800084 Drōv Camera VCU Install Guide

Table of Contents

1 Revision History

Date	Author	Revisions	Review Date
10/25/2025	A Kulkarni	Initial release	

2 Related Documents

Description	Reference
INSTRUCTIONS, FEED THRU RJ 45 CONNECTOR [400397]	800053

3 Purpose and Scope

This document provides step-by-step instructions for the assembly, installation, and commissioning of the Drov Technologies Camera VCU System. The Camera VCU is a ruggedized, IP67-rated camera enclosure designed for integration with the Drov AirBoxOne Smart Trailer System.

Intended Audience: Trained trailer technicians and installers familiar with commercial trailer systems, basic electrical wiring, and Ethernet networking.

Applicable Systems: This guide covers the Drov Camera VCU enclosure containing the main unit with up to four fisheye sensor units, for use on dry van, refrigerated and tankers.

4 System Overview

4.1 System Architecture

The Camera VCU System consists of the following major components:

- Camera VCU Enclosure — A sealed diecast aluminum enclosure housing the main processing unit, power distribution board, and all internal connections.
- Fisheye Sensor Camera Units (up to 4) External ruggedized camera sensors connected to the main unit via FAKRA-to-SMA cable assemblies routed through sealed bulkhead FAKRA connectors.
- Wiring Harnesses — Input power pigtail (200193) and 35 ft power harness (200171) connecting the Camera VCU to the AirBoxOne or vehicle power.

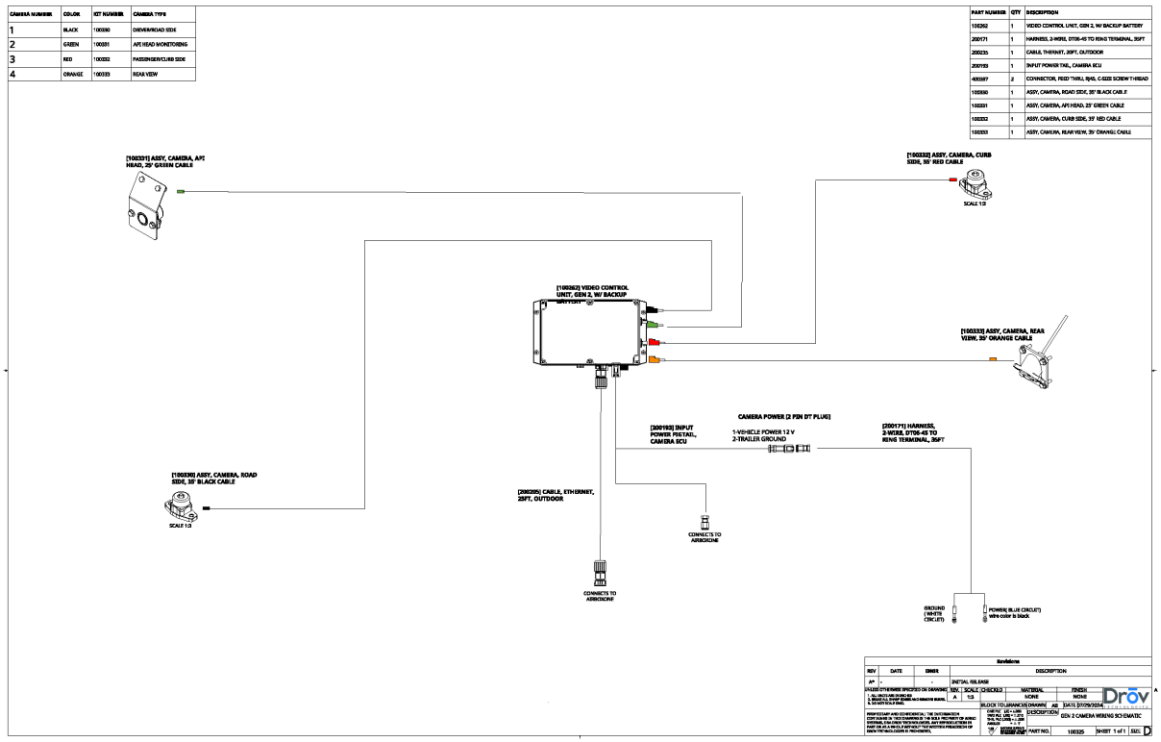

Figure 1 Camera VCU System Architecture

4.2 Camera VCU Specifications

Parameter	Value
External Dimensions	223 x 146 x 55 mm (8.7 x 5.7 x 2.1 in)
Enclosure Material	Aluminum (ADC-12 alloy)
Gasket	Continuous silicone
IP Rating	IP67
Enclosure NEMA Rating	4, 4X, 6, 6P, 12, 13
EMI/RFI Shielding	Inherent diecast aluminum shielding
Mounting	Molded-on flanges, surface mount
Enclosure Screw Torque	12 in-lbs (1.36 Nm)
Operating Temperature	–40 °C to +60 °C (–40 °F to 140 °F)
Camera Channels	Up to 4 (via FAKRA bulkhead connectors)
Power Input	10–48 VDC via DT04/DT06 connector
Power Consumption	Typical 11.5 W, max 25.5 W
Storage	256GB (for 4 camera system)
VCU Certifications	UL/cUL recognized, CE, FCC, KC, VCCI

4.4 Fisheye Camera Sensor Specifications

Parameter	Value
Image Sensor	1/2.8" progressive scan RGB CMOS
Lens	1.98 mm, F2.0, M12 mount, fixed iris
Field of View (720p)	120° horizontal, 62° vertical
WDR	Supported at 1080p (30/25 fps)
Minimum Illumination	0.1 lux (color)
IP Rating	IP66 / IP67 / IP6K9K
Casing	Aluminum, black (NCS S 9000-N), NEMA 4X
Connector	SMA
Power	Typical 1 W, max 1.7 W (supplied via cable from main unit)
Operating Temperature	−40 °C to +60 °C (−40 °F to 140 °F)
Dimensions without housing	46 mm length x 29.8 mm diameter
Weight	50 g (0.1 lb)
Certifications	ECE R10, ECE R118, IEC/EN 62368-1, IEC 61373 Cat 1 Class B

5 Safety Information

WARNING: Observe proper ESD precautions when handling all electronic components. Electrostatic discharge can permanently damage the Axis main unit and power bulkhead board. Use a grounded wrist strap when working with internal components.

WARNING: Verify correct polarity before connecting power. Incorrect connection may damage the Axis main unit and the Power Bulkhead Board. The power supply must be a Safety Extra Low Voltage (SELV) compliant limited power source (LPS) with rated output power ≤100 W or rated output current ≤5 A.

CAUTION: Ensure the Camera VCU is powered off and disconnected from all power sources before opening the enclosure for any reason.

CAUTION: Do not exceed the enclosure screw torque of 12 in-lbs (1.36 Nm). Over-torquing may damage the silicone gasket and compromise the IP67 seal.

NOTICE: All drilled and sealed mounting locations must be inspected and resealed yearly to prevent moisture ingress. Inspect the GORE vent periodically for blockage or contamination.

6 Installation Tools Required

The following tools are required to complete the Camera VCU installation. Verify all tools are available before beginning work.

Tool	Notes
8 mm Wrench	For FAKRA bulkhead connector (SMA end)
Torque Wrench (in-lbs)	For enclosure screw and SMA connector torque
Cordless Drill with Step Drill Bit	For drilling holes on the trailer for Enclosure
Multimeter	For verifying power and continuity
Zip Ties (8" and 11")	For Securing wiring harnesses

7 Pre-Installation Checklist

Before installing the Camera VCU System, verify all components are present and undamaged. Inspect the trailer mounting area and confirm the installation location has been approved.

Inspection Item	Status (YES / NO)
100261	
400397	
Axis F2135-RE sensor units received (qty: ___)	
Input power pigtail (200193) received	
Power harness (200171, 35 ft) received	
Mounting location on trailer identified and approved	
AirBoxOne installed and operational	

Field	Value
Trailer Number	
Trailer Fleet / Owner	
Camera VCU Serial Number	
Axis Main Unit Serial Number	
Axis Main Unit MAC Address	
Installer / Technician Name	
Company / Dealership Name	
Date Installation Started	

9 Camera Sensor Unit Installation

9.1 Sensor Unit Mounting

The Axis F2135-RE fisheye sensor unit is a compact ruggedized sensor rated for IP66/IP67/IP6K9K. It can be mounted on the exterior of the trailer in locations that provide the required field of view.

