

# VETRO-CONV-SDI-RS170

Rugged SDI to RS-170 video converter

The VETRO-CONV-SDI-RS170 is part of AMP's rugged intelligent video converter family designed for vehicle and mobile applications. The VETRO-CONV-SDI-RS170 seamlessly converts SDI video signals to standard compliant RS-170 composite video ensuring reliable performance for Military, Communications, Transportation, and Energy industries.



This VETRO-CONV family are ideal for a wide range of critical requirements, including the integration of new sensors onto existing platforms, vehicle or platform upgrade and retrofit projects, and expanding the operational lifespan of legacy systems. It provides the seamless, automatic video conversion necessary for enabling these mission-critical tasks.

The VETRO-CONV-SDI-RS170 features D38999 connectors and is vehicle-ready with no user intervention. Built tough with conduction-cooled, watertight, IP67-rated enclosure and integrated MIL-STD-1275E power conditioning, the VETRO-CONV-SDI-RS170 delivers power-transient hardened operation for dependable performance in harsh environments.

## Key Features

- ◆ Vehicle ready, rugged video converter
- ◆ SMPTE compliant SDI input
- ◆ RS170 composite video output
- ◆ Military grade, rugged IP67 enclosure
- ◆ Sealed, MIL-D38999 connectors for secure cabling
- ◆ Power transient hardened
- ◆ Designed for demanding applications in harsh environments

## VETRO

The VETRO-CONV rugged video converters are part of AMP's VETRO range of MIL-rated vetronics solutions ready for rapid deployment in the demanding environments.

Housed in IP67 enclosures, using MIL-D38999 connectors and with MIL-1275E power conditioning, VETRO products are designed for durability, ease of integration, and mission critical reliability.

Rev A.00

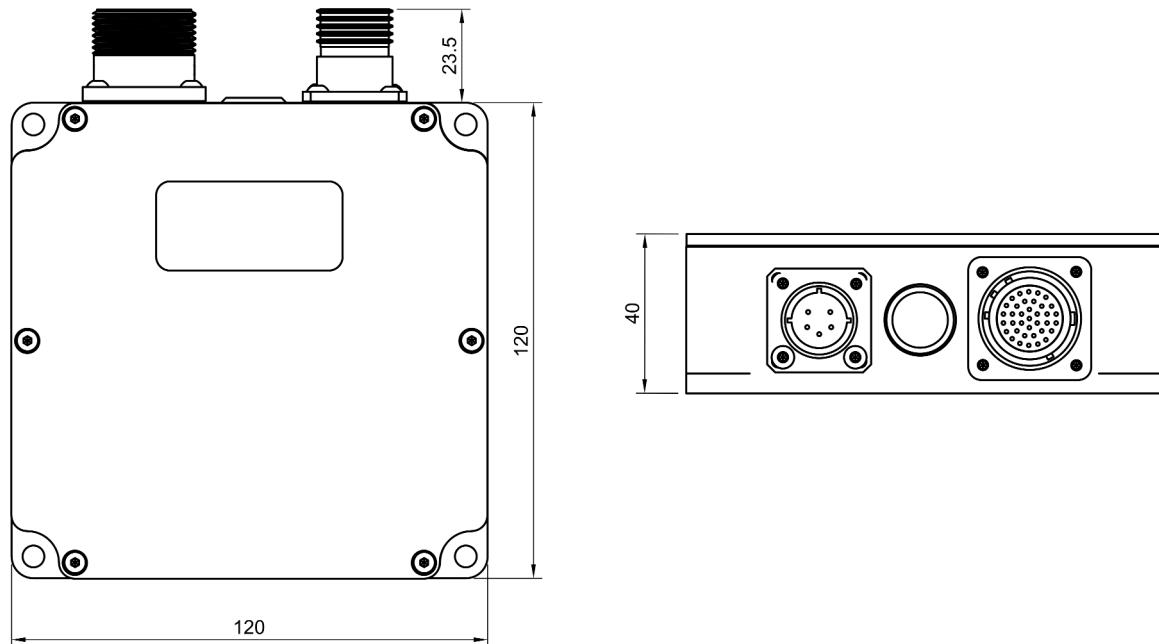
Preliminary Information. Subject to change without notification



**Advanced Micro  
Peripherals**

THE EMBEDDED VIDEO EXPERTS

## Mechanical Drawing



3D Drawing available on request

## Example Applications

The VETRO-CONV-SDI-RS170 is ready for rapid deployment in demanding environments, ideal for applications such as:

- ◆ Integration of new sensors
- ◆ Situational awareness
- ◆ Lifespan extension projects
- ◆ Vehicle surveillance systems
- ◆ Platform Upgrades and Retrofit
- ◆ Security systems for critical infrastructure
- ◆ Mobile command centres

## VETRO-CONV

The VETRO-CONV converters support a comprehensive range of video interfaces, including:

- ◆ GMSL ◆ RS-170 ◆ NTSC
- ◆ PAL ◆ Composite Video
- ◆ DisplayPort ◆ VGA
- ◆ HD-SDI ◆ HDMI ◆ DVI

Contact us to find the vehicle ready VETRO-CONV ideal for your project.



## Technical Specification

### Digital Video Input

- SMPTE compliant SDI input
  - SMPTE 259M standard definition (NTSC and PAL)
  - SMPTE 292M HD-SDI High definition (up to 1080p30)
  - SMPTE 424M 3G-SDI (up to 1080p60)
- 75 Ohm input

### Analog Video Output

- RS-170 composite video out
- Ground Loop Mitigation
- 75 Ohm output impedance

### Video Conversion

- Intelligent solution - no configuration required.

### Latency

- Latency < 1 frame time
- Zero buffer process
- No video data persistence

### Environmental

- Operating temp -20°C to +60°C
- IP67 dust-proof, water immersion to 1m
- Passively cooled, fanless enclosure

### Power

- 12-31V DC Input range
- 28V DC Nominal input voltage
- Hardened against power transients
- Reverse polarity protection
- EMI hardened for immunity and emissions
- Military vehicle class power conditioning conforming to MIL-STD-1275E

### Mechanical

- Milled from solid Aluminium Alloy block
- Size: 120 x 120 x 40 mm (4.7 x 4.7 x 1.6 inch) LWH
- Sealed IP67 rugged MIL-D38999 Connectors

### Standards Compliance

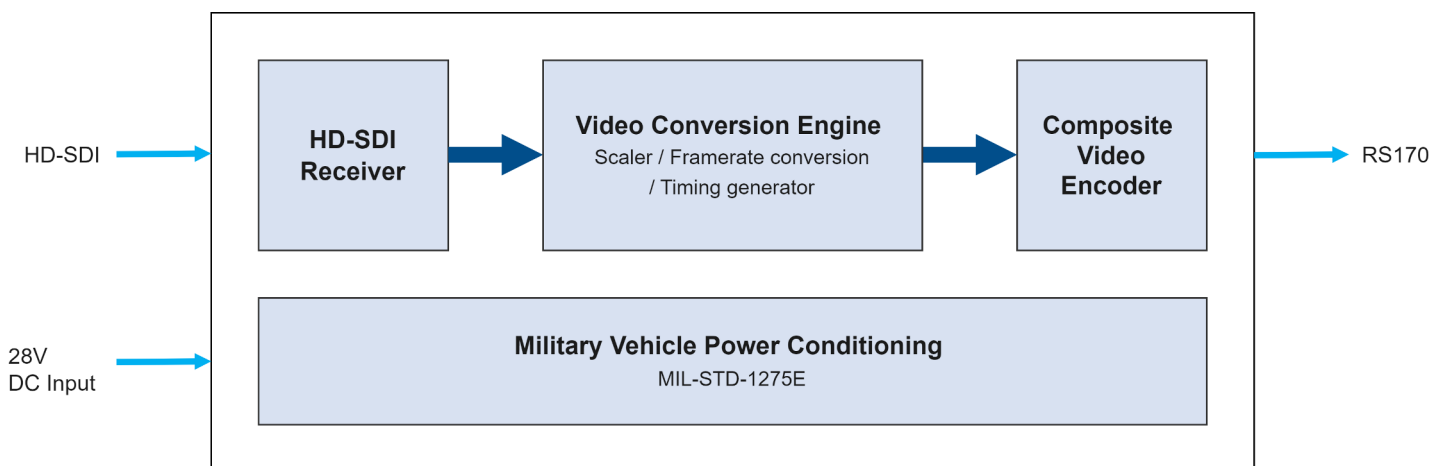
- MIL-STD-1275E<sup>(1)</sup>

### Ordering Information

#### VETRO-CONV-SDI-RS170

Vehicle ready rugged video converter. SDI-to-RS170

## Functional Diagram



<sup>(1)</sup> The AMP VETRO-CONV family is designed to meet MIL-STD-1275E requirements.

