



In the field of power conversion solutions, Analytic Systems is widely regarded as one of the most versatile and responsive companies in the industry. Our products are rugged and reliable, have high tolerance for shock and vibration and are built-to-last with a 10 year life span.

Analytic Systems designs and manufactures a full line of power conversion products including DC/DC Voltage Converters, DC/AC Power Inverters, AC/AC Frequency Converters and DC and AC Source Battery Chargers.

With our experienced and aggressive research and development program, we have the expertise and capacity to custom design and manufacture power conversion products in-house.

Please review the listed product lines and contact us with any questions you may have specific to your locomotive or passenger car needs. For more information on Analytic Systems and to review our catalogue, please visit www.analyticsystems.com

Thank you and we look forward to working with you.

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Heavy-Duty DC/DC Converters (Common Negative)				
Series	Input Voltages (VDC)	Output Voltages (VDC)	Output Amps Continuous / Peak	Part Number
VTC60	10.5-16V	5V	5A / 7A	VTC60-12-5
	20-35V	13.6V		VTC60-24-12
VTC65	20-45V	13.6V	5A / 7A	VTC65-32-12
	30-45V	27.2V	2.5A / 3A	VTC65-32-24
	40-65V	13.6V	5A / 7A	VTC65-48-12
	40-65V	27.2V	2.5A / 3A	VTC65-48-24
	65-100V	13.6V	5A / 7A	VTC65-72-12
	65-100V	27.2V	2.5A / 3A	VTC65-72-24
VTC120	11-15V	12.0V	5A / 5.5A	VTC120-12-12
			7.5A / 8A	VTC120h-12-12
		24.0V	5A / 5.5A	VTC120-12-24
			7.5A / 8A	VTC120h-12-24
VTC140/240	20-35V	13.8V	12A / 15A 20A / 23A	VTC140-24-12 VTC240-24-12
VTC180	20-45V	13.6V	15A / 18A	VTC180-32-12
	30-45V	27.2V	7.5A / 9A	VTC180-32-24
	40-65V	13.6V	15A / 9A	VTC180-48-12
	40-65V	27.2V	7.5A / 9A	VTC180-48-24
	65-100V	13.6V	15A / 18A	VTC180-72-12
	65-100V	27.2V	7.5A / 9A	VTC180-72-24
VTC300	20-35V	13.6 +/- 0.5	25A / 35A	VTC300-32-12
	30-45V	27.2 +/- 0.5	20A / 25A	VTC300-32-24
VTC305	10.5-18V	13.5-17.0V	30A (Input)	VTC305-12-12
	10.5-28V	24.0-27.5V	30A (Input)	VTC305-12-24
VTC600	20-45V	13.6 +/- 0.5	50A / 55A	VTC600-32-12
	30-45V	27.2 +/- 0.5	35A / 40A	VTC600-32-24
VTC605	10.5-18V	13.5-17.0V	*17 - 45A	VTC605-12-12
	10.5-28V	24.0-27.5V	*17 - 45A	VTC605-12-24

Heavy-Duty DC/DC Converters (Fully Isolated)					
Series	Input Voltages (VDC)	Output Voltages (VDC)	Output Amps Continuous / Peak	Part Number	
VTC120i	11-15V	12.0V	5A / 5.5A or 7.5A / 8A (VTC120ih)	VTCi120-12-12	
		24.0V		VTCi120-12-24	
		48.0V		VTCi120-12-48	
		12.0V	5A / 5.5A or 7.5A / 8A (VTC120ih)	VTCi120-24-12	
		24.0V		VTCi120-24-24	
		48.0V		VTCi120-24-48	
	40-60V	12.0V	5A / 5.5A or 7.5A / 8A (VTC120ih)	VTCi120-48-12	
		24.0V		VTCi120-48-24	
		48.0V		VTCi120-48-48	
		20-35V	13.6 +/- 1.0	20A / 22.5A	VTC315-24-12
			27.2 +/- 1.0	10A / 12.5A	VTC315-24-24
			54.4 +/- 1.0	5A / 6A	VTC315-24-48
40-60V	13.6 +/- 1.0		20A / 22.5A	VTC315-48-12	
	27.2 +/- 1.0		10A / 12.5A	VTC315-48-24	
	54.4 +/- 1.0		5A / 6A	VTC315-48-48	
	65-90V	13.6 +/- 1.0	20A / 22.5A	VTC315-72-12	
		27.2 +/- 1.0	10A / 12.5A	VTC315-72-24	
		54.4 +/- 1.0	5A / 6A	VTC315-72-48	
100-140V		13.6 +/- 1.0	20A / 22.5A	VTC310-110-12	
		27.2 +/- 1.0	10A / 12.5A	VTC310-110-24	
		54.4 +/- 1.0	5A / 6A	VTC310-110-48	
	230-280V	13.6 +/- 1.0	20A / 22.5A	VTC310-250-12	
		27.2 +/- 1.0	10A / 12.5A	VTC310-250-24	
		54.4 +/- 1.0	5A / 6A	VTC310-250-48	