1. Identify the desired mounting location for each sensor unit. Consider:

- 120° horizontal field of view at 720p — position the sensor to cover the desired surveillance area
- Clear line of sight without obstructions from trailer components
- Protection from direct physical impact during normal trailer operations
- Cable routing back to the Camera VCU enclosure (see section 10 for mounting instructions)

2. Mount the sensor bracket (consult Drov Engineering for bracket options) to the trailer using appropriate fasteners. Torque exterior camera/bracket fasteners (1/4 in.) to 10 ft-lbs (14 Nm).
3. Attach the Axis F2135-RE camera sensor unit housing to the bracket.

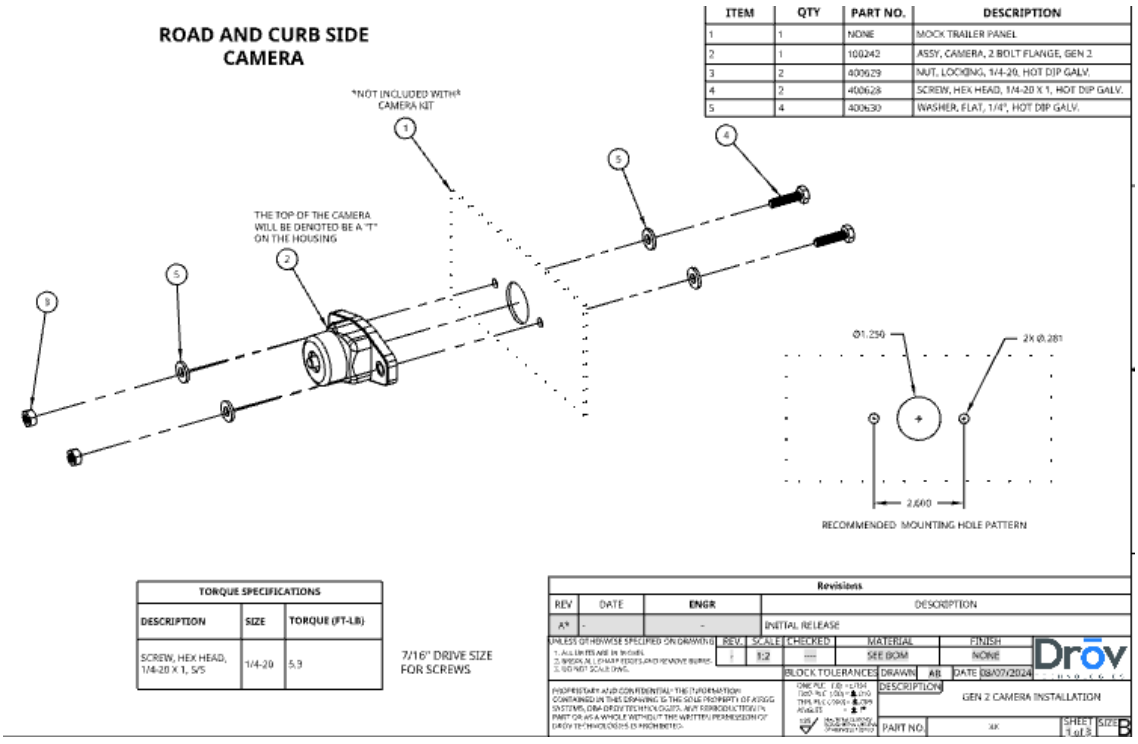

Figure 2 Sensor unit mounting information

Figure 3 Sensor Unit Mounting example

9.2 Sensor Cable Routing

In most cases, the FAKRA to SMA Cable will ship with the camera attached and steps 2 and 3 can be skipped. If not, slide the provided head shrink over the SMA connector.

1. Connect the SMA plug end of the - cable to the SMA connector on the Axis F2135-RE sensor unit. Tighten the SMA connector to 5 in-lbs (0.56 Nm) using an 8 mm wrench or use an SMA torque wrench.
   CAUTION: DO NOT OVERTIGHTEN THE SMA CONNECTION. IT CAN CAUSE AN INTERNAL BREAK
2. Push the heat shrink against the camera and shrink over the connector. Make sure it shrinks all the way to stick with the SMA connector
3. Route the cable from the sensor to the Camera VCU enclosure location. Follow the Wire Harness Routing Guidelines in Section 12.
4. Connect the FAKRA jack end of the cable to the corresponding FAKRA bulkhead plugs onto the exterior of the Camera VCU enclosure. Push firmly until you hear a click. Camera numbers are marked as 1, 2, 3 and 4.

> NOTICE: The FAKRA connection is IP67 sealed in mated condition. Pull outward on the connector to verify it is locked. An unlocked connection will compromise the seal.

5. Repeat for each sensor unit.

Figure 4 FAKRA connectors

Tanker Configuration

Camera 1	Driver side camera
Camera 2	Fuel Head camera
Camera 3	Curbside camera
Camera 4	Rear view camera

Dry Van trailer

Camera 1	Cargo camera
Camera 2	Driver side Camera
Camera 3	Curbside camera
Camera 4	Rear view camera

10 Camera VCU Mounting on Trailer

10.1 Mounting Location Selection

Choose a suitable mounting location for the Camera VCU enclosure on the trailer. The recommended location is near the AirBoxOne gateway hub. Consider the cable length of the ethernet cable (PN 200205) and power cable (200171) before choosing the location

- Should be accessible for installation and future service
- Should be protected from direct road debris impact
- Provides adequate cable routing paths to sensor units and the AirBoxOne
- Does not interfere with other trailer components, moving parts, or suspension travel

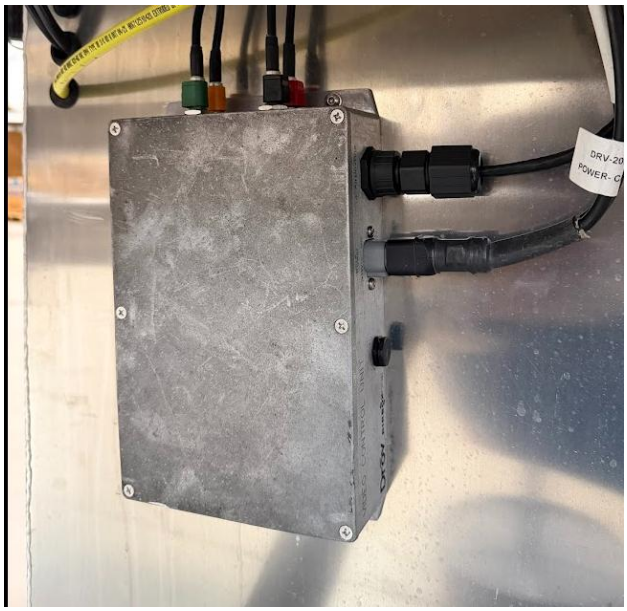

Figure 5 Example Camera VCU Mounting Location

Figure 6 Example of camera enclosure near door frame

10.2 Mounting Procedure

1. Hold the Camera VCU enclosure in the desired position against the mounting surface. Mark the flange mounting holes using a center punch.
2. Drill mounting holes per the flange pattern. Use the appropriate drill bit for the fastener size selected.
3. Apply rust-resistant spray paint to cover the drilled holes to prevent corrosion.
4. Mount the Camera VCU using bolts, lock washers, and nuts through the molded-on flanges. Torque fasteners per the 10-24 bolt size.
5. Verify the enclosure is secure.

> CAUTION: Before drilling, verify there is no interference with existing components, wiring, airlines, or other systems behind the mounting surface. Do not drill into electrical or mechanical components.

11 Electrical Connections

11.1 Power Wiring

The Camera VCU receives power through the external DT06-4S connector on the power bulkhead board. The board accepts two independent power inputs to be used on separate occasions:

- AirBoxOne Power (Pins 3 & 4): Power from the AirBoxOne system when there is no vehicle power. It is only used on certain events and not powered ON by the AirBoxOne all the time.
- Auxiliary/Vehicle Power (Pins 1 & 2): Direct vehicle DC power input to operate the Camera VCU.

