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# RuggedCONNECT Smart Video Switcher

Video capture, processing, streaming, and display

## Overview

The **RuggedCONNECT Smart Video Switcher** is a highly integrated standalone device that acquires, processes, and displays real-time video sensor data for vehicle-based local situational awareness (LSA) and driver vision enhancer (DVE) applications.

The RuggedCONNECT Smart Video Switcher includes eight analog composite inputs supporting RS-170/NTSC/PAL or 2 HD-SDI video inputs and two independent HD-SDI single link displays. Support for GigE Vision and Def Stan 00-082 streaming protocols on dual 1 Gbps Ethernet channels make it the perfect solution to implement networked, open standard, interoperable video management systems as demanded by GVA, NGVA, and VICTORY standards.

## Scalable, distributed video

The RuggedCONNECT leverages Pleora's distributed video architecture to allow multiple units to be networked together to create larger scale video switching systems with different video input/output combinations.

## Customization options

The highly configurable RuggedCONNECT architecture enables fast development of products to address various sensor and display interfaces, such as HD-SDI, VGA, or custom sensor/display requirements. This same architecture enables Pleora to add more interfaces, support a different mix of interfaces, additional network interfaces, and general communications ports.

## Features

**All-in-one rugged Smart Video Switcher for video capture, processing, streaming, and display**

- 8 video inputs (RS-170/NTSC/PAL) or 2 HD-SDI video inputs
- 2 fully independent HD-SDI displays
- CANbus, USB2.0
- Dual Ethernet capability enables system level redundancy and more effective communications capabilities
- Bypass channels for select inputs provides additional redundancy during degraded operating situations
- Scalable technology platform to support multiple sensor and display configurations, including basic sensor, display, or network-only processing units

**Eases design of standards-compliant avionics video management platforms**

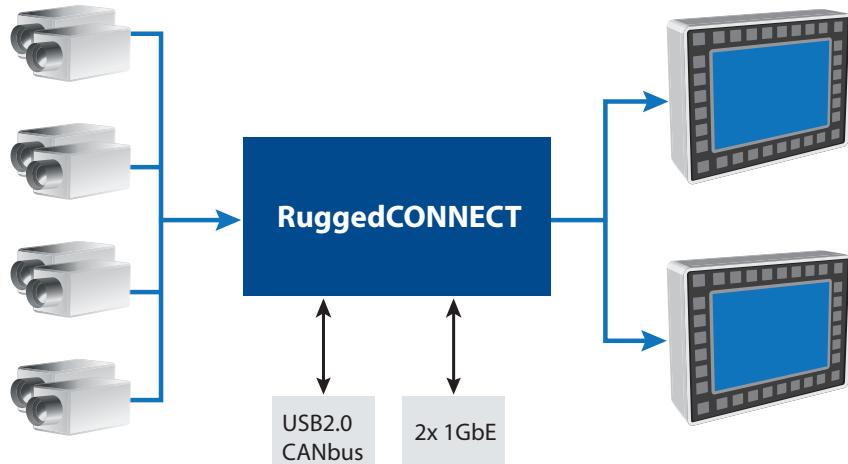
- GigE Vision and Def Stan 00-082 compliant
- GVA, NGVA and VICTORY ready
- MIL-STD-1275E Power supply
- MIL-STD-810G and MIL-STD-461F conformance for shock, vibration and EMI.

## Software

The included RuggedCONNECT software platform provides features such as networked-based video switching or advanced situational awareness. An open framework is provided to load custom imaging plug-ins into the platform to perform real-time video analysis.



# RuggedCONNECT Smart Video Switcher



## Functional Specifications

Video Input	8 channels or RS-170/NTSC/PAL or 2 channels of HD-SDI
Network I/F	2 channels of 1 Gbps Ethernet
Video Streaming Protocol	GigE Vision 2.0 and Def Stan 00-082
Communications	<ul style="list-style-type: none"> <li>1 x channel CANbus</li> <li>1 x channel USB2.0</li> </ul>
Compression	HW codec for multi-channel H.264/H.265/JPEG2000
Display Interfaces	2 fully independent channels of HD-SDI

## Mechanical, Environmental, Power

Conformal Coating	Applied to all PCBs
Power Connector	MIL-DTL-38999 Series III
Sensor I/O Connector	MIL-DTL-38999 Series III
Ethernet Connector	MIL-DTL-38999 Series III
Enclosure	Aluminum Alloy
Shock and Vibration	MIL-STD-810G
EMI	MIL-STD-461F
Power Supply	MIL-STD-1275E
Power Consumption	<50W

## Customization Options

Video inputs	VGA/HDMI/DVI
Video outputs	VGA/DVI/HDMI
Communications	RS232/422/485