



Up to 80V input

Watertight O-ring sealed and EMC gasketed enclosure

Deutsch DT04-4P connector on pigtail

Compact size and easy mounting

MIL connectors



VCH10W



VCH10MW

VCH10W & VCH10MW DC/DC VOLTAGE CONVERTER

The VCH10 Step Down series of Voltage Converters supply up to 10 amps of output current at 12, 24, 36 or 48 volts from any higher voltage between 20 and 80 volts DC in an IP66 rated watertight and EMC shielded enclosure for use in rugged environments.

The standard VCH10W model offers a Deutsch connector on a pigtail input/output cable, and the military grade VCH10MW features separate bayonet style MIL connectors for input and output.

The all surface mount high frequency design offers higher reliability, higher efficiency (more than 92%), more power (up to 544 watts at 48 VDC Out) and minimum size

The VCH10MW is rated for operation from -40 to +55 degrees C and has been tested and confirmed to meet MIL-STD-461F for radiated and conducted emissions. It is designed to meet MIL-STD-810G for shock and vibration.

The unit has reverse input protection, output current limiting and output over-voltage protection.

2 YEAR WARRANTY



Available models

Input (VDC)

20 - 80	30 - 80	40 - 80	45 - 80	60 - 80
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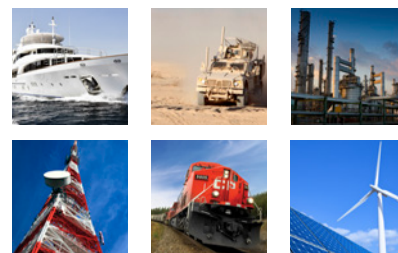
Output | Nominal (VDC)

12	24	32	36	48
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Output | Actual (VDC)

13.6	27.2	36.3	40.8	54.4
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Applications



VCH10W & VCH10MW | DC/DC VOLTAGE CONVERTER

INPUT

Model	VCH10(M)W-12	VCH10-24	VCH10-32	VCH10-36	VCH10-48
Input Volts	20 - 80 VDC	30 - 80 VDC	40 - 80 VDC	45 - 80 VDC	60 - 80 VDC

OUTPUT

Nominal Volts	12 VDC	24 VDC	32 VDC	36 VDC	48 VDC
Actual Volts	13.6 VDC	27.2 VDC	36.3 VDC	40.8 VDC	54.4 VDC
Output Amps	10 Amps				
Dissipation	12 Watts				
Efficiency	91.9%	95.8%	96.8%	97.1%	97.8%

ELECTRICAL

Input Ripple & Noise	< 100 mV Peak to Peak
Output Ripple & Noise	< 50 mV Peak to Peak
Transient Response	< 300 mV for 50% Load Step Change
Regulation (Line & Load)	< +/- 0.5%
Emissions	Meets MIL-STD-461F

MECHANICAL

Dimensions	6.20 in / 15.8 cm Long x 4.91 in / 12.5 cm Wide x 2.15 in / 5.5 cm High
Clearance	1.0 in / 2.5 cm all around
Weight	0.62 lb / 0.28 kg
Material and Finish	Diecast Aluminum with O-Ring and EMC Gaskets, Black Powder Coat Finish
Mounting	Wall or shelf mount
Connections	VCHW - Deutsch DT04-4P on 15cm Pigtail; Mating Connector Included VCHMW - Input - GTC020R10SL-3P; Output - GTC020R10SL-3S; Mating connectors included
Shock and Vibration	Designed to meet MIL-STD-810G

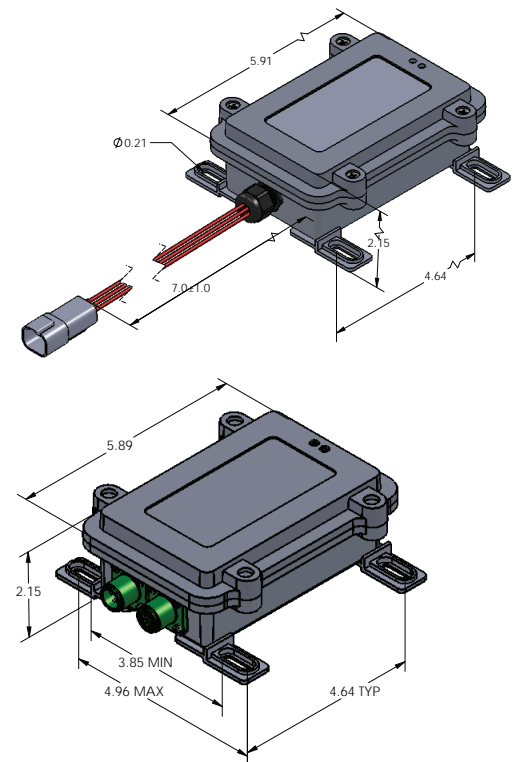
ENVIRONMENTAL AND SAFETY

Operating Temperature Range	-40°C to +55°C @ maximum output.
Humidity	0 - 95% Relative Humidity (non-condensing) with standard conformal coating
Audible Noise	NONE 0db @ 3ft
Typical Service Life	> 10 years (87,600 hrs)
Isolation	Any input or output to case (1500 VDC) Input to output - common negative
Warranty	Two years parts and labour
Safety	Built to meet CSA 22.2.107.1 & UL458

OPTIONS

- Paralleling diodes
- Custom output voltages available
- Custom connector arrangements
- Industrial VCH10 model available
- COTS - MIL461F and MIL810G in-house testing with report for each unit
- Stand alone MIL461F tested and report
- Stand alone MIL810 tested and report
- European ROHS compliant (Lead free manufactured)

DIMENSIONS



ANALYTIC SYSTEMS
Power Conversion Solutions