Figure 7- 4 pin Deutsch connector pin out

1. Connect the Input Power Pigtail (200193) to the Camera VCU. Mate the DT06-4S plug connector on the pigtail to the receptacle on the enclosure exterior. Ensure the connector locks securely.
2. Route the ABO PWR (black) and ABO GND (white) pair from the pigtail to the AirBoxOne. Connect using the DT04-2P connector to the 200199-harness supplied with AirBoxOne.
3. For vehicle power, route the AUX PWR (black) and AUX GND (white) pair to the vehicle power source. Connect using the DT04-2P connector.
4. Route the 35 ft harness (200171) from the Camera VCU to the vehicle power source location.
5. Connect the DT06-2S plug to the appropriate power output on the pigtail (200193).
6. Connect the ring terminals at the other end to the vehicle power source:

- Black wire (10 ring terminal): Vehicle positive (+)
- White wire (10 ring terminal): Vehicle ground (–)

WARNING: Verify correct polarity with a multimeter before energizing the system. The Camera VCU accepts 10–48 VDC. Incorrect polarity or overvoltage will damage the Axis main unit and the power bulkhead board. The board includes a resettable PTC fuse for overcurrent protection, but this does not protect against reverse polarity beyond the Schottky diode ratings.

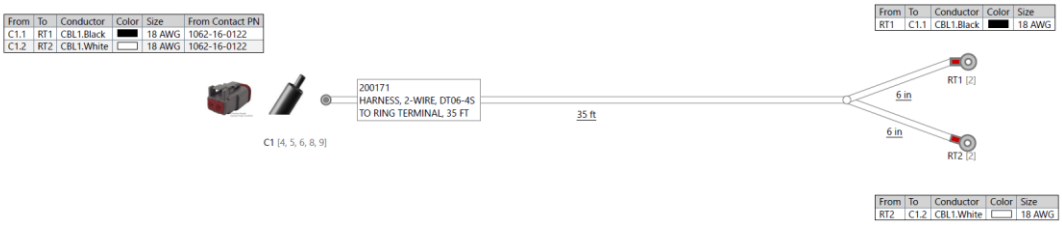

Figure 8 7-way Power Wiring harness

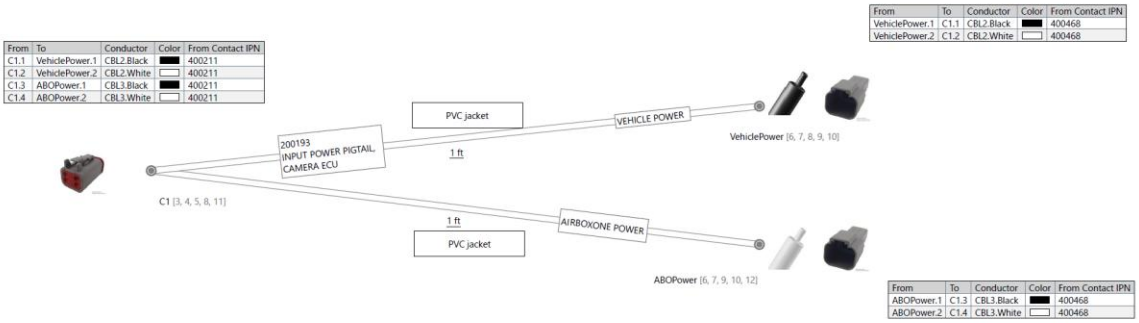

Figure 9 200193 harness

11.2 Ethernet (Network) Connection

1. Connect a Cat6 Ethernet cable from the AirBoxOne or network switch to the exterior Amphenol RJ45 jack on the Camera VCU enclosure.
2. Install Amphenol connector over the connection to maintain the IP67 seal. Refer 800053 for detailed instruction on the connector assembly

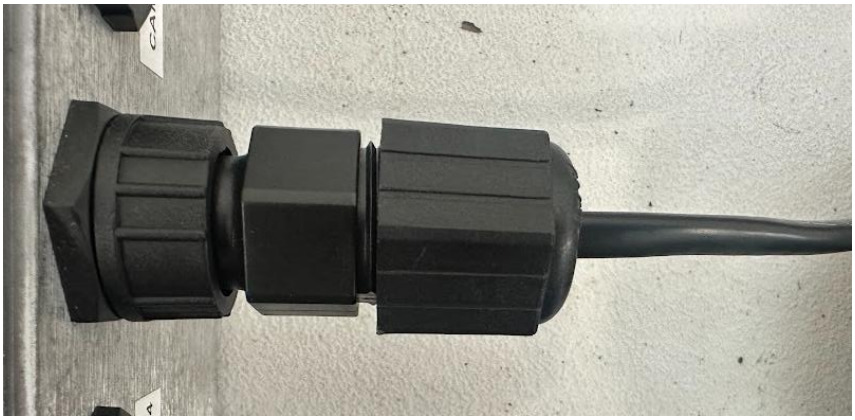

Figure 10 Ethernet Connection

11.3 FAKRA Sensor Cable Connections

The FAKRA sensor cable connections are completed as part of the sensor cable routing in Section 9.2. Verify the following after all sensor cables are connected:

- Each exterior FAKRA connection is fully clicked and locked (IP67 sealed in mated condition)
- Each interior FAKRA connection to the Axis main unit is fully clicked and locked
- Cable assemblies are not kinked, pinched, or under excessive tension
- The correct key code (color) matches each sensor channel assignment

11.4 Camera cover installation

1. Place cover over VCU enclosure and center the three side slots over the installed cabling.
2. Fasten the cover to the trailer with the supplied self-drilling and -tapping screws or mark and drill holes for customer supplied #8 hardware.
3. After mounting, ensure the cables are unable to touch the cover

