 5V @ 1.5A 5V @ 1.5A	-- -- -- -12V @ 0.625A -15V @ 0.5A 12V @ 0.31A 15V @ 0.25A	-- -- -- -- -- -12V @ 0.31A -15V @ 0.25A	0.4x2.0x2.0	10.2x51.0x51.0	1334
AA15B	15W	20-72 VDC	5V @ 3A 12V @ 1.25A 15V @ 1A 12V @ 0.625A 15V @ 0.5A	-- -- -- -12V @ 0.625A -15V @ 0.5A	-- -- -- -- --	0.4x1.6x2.0	10.2x40.6x51.0	1334
AA20A	20W	9-36 VDC or 20-72 VDC	5V @ 4A 12V @ 1.65A 15V @ 1.3A -- -- 5V @ 2A 5V @ 2A	-- -- -- 12V @ 0.83A 15V @ 0.65A 12V @ 0.4A 15V @ 0.3A	-- -- -- -12V @ 0.83A -15V @ 0.65A -12V @ 0.4A -15V @ 0.3A	0.4x2.0x2.0	10.2x51.0x51.0	1335
AA25A	25W	19-35 VDC or 36-75 VDC	5V @ 5A 5V @ 5A 5V @ 5A 12V @ 2A 15V @ 1.6A	12V @ 1A 15V @ 0.8A -- -- --	-12V @ 1A -15V @ 0.8A -- -- --	0.426x3.0x3.0	10.8x76.0x76.0	1336
AA25B	25W	9-36 VDC or 20-72 VDC	5V @ 5A 12V @ 2A 15V @ 1.6A -- -- 5V @ 3.5A 5V @ 3.5A	12V @ 1A 15V @ 0.8A -- -- 12V @ 0.75A 15V @ 0.5A	-12V @ 1A -15V @ 0.8A -- -- -12V @ 0.75A -15V @ 0.5A	0.83x2.5x3.0	21.0x63.5x76.2	1337
AA25C	25W	36-75 VDC	5V @ 5A 5V @ 5A 5V @ 5A	12V @ 1A 15V @ 0.8A --	-12V @ 1A -15V @ 0.8A --	0.5x3.0x3.0	12.7x76.0x76.0	1800
AA25D	25W	4.7-7 VDC	3.3V @ 8A	--	--	0.5x2.0x2.0	12.7x51.0x51.0	1801
AA25E	25W	4.7-7 VDC	3.3V @ 8A	--	--	0.5x2.0x1.0	12.7x51.0x25.4	1802
AA30A	30W	19-35 VDC 36-75 VDC	15V @ 2A 12V @ 2.5A	-- -12V @ 2A	-- --	0.426x3.0x3.0	10.8x76.0x76.0	1338
AA30C	30W	36-75 VDC	12V @ 2.5A 15V @ 2A 12V @ 2.5A	-- -- -12V @ 2A	-- -- --	0.5x3.0x3.0	12.7x76.0x76.0	1803
AA40A	40W	19-35 VDC 36-75 VDC	5V @ 8A	--	--	0.426x3.0x3.0	10.8x76.0x76.0	1339
AA40C	40W	36-75 VDC	5V @ 8A 5V @ 4A	-- -5V @ 4A	-- --	0.5x3.0x3.0	12.7x76.0x76.0	1804
AA45C	45W	36-75 VDC	15V @ 1.5A	-15V @ 1.5A	--	0.5x3.0x3.0	12.7x76.0x76.0	1805

DC/DC

Please refer to the AMPSS® Catalog
for more complete information.



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84

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