Heavy-Duty DC/DC Converters (Fully Isolated) CONTINUED					
Series	Input Voltages (VDC)	Output Voltages (VDC)	Output Amps Continuous / Peak	Part Number	
VTC610	110-140V	13.6 +/- 1.0	40A / 45A	VTC610-110-12	
		27.2 +/- 1.0	20A / 25A	VTC610-110-24	
		36.3 +/- 1.0	15A / 18A	VTC610-110-32	
		54.4 +/- 1.0	10A / 12.5A	VTC610-110-48	
		13.6 +/- 1.0	40A / 45A	VTC610-250-12	
		27.2 +/- 1.0	20A / 25A	VTC610-250-24	
	230-280V	36.3 +/- 1.0	15A / 18A	VTC610-250-32	
		54.4 +/- 1.0	10A / 12.5A	VTC610-250-48	
		20-35V	13.6 +/- 1.0	40A / 45A	VTC615-24-12
			27.2 +/- 1.0	20A / 25A	VTC615-24-24
			54.4 +/- 1.0	10A / 12.5A	VTC615-24-48
			40-60V	13.6 +/- 1.0	40A / 45A
27.2 +/- 1.0	20A / 25A			VTC615-48-24	
54.4 +/- 1.0	10A / 12.5A			VTC615-48-48	
65-90V	13.6 +/- 1.0	40A / 45A		VTC615-72-12	
	27.2 +/- 1.0	20A / 25A		VTC615-72-24	
	54.4 +/- 1.0	10A / 12.5A		VTC615-72-48	
	100-140V	13.6 +/- 1.0	60A / 70A	VTC1000-110-12	
		27.2 +/- 1.0	40A / 45A	VTC1000-110-24	
		54.4 +/- 1.0	20A / 22.5A	VTC1000-110-48	
230-280V		13.6 +/- 1.0	60A / 70A	VTC1000-250-12	
		27.2 +/- 1.0	40A / 45A	VTC1000-250-24	
		54.4 +/- 1.0	20A / 22.5A	VTC1000-250-48	
	280-360V	13.6 +/- 1.0	60A / 70A	VTC1000-300-12	
		27.2 +/- 1.0	40A / 45A	VTC1000-300-24	
		54.4 +/- 1.0	20A / 22.5A	VTC1000-300-48	
22-35V		13.6 +/- 1.0	60A / 70A	VTC1015-24-12	
		27.2 +/- 1.0	40A / 45A	VTC1015-24-24	
		54.4 +/- 1.0	20A / 22.5A	VTC1015-24-48	
	40-60V	13.6 +/- 1.0	60A / 70A	VTC1015-48-12	
		27.2 +/- 1.0	40A / 45A	VTC1015-48-24	
		54.4 +/- 1.0	20A / 22.5A	VTC1015-48-48	
65-90V		13.6 +/- 1.0	60A / 70A	VTC1015-72-12	
		27.2 +/- 1.0	40A / 45A	VTC1015-72-24	
		54.4 +/- 1.0	20A / 22.5A	VTC1015-72-48	
	100-140V	13.6 +/- 1.0	100A	VTC1503-110-12	
		27.2 +/- 1.0	50A	VTC1503-110-24	
		54.4 +/- 1.0	25A	VTC1503-110-48	
230-280V		13.6 +/- 1.0	100A	VTC1503-250-12	
		27.2 +/- 1.0	50A	VTC1503-250-24	
		54.4 +/- 1.0	25A	VTC1503-250-48	