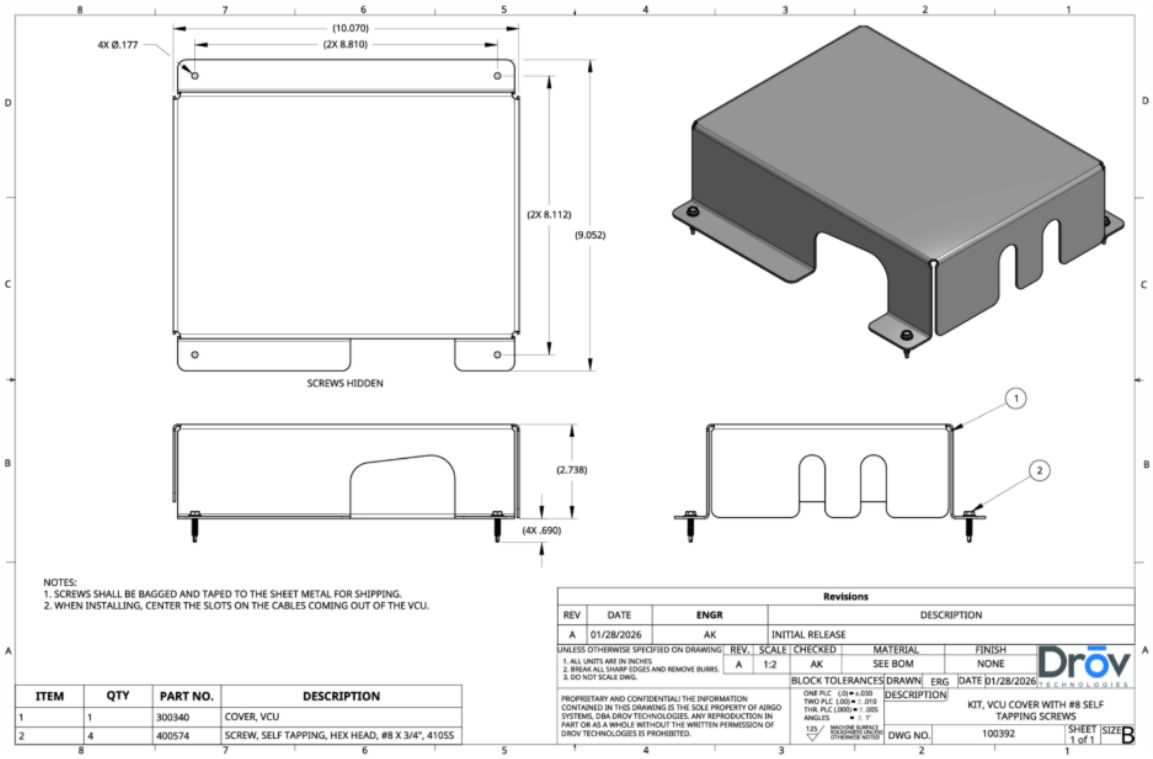

Figure 11 VCU cover

Figure 12 Cover placement over VCU

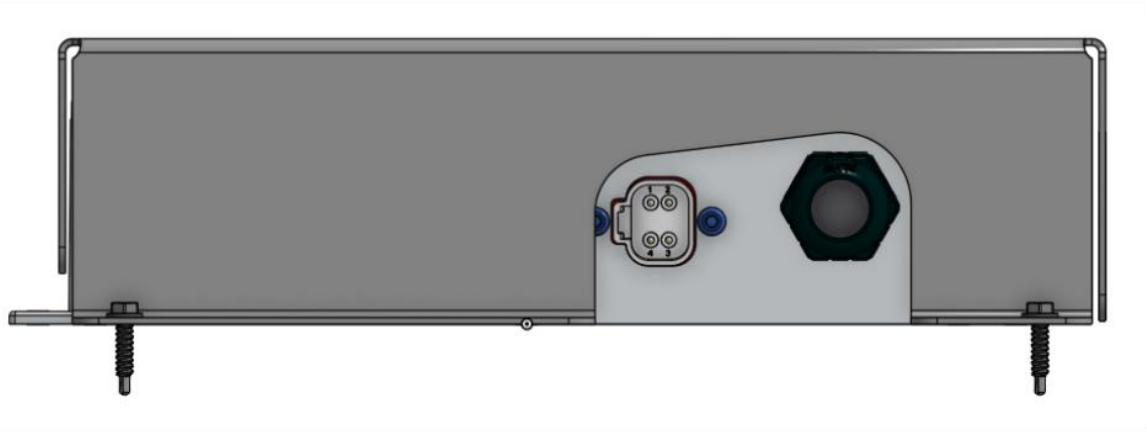

Figure 13 Cover in relation to Ethernet and Power ports

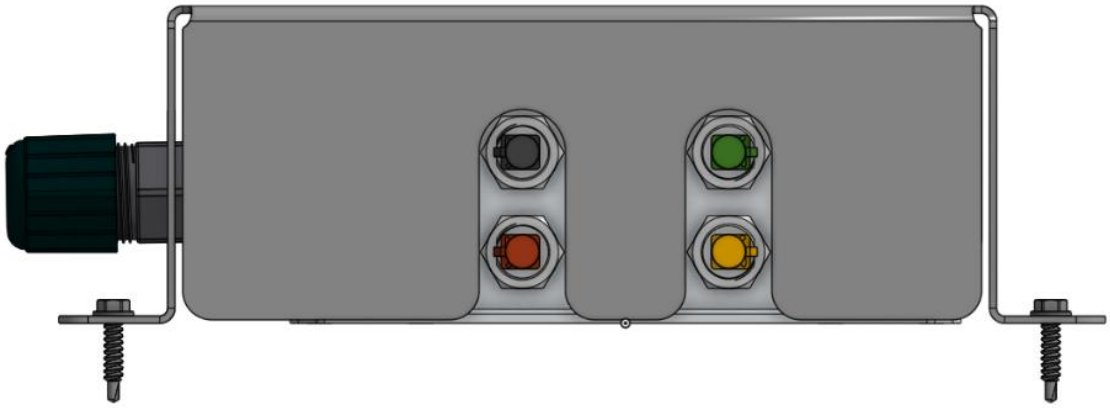

Figure 14 Cover in relation to FAKRA connectors

12 Wire Harness Routing Guidelines

Follow these guidelines when routing all Camera VCU wiring harnesses and sensor cables to ensure long-term reliability and prevent damage:

1. Secure all harnesses every 24 inches (61 cm) with heavy-duty cable ties. Clamps and fasteners are installer-supplied.
2. Protect all harnesses with split loom, especially along long under-trailer runs and at all pass-through locations with sharp edges.
3. Seal all holes drilled into the trailer frame with rust-resistant paint, if applicable.
4. DO NOT route harnesses above, near, or through trailer tire or wheel well areas unless protected by firm irrigation tubing.
5. Route Camera VCU harnesses together with AirBoxOne Smart Trailer harnesses where applicable to minimize clamp points and simplify future service.
6. Account for full bogie suspension travel when measuring harness length. All harness lengths must account for suspension movement.
7. Protect SMA and FAKRA cable assemblies from sharp bends.
8. Keep sensor cables away from high-EMI sources (motor controllers, welding equipment, high-current DC lines) to prevent video interference.

NOTICE: Do not drill holes into refrigeration, electrical, or mechanical components. Do not route any wiring harnesses through refrigerated trailer floor drains. All drilled and sealed mounting locations must be inspected and resealed yearly.

Figure 15 Wire Routing Example

14 System Commissioning and Verification

After completing all mechanical, electrical, and software configuration, perform the following system verification before returning the trailer to service:

IP67 Seal Verification

1. Visually inspect the enclosure exterior:

    - All 6 cover screws are torqued to 12 in-lbs
    - All FAKRA connections are clicked and locked.
    - Ethernet connector gasket is compressed and tightened.
    - Power connector (DT) is fully mated.

Power-On Verification

1. Apply power to the Camera VCU through the J560 connection. Verify the Axis main unit powers on:
2. If connected to AirBoxOne, verify the camera video feed is accessible through the fleet management platform.
3. Verify video recording is functioning by requesting videos from the cloud UI portal.

Camera Configuration

This section describes how to navigate to the Camera Configuration panel and configure camera ports, presets, SD card storage, and door snapshot preferences.

Accessing Camera Configuration

To open the Camera Configuration panel for an asset:

4. From the top navigation bar, select “System Admin” to access administrative tools.
5. In the left-hand sidebar, select the “Assets” tab. A list of all assets in the organization is displayed.
6. In the search bar at the top-left corner of the Assets page, enter the name of the asset to configure (e.g., Test_Asset).
7. Locate the kebab menu (⋮) in the “Actions” column for the target asset.
8. Select “Camera Configuration” from the dropdown menu. The Camera Configuration panel is displayed.

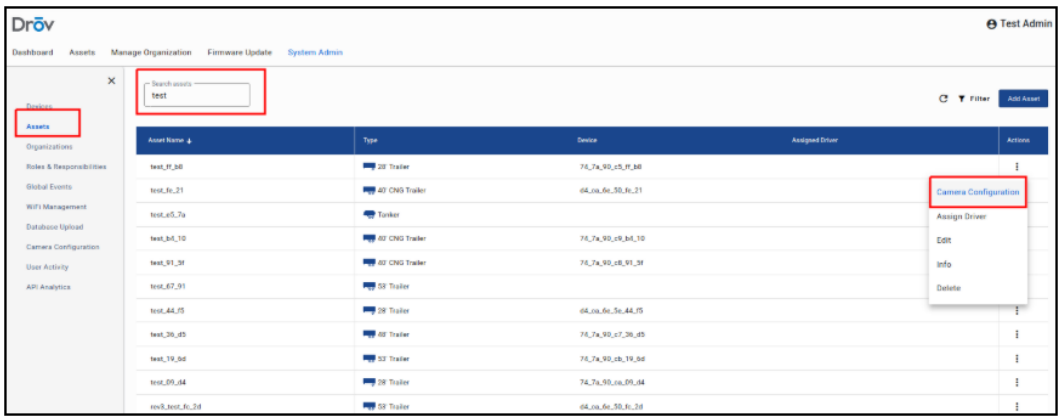

Figure 16 Camera Configuration panel accessed from the Assets actions menu

Selecting the Camera

From the “Camera” dropdown menu in the configuration dialog, select the camera model installed on the vehicle. You will select F91 with this installation

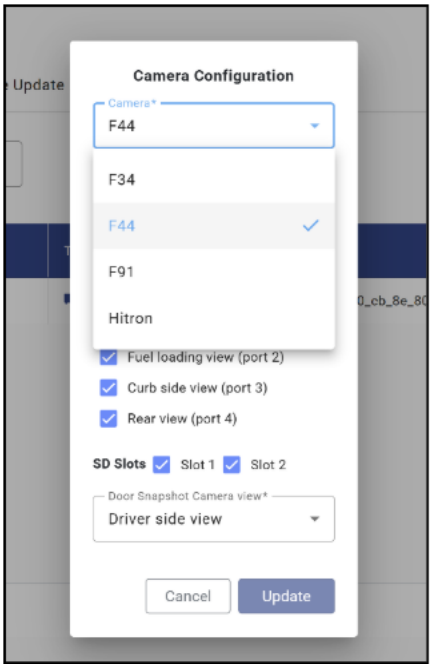

Figure 17 Camera selection dropdown

9. From the “Camera Configuration” dropdown, select the desired preset. Select “Default Camera Configuration” for standard views.

