

Power sensitive electronics without interference

Ultra quiet operation (no fans)

Simple operation

Rugged and reliable



3 YEAR WARRANTY



VTC605 COMMON NEGATIVE VOLTAGE CONVERTER

Step up a 12 VDC battery to between 13.5 and 17.0 or 24.0 and 27.5 DC in 0.5 VDC increments (via 3 position DIP switch), or stabilize a 12 or 24 VDC power system.

Safety features include reverse input protection, low input voltage alarm, low output voltage alarm, over temperature shutdown and alarm, a dry contact alarm relay output and output overvoltage crowbar. If the input voltage exceeds the regulated output voltage, the unit simply passes the voltage through with full LC filtering and a single schottky diode drop (0.5 VDC or less). Optional features include remote panel monitoring with On/Off control.

Applications include temporarily brightening 12 volt headlights or work lights, increasing voltage into an automotive or marine ignition system for hotter spark and/or prevention of failures due to voltage drop during engine start, stabilizing 12V and 24 VDC power systems in marine, automotive or aeronautical environments and more.

Available models

Input

10.5-18

10.5-28

Output

12V

24V

Applications



VTC605 | COMMON NEGATIVE VOLTAGE CONVERTER

INPUT

Input Volts Nominal (DC)	10.5 - 18	10.5 - 28
Input Amps (max)	50	
Input Fuse (AGC)	25 x 2 Amp	
Noise on Input Voltage Alarm	< 50 mV	
Current Limit	50 Amps In	

OUTPUT

Output Volts Nominal VDC	12	24
Output Volts Actual (DC)	Input - 1 Volt or 13.5 to 17.0 Volts (set by DIP switch), whichever is greater	Input - 1 Volt or 24.0 - 27.5 Volts (set by DIP switch), whichever is greater
Output Current (Amps)	*45	

*** The actual output current capability depends upon the input/output voltage ratio. To obtain the actual output current capability at any given input voltage, use the following formula:**

Output Amps = Input Volts/Output Volts x 45

For example, at 11 VDC in and 13.6 VDC out, the output current = 11/13.6 x 45 = 36.4 amps

Output Crowbar	Programmed output volts x (1.3 ± 1%)
Output Ripples & Noise	< 50 mV
Low Output Voltage Alarm	Program Output Voltage minus 2.5 VDC
Transient Response	< 1V for 50% Surge
Regulation (Line & Load)	< +/- 0.5%
Duty Cycle	Continuous 100% for 24 hrs per day
Efficiency	> 90% @ Maximum Output

MECHANICAL

Dimensions	9.1 in / 23.1 cm Long x 7.8 in / 19.8 cm Wide x 4.3" / 10.9 cm High
Clearance	1.0" / 2.5cm all around
Weight	6.0 lb / 2.7 kg
Material and Finish	Marine Grade Black Anodized Aluminum with 18-8 Stainless Fasteners
Mounting	Wall or Shelf Mount
Connections	Input: Flying Leads – Red & Black, 4 ft / 1.25 m length, 2 x 10 AWG Output: Beau 4 position terminal block, 2 positive, 2 negative

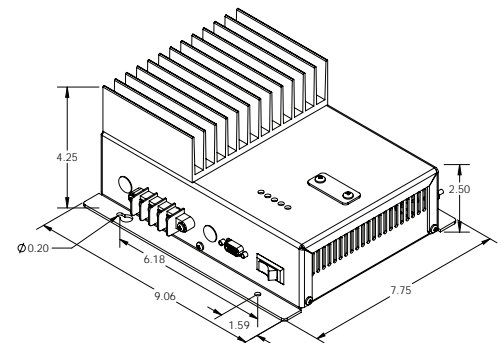
ENVIRONMENTAL AND SAFETY

Operating Temperature Range	-25°C to +40°C @ maximum output. Derate Linearly 2.5% per °C from 40°C (Optional -40°C wide temperature range available)
Humidity	0 - 95% Relative Humidity (non-condensing) with standard conformal coating
Emissions	Meets FCC Part 15, Class B
Isolation	Input-Case, Input-Output and Output-Case 1500 VDC
Audible Noise	None
Duty Cycle	Continuous
Warranty	Three years parts and labor
Safety	Designed to meet CSA 22.2.107.1 & UL458

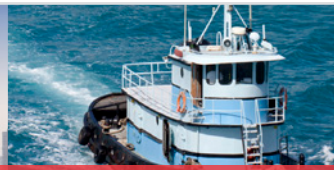
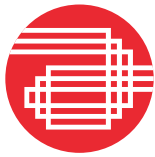
OPTIONS