Heavy-Duty AC/DC Power Supplies				
Series	Input Voltages (VDC)	Output Voltages (VDC)	Output Amps Continuous / Peak	Part Number
PWS310	105-125V	13.6 +/- 1.0	20A	PWS310-110-12
		27.2 +/- 1.0	10A	PWS310-110-24
		54.4 +/- 1.0	5A	PWS310-110-48
	210-250V	13.6 +/- 1.0	20A	PWS310-220-12
		27.2 +/- 1.0	10A	PWS310-220-24
		54.4 +/- 1.0	5A	PWS310-220-48
PWS610	105-125V	13.6 +/- 1.0	40A	PWS610-110-12
		27.2 +/- 1.0	20A	PWS610-110-24
		54.4 +/- 1.0	10A	PWS610-110-48
	210-250V	13.6 +/- 1.0	40A	PWS610-220-12
		27.2 +/- 1.0	20A	PWS610-220-24
		54.4 +/- 1.0	10A	PWS610-220-48
PWS1000	105-125A	13.6 +/- 1.0	60A	PWS1000-110-12
		27.2 +/- 1.0	40A	PWS1000-110-24
		54.4 +/- 1.0	20A	PWS1000-110-48
	210-250V	13.6 +/- 1.0	60A	PWS1000-220-12
		27.2 +/- 1.0	40A	PWS1000-220-24
		54.4 +/- 1.0	20A	PWS1000-220-48
PWS1503	105-125V	13.6V	100A	PWS1503-110-12
		27.2V	50A	PWS1503-110-24
		13.6V	100A	PWS1503-220-12
	210-250V	27.2V	50A	PWS1503-220-24

AC/DC Battery Chargers

Heavy-Duty AC/DC Battery Chargers					
Series	AC Source Volts 45-65 Hz	Battery Volts	Charging Amps	Part Number	
BCA310	105-125	12V	20A	BCA310-110-12	
		16V	18A	BCA310-110-16	
		24V	10A	BCA310-110-24	
		32V	7.5A	BCA310-110-32	
		48V	5A	BCA310-110-48	
		12V	20A	BCA310-220-12	
BCA610	105-125	24V	10A	BCA310-220-24	
		48V	5A	BCA310-220-48	
		12V	40A	BCA610-110-12	
		24V	22A	BCA610-110-24	
		32V	16.5A	BCA610-110-32	
		48V	11A	BCA610-110-48	
BCA1000	210-250	12V	40A	BCA610-220-12	
		24V	22A	BCA610-220-24	
		48V	11A	BCA610-220-48	
		105-125	12V	60A	BCA1000-110-12
			24V	40A	BCA1000-110-24
			32V	30A	BCA1000-110-32
48V	20A		BCA1000-110-48		
210-250	12V		60A	BCA1000-220-12	
	24V		40A	BCA1000-220-24	
	48V	20A	BCA1000-220-48		
	BCA1503	105-125	12V	100A	BCA1501-110-12
			24V	50A	BCA1501-110-24
			12V	100A	BCA1501-220-12
24V			50A	BCA1501-220-24	



COMMUTER RAIL

- VOLTAGE CONVERTERS
- SOLAR CHARGE CONTROLLERS
- AC INVERTERS
- BATTERY CHARGERS
- POWER SUPPLIES
- FREQUENCY CONVERTERS