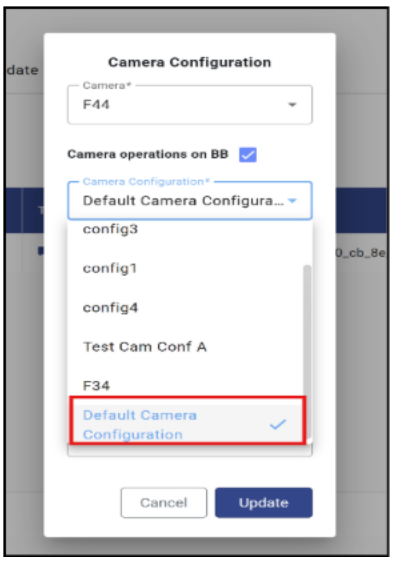

Figure 18 Camera Configuration dropdown — Preset selection

Enabling Camera Ports and SD Card Storage

Select each camera port required for active use:

- Driver side (port 1)
- Fuel loading view (port 2)
- Curb side view (port 3)
- Rear view (port 4)

> ***Note:*** *The port names populate automatically based on the selected configuration preset.*

Under the SD card storage section, enable “Slot 1” and/or “Slot 2” corresponding to the SD card(s) physically inserted into the Camera ECU.

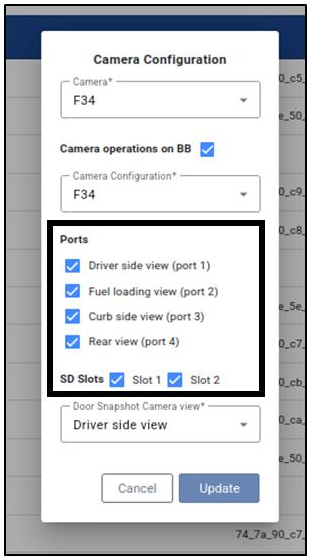

Figure 19 Configuration checkbox

Video pull request

1. Navigate to the **Video tab** located on the left side of the cloud UI portal.

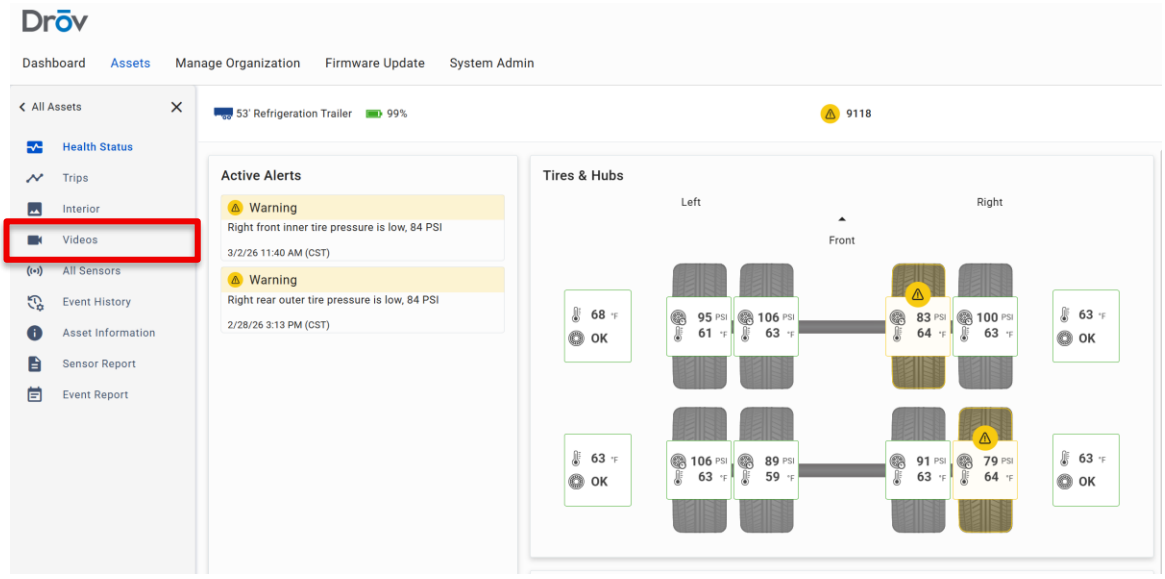

Figure 20 UI asset screen

2. Select request video and **time-based** retrieval option.

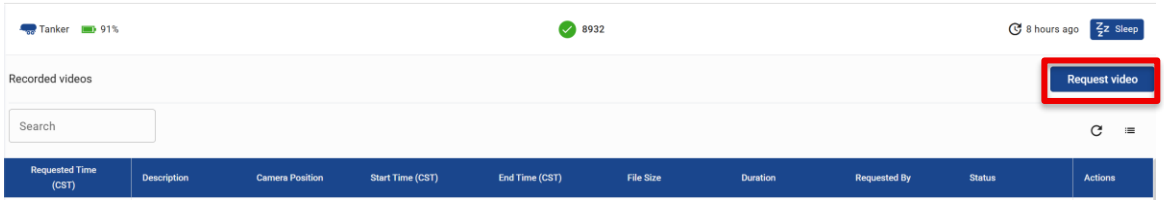

Figure 21 Request video button

3. Specify the desired starting time corresponding to when vehicle power was applied to the trailer (J560 power).
4. Set the playback **duration** to 1 minute.
5. Select the **Quad View** (or all-cameras / multi-view) camera position to display the simultaneous feed from all installed cameras.
6. Once the requested video segment has fully loaded from the specified timestamp, press **Play** to start playback of the video feed.

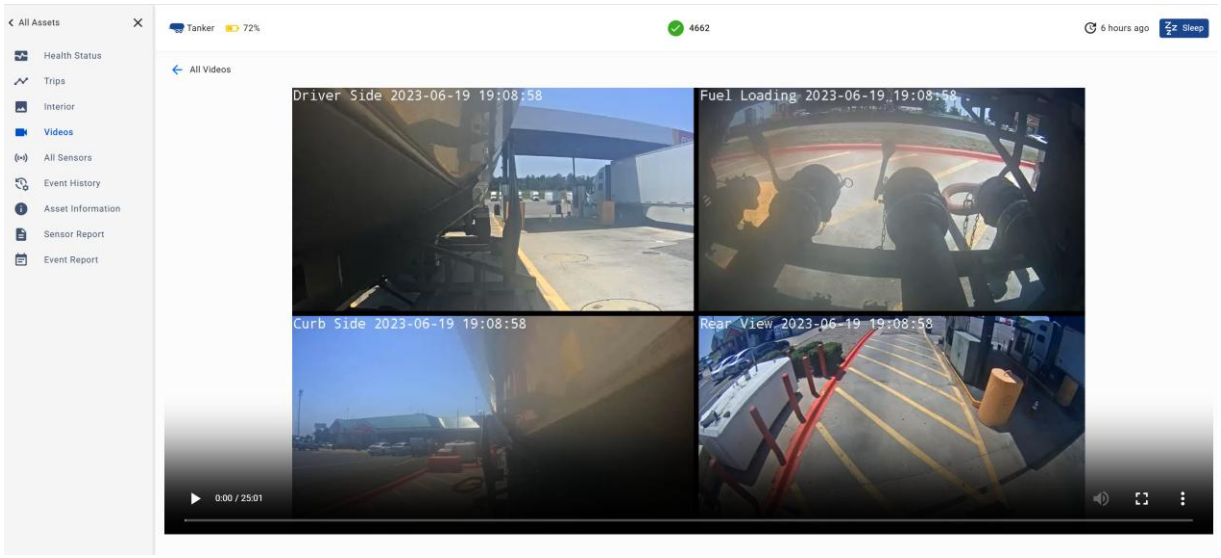

Figure 22 Video playback screen

15 Camera operation feature

15.1 Videos

The Videos tab displays a list of all video requests submitted by users from the AirBoxOne device. Use the search bar to filter videos by description, camera position, or requestor name.