- Paralleling Diodes
- European ROHS Compliant (Lead Free Manufactured)
- Electric Fork Lift (Filtering and Surge Suppression)
- Open Frame (No chassis just heat sink bars)
- Safety Special Inspection (CSA/UL)
- Heavy duty ruggedization with wide temperature range
- Custom input/output available

DIMENSIONS



ANALYTIC SYSTEMS
Power Conversion Solutions



NAVAL & DEFENSE RESEARCH OFFSHORE COMMERCIAL LUXURY & SUPER YACHT

Analytic Systems origins are in the marine market with their first 32 to 12 volt Switchmode DC-DC voltage converter designed in 1976 by founder Lloyd Hargrove specifically for powering 12V 150 Watt SSB radios directly from 32V engine starting batteries.

Today we manufacture a full line of marine grade power conversion products including step-up and step-down DC to DC Voltage Converters from 60 to 1500 Watts, Multi-Bank Programmable Battery Chargers for 12, 24 and 32 volt batteries up to 100 Amps and Pure Sine Wave DC to AC Inverters from 12, 24 or 32 volt batteries up to 3600 Watts.

INVERTERS

Analytic Systems has been producing Pure Sine Wave inverters since 1994. Originally designed for running navigation computers in marine applications, the IPSi line has evolved into a line of Digitally Controlled models with power outputs from 300 to 3600 watts and includes waterproof versions for exposed or hazardous locations.



IPS300W
Sealed Inverter

BATTERY CHARGERS

Analytic Systems manufactures a wide range of battery chargers that operate from either AC or DC power sources. One, two or three bank models, temperature compensation, bright LED voltage and current readouts, support for Lithium Ion in addition to traditional Lead Acid chemistries, are all available.



IBC320MW
Intelligent Battery Charger

VOLTAGE CONVERTERS

Analytic Systems manufactures Common Negative and Isolated DC-DC Voltage Converters. Use for voltage conversion up or down without the need for batteries or ground isolation between 100 and 1500 watts including the popular VTC300 and VTC600 32 to 12 volts converters that trace their roots right back to the company's origin.



VTC605
Voltage Converter

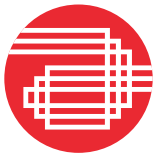
POWER SUPPLIES

The PWS series power supplies designed and produced by Analytic Systems are specifically designed for the commercial, industrial and COTS military markets. Inputs from 110 or 220 AC, or full 85 to 265 VAC with power factor correction deliver outputs from 12 to 72 volts DC at 120 to 1500 watts.



BCA1505MW
Sealed Battery Charger

PWS1505MW
Sealed Power Supply



ANALYTIC SYSTEMS

Power Conversion Solutions

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Head Office | BC, Canada

Analytic Systems is an innovative Canadian manufacturer of power conversion products. We designed our first Switchmode DC-DC Voltage Converter in 1976 and today we design and build a complete range of products including Battery Chargers, Voltage Converters, Inverters, Power Supplies, Frequency Converters and MPPT Solar Charge Controllers.

All of our products are manufactured in our own ISO9001 certified state of the art facilities located near Vancouver, BC, Canada that include the latest automated Surface Mount Technology, CNC conformal coating and transformer

manufacturing. In a separate facility, we CNC machine billet enclosures, extruded enclosures and heat sinks from aluminum, copper, brass, bronze and titanium. All of our facilities are Controlled Goods Directorate certified for security.

At Analytic Systems, we know that the reliability of our systems not only depend on the quality of the design and manufacture, but also in the way we support our products. All products are designed to meet or exceed many international testing standards including CSA, UL, ABS and CE. We are experienced in working with Military standards including MIL461 (EMC) and MIL810 (environmental).

Whether you need marine, industrial, telecom, COTS or MILSPEC, one unit or a thousand, we can do it.

OTHER MARKETS SERVED

MILITARY



COTS

UAS

MARINE

INDUSTRIAL



STEEL MILL

INDUSTRIAL

MINING

OIL & GAS

UTILITIES

TELECOM



TELECOM

CABLE TELEVISION

TWO-WAY RADIO

SATELLITE COMMUNICATION

TRANSPORTATION

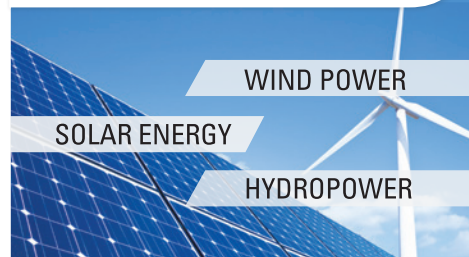


TRANSIT

RAIL

TRUCKING

ALTERNATIVE ENERGY



WIND POWER

SOLAR ENERGY

HYDROPOWER