Heavy-Duty DC/DC Battery Chargers				
Series	DC Source Volts	Battery Volts	Charging Amps	Part Number
BCD60	10.5-16V	5V	5A	BCD60-12-5
	20-35V	12V	12A	BCD60-24-12
BCD180	20-45V	12V	15A	BCD180-32-12
		24V	7.5V	BCD180-32-24
	40-65V	12V	15A	BCD180-48-12
		24V	7.5V	BCD180-48-24
65-100V	12V	15A	BCD180-72-12	
	24V	7.5V	BCD180-72-24	
BCD300	20-45V	12V	25A	BCD300-32-12
	30-45V	24V	20A	BCD300-32-24
BCD301	20-30V	Input Volts / 2	25A	BCD301-24-12
BCD305	10.5-14V	12V	*17-27A	BCD305-12-12
	10.5-28V	24V	*10-27A	BCD305-12-24
BCD310	100-140V	12V	20A	BCD310-110-12
		24V	10A	BCD310-110-24
		48V	5A	BCD310-110-48
	230-280V	12V	20A	BCD310-250-12
		24V	10A	BCD310-250-24
		48V	5A	BCD310-250-48
BCD315	20-35V	12V	20A	BCD315-24-12
		24V	10A	BCD315-24-24
		48V	5A	BCD315-24-48
	40-60V	12V	20A	BCD315-48-12
		24V	10A	BCD315-48-24
		48V	5A	BCD315-48-48
65-90V	12V	20A	BCD315-72-12	
	24V	10A	BCD315-72-24	
	48V	5A	BCD315-72-48	
BCD600	20-45V	12V	50A	BCD600-32-12
	30-45V	24V	38A	BCD600-32-24
BCD601	20-30V	Input Volts / 2	50A	BCD601-24-12
BCD605	10.5-14V	12V	*17-45A	BCD605-12-12
	10.5-28V	24V	*17-45A	BCD605-12-24
BCD610	100-140V	12V	40A	BCD610-110-12
		24V	22A	BCD610-110-24
		48V	10A	BCD610-110-48
	230-280V	12V	40A	BCD610-250-12
		24V	22A	BCD610-250-24
		48V	10A	BCD610-250-48
BCD615	20-35V	12V	40A	BCD615-24-12
		24V	20A	BCD615-24-24
		48V	10A	BCD615-24-48
	40-60V	12V	40A	BCD615-48-12
		24V	20A	BCD615-48-24
		48V	10A	BCD615-48-48
65-90V	12V	40A	BCD615-72-12	
	24V	20A	BCD615-72-24	
	48V	10A	BCD615-72-48	
BCD800	10.5-14V	12V	60A	BCD800-12-12
	10.5-28V	24V	30A	BCD800-12-24
BCD1000	100-140V	12V	60A	BCD1000-110-12
		24V	40A	BCD1000-110-24
		48V	20A	BCD1000-110-48
	230-280V	12V	60A	BCD1000-250-12
		24V	40A	BCD1000-250-24
		48V	20A	BCD1000-250-48
BCD1015	22-35V	12V	60A	BCD1015-24-12
		24V	40A	BCD1015-24-24
		48V	20A	BCD1015-24-48
	40-60V	12V	60A	BCD1015-48-12
		24V	40A	BCD1015-48-24
		48V	20A	BCD1015-48-48
65-100V	12V	60A	BCD1015-72-12	
	24V	40A	BCD1015-72-24	
	48V	20A	BCD1015-72-48	
BCD1503	360V	12V	100A	BCD1503-360-12
		24V	50A	BCD1503-360-24

Heavy-Duty DC/AC Sinewave Power Inverters (300W - 1000W)				
Series	Input Voltage (VDC)	Output Voltage (VAC)	Watts Continuous / Peak	Part Number
IPS300	10.5-16	115 +/- 5.0V	600 / 900	IPS300-12-110
		220 +/- 10.0V		IPS300-12-220
	20-30	115 +/- 5.0V	1000 / 1500	IPS300-24-110
		220 +/- 10.0V		IPS300-24-220
	30-40	115 +/- 5.0V	600 / 900	IPS300-32-110
		220 +/- 10.0V		IPS300-32-220
IPS600	10.5-16	115 +/- 5.0V	600 / 900	IPS600-12-110
	20-40	220 +/- 10.0V		IPS600-20-110
IPS1000	10.5-16	115 +/- 5.0V	1000 / 1500	IPS1000-12-110
		220 +/- 10.0V		IPS1000-12-220
	20-40	115 +/- 5.0V	600 / 900	IPS1000-20-110
		220 +/- 10.0V		IPS1000-20-220
	40-80	115 +/- 5.0V	1000 / 1500	IPS1000-40-110
		220 +/- 10.0V		IPS1000-40-220
IPS1500	20-40	115 +/- 5.0V	600 / 900	IPS1500-24-110
		220 +/- 10.0V		IPS1500-24-220
	20-40	115 +/- 5.0V	1000 / 1500	IPS1500-32-110
		220 +/- 10.0V		IPS1500-32-220
IPS2000	20-40	115 +/- 5.0V	600 / 900	IPS2000-24-110
		220 +/- 10.0V		IPS2000-24-220

Heavy-Duty DC/AC Modified Sinewave Power Inverters (300W-600W)				
Series	Input Voltage (VDC)	Output Voltage (VAC)	Watts Continuous / Peak	Part Number
IQS300	11-14	115 +/- 5.0V	300 / 450	IQS300-12-110
		220 +/- 10.0V		IQS300-12-220
	22-28	115 +/- 5.0V	600 / 900	IQS300-24-110
		220 +/- 10.0V		IQS300-24-220
	30-38	115 +/- 5.0V	1000 / 1500	IQS300-32-110
		220 +/- 10.0V		IQS300-32-220
IQS600	11-14	115 +/- 5.0V	600 / 900	IQS600-12-110
		220 +/- 10.0V		IQS600-12-220
	22-28	115 +/- 5.0V	1000 / 1500	IQS600-24-110
		220 +/- 10.0V		IQS600-24-220
	30-38	115 +/- 5.0V	600 / 900	IQS600-32-110
		220 +/- 10.0V		IQS600-32-220



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