The video request table contains the following columns:

- Requested Time (Time zone) -The date and time at which the video request was submitted.
- Description — A user-defined label for the video request. For event-based requests, the system automatically populates this field with the corresponding event description.
- Camera Position — The camera position specified in the video request.
- Start Time (Time zone) The start date and time specified in the video request.
- End Time (Time zone) For time-based requests, the end time is calculated from the selected duration. For event-based requests, the end time corresponds to the value selected in the "To" field.
- File Size — The total file size of the uploaded video, displayed in megabytes (MB).
- Duration — The total playback duration of the requested video.
- Requested By — The first and last name of the user who submitted the request.
- Status — Indicates the current state of the video request. Three status are available:
    - "Play" (Green) The requested video is available for playback or download.
    - "In Queue" (Blue) The video request has been sent to the device and is being processed.
    - "Unavailable" (Grey) The requested video could not be retrieved from the device.

Possible reasons for an "Unavailable" status include:

- The device was in sleep mode, and the Camera ECU was powered off during the requested time.
- The "Camera operations on BB" setting was disabled for the selected asset, causing the Camera ECU to be powered off while the device operated on backup battery.
- The device was powered through the clearance light circuit, and the Camera ECU was powered off.
- A hardware issue prevented the Camera ECU from powering on or communicating with the device.
- The SD cards in the Camera ECU were corrupted, preventing video recording during the requested time period.
- A software error in the Camera ECU prevented the device from retrieving the video.

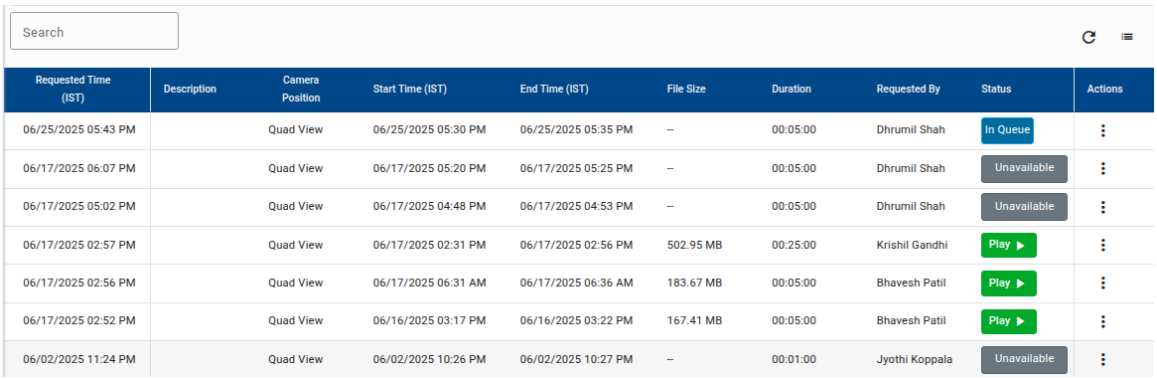

Figure 23 Videos tab — Video request list

- **Actions —** Each video request provides two action options:

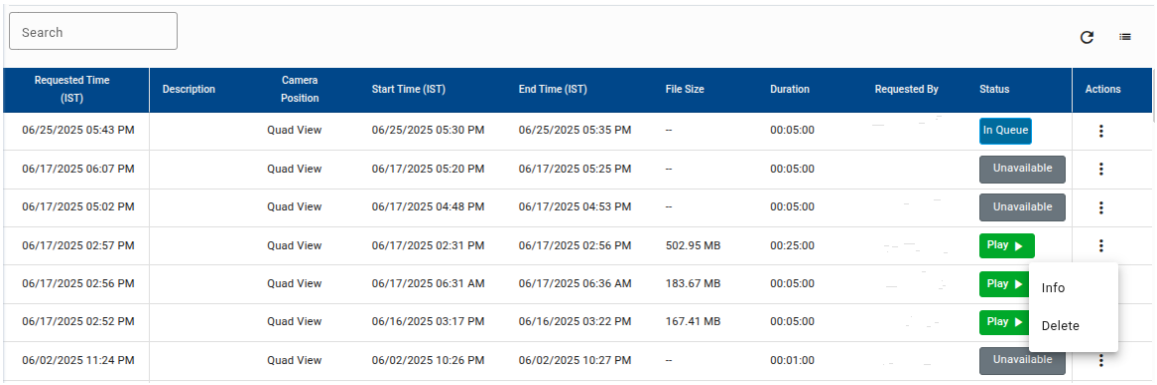

Figure 24 Videos tab — Actions column

- **Info —** Select "Info" to view detailed information about the video request. A custom description may be added for tracking purposes.

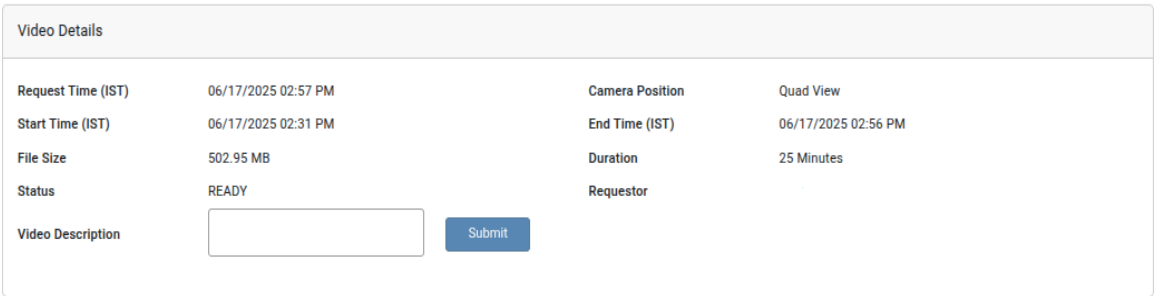

Figure 25 Video Details

- **Delete —** Select "Delete" to remove the video request. A confirmation dialog is displayed before the deletion is executed. Select "Cancel" to abort the operation.

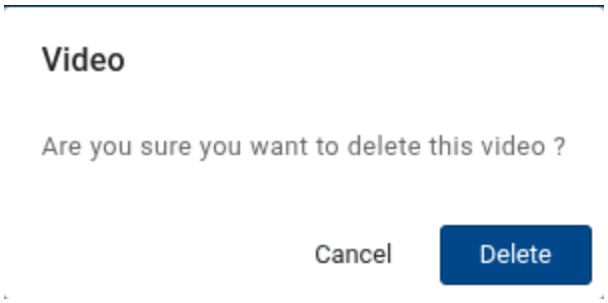

Figure 26 Delete confirmation dialog

15.2 Time-Based Video Request

To submit a time-based video request, perform the following steps:

- Select the "Request Video" button. A request dialog is displayed.

