



## Cogswell Vision System

Connect Tech's Cogswell Vision System is powered by NVIDIA® Jetson™. This system is pre-integrated with the NVIDIA® Jetson™ TX2 or Jetson™ TX1 supercomputer-on-module, providing 256 CUDA® cores on the NVIDIA® Pascal™ or Maxwell™ architecture. Cogswell Vision System comes in a black anodized metal enclosure and is both fanless and cable free.

This system is ideal for Machine Vision applications allowing up to 5 Gigabit Ethernet cameras to be connected, 4 of which can be powered by on board Power over Ethernet. This system also comes equipped with USB 3.0, USB 2.0, USB OTG, RS-232, miniPCIe and mSATA expansion.

**Product Name:** Cogswell Vision System  
**Part Number:** CVS001



### FEATURES

- ✓ Specifically designed for use with GigE Vision Cameras
- ✓ 5 x Gigabit Ethernet Channels  
4 x PoE, 2 x PoE+ PSE Gigabit Ports
- ✓ Only a single +12V input required;  
No external 48V PoE power required
- ✓ 1 x USB 3.0, 1x USB 2.0, 1x USB OTG,  
2x RS-232, 1x miniPCIe, 1x mSATA
- ✓ Extended Temperature Range  
-20°C to +80°C
- ✓ Mounting option  
(Surface Edge Mount)

Specifications	
Compatibility	NVIDIA Jetson TX2 NVIDIA Jetson TX1
GPU	Jetson TX2: NVIDIA Pascal™, 256 CUDA cores (Up to 1.3 GHz) Jetson TX1: NVIDIA Maxwell™, 256 CUDA cores (998 MHz)
CPU	Jetson TX2: HMP Dual Denver 2/2MB L2 + Quad ARM® A57/2MB L2 (Up to 2 GHz) Jetson TX1: 64-bit ARM® A57 CPUs
Mechanical Details	Black Anodized Aluminum Enclosure Integrated Finned Passive Heatsink, Fanless Solution
Networking	5x Gigabit Ethernet Ports • 4 x IEEE 802.3af (PoE) 15.4W PSE Gigabit Ethernet Ports OR • 2 x IEEE 802.3at (PoE+) 25.5W PSE Gigabit Ethernet Ports
Display Output	1 x HDMI 1.4a (Type-A vert RA)
USB	1 x USB 3.0 Port (Type-A); 1 x USB OTG (Micro-AB); 1 x USB 2.0 (Type-A); 1 x USB 2.0 to miniPCIe Slot
Storage	1 x mSATA Full Sized Slot 1 x microSD Card Slot
UART	2 x RS-232
I2C	I2C Channel 1 @ 3.3V IO
CAN	1 x CAN 2.0b Port
GPIO	4 bits of 3.3V (level shifted GPIO)
Antenna	2x SMA Antennas
User Expansion	1 x miniPCIe Slot with PCIe & USB
LEDs	GbE LEDs, RESET#_OUT, PSU PGOOD
Input Power	+12 DC Input Only No external 48V is required, carrier creates its own PoE power
Dimensions	215mm x 154mm x 72.2mm
Buttons	Power, Reset, Recovery
Operating Temperature <sup>1</sup>	-20°C to +80°C (-4°F to +176°F) <sup>1</sup>

[1] The Jetson TX2/TX1 Module is rated for -25°C to +80°C (measured at thermal heat plate)