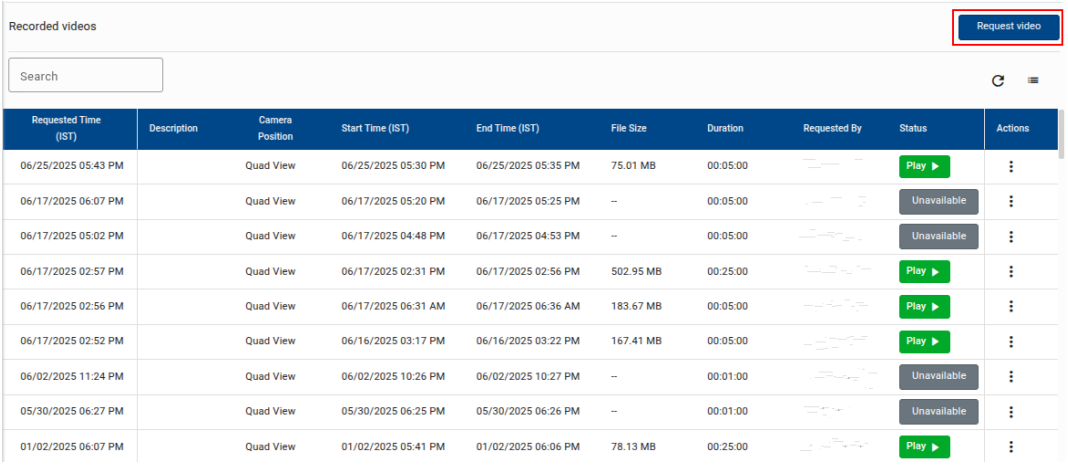

Figure 27 Request Video selection

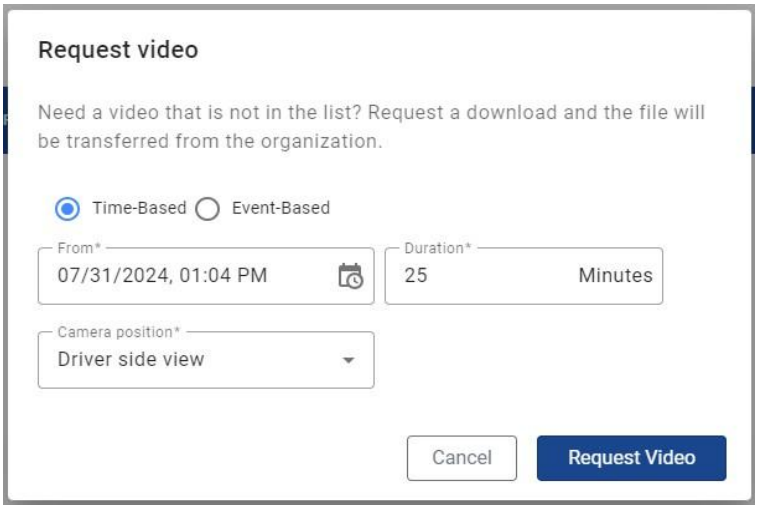

Figure 28 Time-based video request dialog

- Select the "Time-Based" radio button.
- In the "From" field, select the desired start date and time using the date and time picker.
- In the "Duration" field, select the video length. Available durations range from 1 minute to 30 minutes.
- In the "Camera Position" field, select the desired camera position from the drop-down list.
- Select "Request Video" to submit the request. The request is added to the video list with an "In Queue" status.

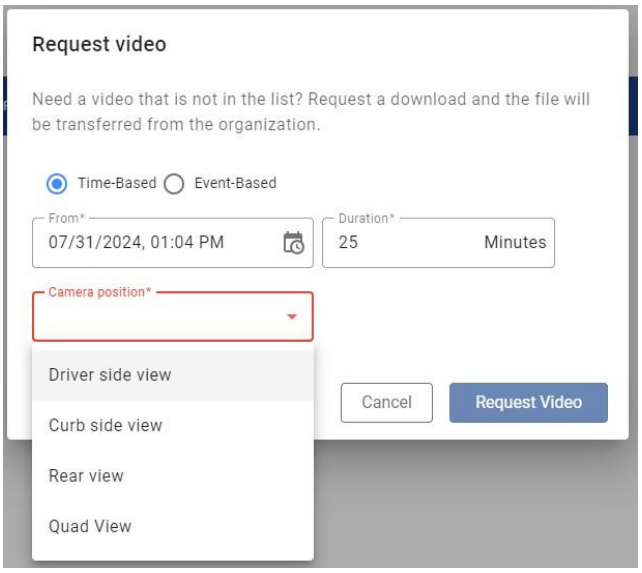

*Figure 29 Time-Based video request — **Camera selection***

15.3 Event-Based Video Request

To submit an event-based video request, perform the following steps:

- Select the "Event-Based" radio button in the Request Video dialog.
- In the "From" and "To" fields, select the start and end date/time range using the date and time picker.
- In the "Event List" field, select the desired event from the drop-down list.
- Select the event time from the drop-down list, then select "Request Video" to submit the request.

If no events were generated within the specified time range, the system displays a "No Event Time Found" message.

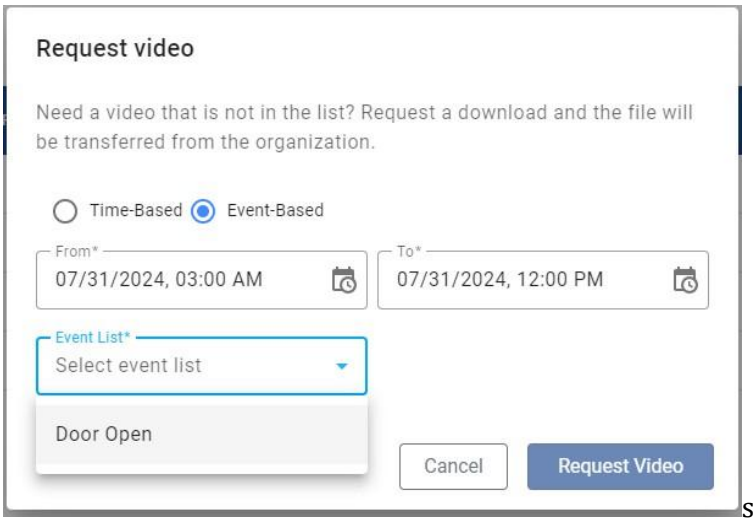

Figure 30 Event-Based request

15.4 Video Playback

To view the video requested, perform the following steps:

- Select the "Play" button to open the video player.
- Select the full-screen icon to expand the video to full-screen view.
- Select the menu icon (three dots) to access additional options, including video download and playback speed adjustment.

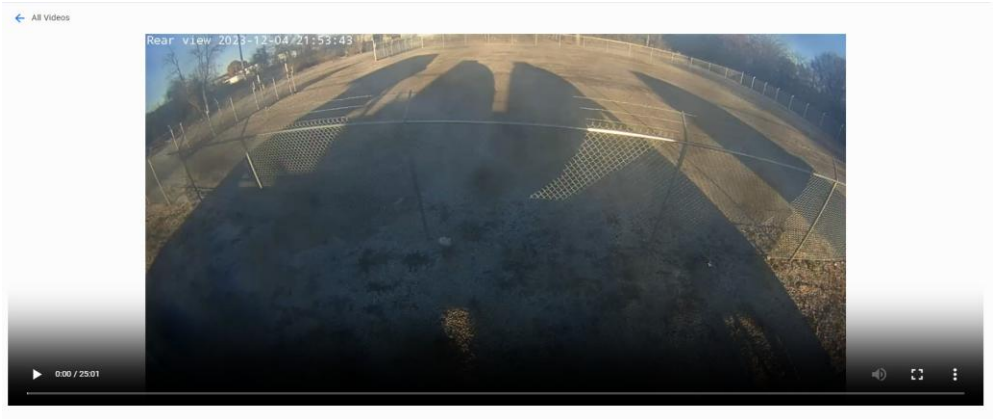

Figure 31 Video playback screen

Figure 32 Video player — Download and playback speed options

16 Troubleshooting

Figure 33 LED indicators

The LED indicator information shown below is in the same order as the led placement in Figure 33 LED indicators.

Power LED	Indication
Green	Normal operation
Amber	Flashes green/amber during software upgrade

Status LED	Indication
Green	Steady green for Normal operation
Amber	Steady during startup. Flashes when restoring settings.
Red	Device software upgrade failure

Network LED	Indication
Green	Steady for connection to a 1 Gbit/s network. Flashes for network activity.
Amber	Steady for connection to a 10/100 Mbit/s network. Flashes for network activity.
Unlit	No network connection

Troubleshooting Table

Symptom	Possible Cause	Corrective Action
Status LED does not illuminate on power-up	No power reaching the Axis main unit	• Verify power source voltage (10–48 VDC) with a multimeter at the DT connector. • Check 200171 print in section 11.1 for power and ground. • Check the PTC fuse (F1) on the power bulkhead board. • Verify the ring connector connection
Status LED flashes amber/red	Network connection unavailable or lost	• Check ethernet cable for damage. • Check ethernet connections on the AirBoxOne and the Camera VCU
One or more sensor channels show no video	FAKRA connection not fully seated	• Verify sensor cables are not kinked or damaged. • Verify cable lengths are within specification. Check if the SMA connection at the sensor is tight (5 in-lbs). • Verify the exterior FAKRA bulkhead connection is clicked and locked. • Try restarting the main unit after reconnecting sensors.
Image quality is degraded or there is no image from the camera	Camera cable issue or Camera issue	• Verify sensor cables are not kinked or damaged. • Verify cable lengths are within specification. Check if the SMA connection at the sensor is tight (5 in-lbs.) • Verify the exterior FAKRA bulkhead connection is clicked and locked. • Try restarting the main unit after reconnecting sensors.
Water detected inside enclosure	Seal integrity compromised	• Immediately disconnect power. • Verify screw torque (12 in-lbs, cross pattern).
No network LED or unavailable video request	Ethernet cable damage	• Check ethernet cable for damage. • Check ethernet connections on the AirBoxOne and the Camera VCU

17 Maintenance

Periodic Inspection Schedule

Item	Interval	Action
Enclosure exterior	Every 6 months	Inspect for physical damage, corrosion, or loose screws. Verify screw torque (12 in-lbs.) if screws appear loose.
FAKRA cable connections	Every 6 months	Verify all FAKRA connections are locked (pull test). Inspect cables for chafing, kinking, or insulation damage.
Ethernet connection	Every 6 months	Verify the exterior Ethernet connection is secure. Inspect the Amphenol gasket.
Power connection	Every 6 months	Verify the DT connector is fully mated. Inspect the power harness for damage.
Sensor units	Every 6 months	Clean the sensor lens with soft, lint-free cloth. Inspect mounting brackets for looseness. Verify SMA connector torque.
Mounting hardware	Annually	Verify all flange mounting bolts are properly torqued. Inspect for frame corrosion around mounting holes. Reseal drilled holes if needed.
Cable routing	Annually	Inspect all P-clamps, zip ties, and split loom. Replace any damaged cable protection. Verify cables are clear of moving parts and tires.

Camera replacement procedure

WARNING: The heat gun outlet, the heatshrink sleeve, and the SMA connector remain hot for several minutes after shrinking. Wear heat-resistant gloves and allow the assembly to cool before handling or routing the cable.

CAUTION: When removing a heatshrink sleeve with a blade, cut only into the sleeve. Cutting into the cable jacket can damage the inner conductor or shield and will require the cable to be replaced.

NOTE: Every SMA connection must be torqued to 8 in-lb before the heatshrink is shrunk. An under-torqued connection trapped under heatshrink cannot be re-tightened without removing and replacing the sleeve.

Camera- SMA connection

This procedure applies to the SMA junction at the camera body, where the camera-mounted SMA bulkhead mates to the camera cable

1. Slide the heat shrink sleeve over the SMA cable, leaving it clear of the connector so the joint can be mated.
2. Connect the cable to the camera. Hand-tighten the SMA nut, then torque to 8 in-lb using the calibrated torque wrench.
3. Slide the heat shrink along the cable until it is pressed firmly against the camera body and fully covers the connector.
4. Shrink the heat shrink using a heat gun. Apply heat evenly around the circumference until the sleeve has fully conformed to the connector and the cable jacket on both sides of the joint.

Figure 34 Heat shrink staged on cable before mating to the camera.

Figure 35 Cable connected to the camera and torqued to 8 in-lb.

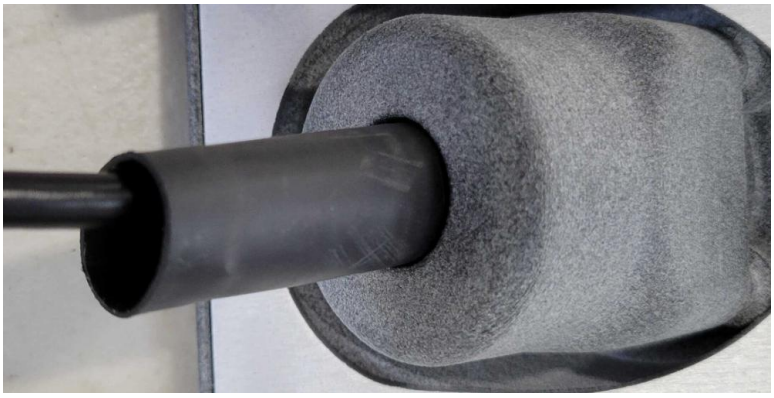

Figure 36 Heat shrink shrunk over the SMA junction at the camera body

Camera-Cable Removal

Use this procedure when a camera-side SMA junction must be opened for service. The heat shrink is destructive to remove — a new sleeve is required for re-installation.

1. Using a sharp blade/knife, carefully cut along the length of the heat shrink
2. Cut only into the sleeve. Cutting too deep risks cutting into the cable jacket itself. Flush cutters may also be used to score the sleeve without contacting the wire underneath.
3. Once the heat shrink has been scored, peel it off the connector and cable. Needle-nose pliers may be needed to grip the cut edge of the heat shrink and start the peel.
4. Inspect the SMA connector for damage before re-mating. Replace the heat shrink with a new sleeve before re-torquing.

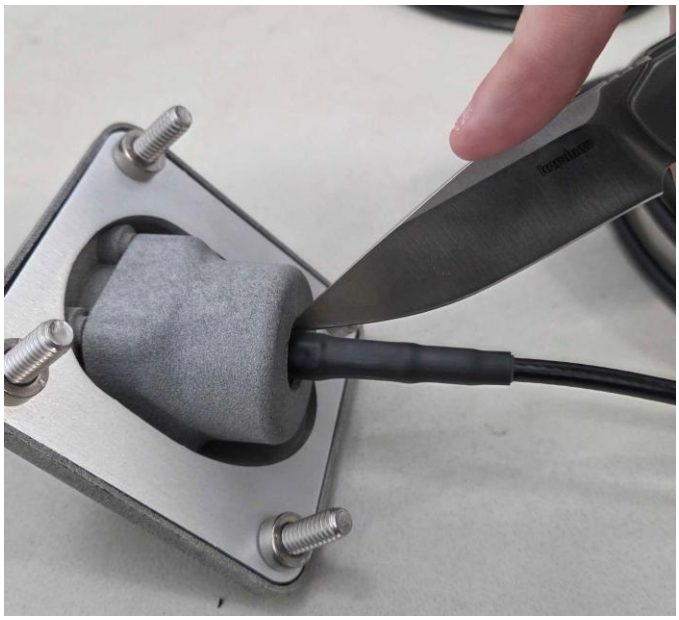

Figure 37 Score the heat shrink along its length with a sharp blade

Figure 38 Use pliers to grip the cut edge and begin peeling the sleeve

Figure 39 Heat shrink partially removed, SMA junction exposed

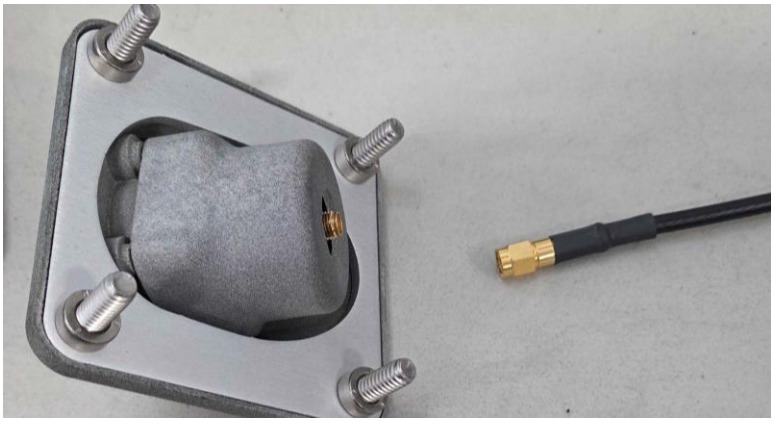

Figure 40 Cable fully separated from the camera after sleeve removal

17 Installation Completion Checklist

Complete this checklist after the Camera VCU System installation is finished. All items must be verified before returning the trailer to service.

Task	Verified Complete
Pre-installation checklist completed and all components verified	
Enclosure holes machined and deburred per drawing 100261-D	
Camera VCU mounted on trailer with flanges, all fasteners torqued	
Sensor units mounted on brackets, fasteners torqued to 10 ft-lbs	
Sensor cables routed, secured every 24 in., protected with split loom	
SMA connections at sensors torqued to 5 in-lbs	
Exterior FAKRA connections clicked and locked (pull test verified)	
Power harness connected (200193 / 200171) with correct polarity verified	
Ethernet cable connected from network/AirBoxOne to Camera VCU	
All drilled holes in trailer frame/walls sealed	
System powered on, Axis status LED shows normal operation	
All sensor channels display live video with correct field of view	

Field	Value
Technician Name	
Company / Dealership Name	
Date Installation Completed	
Axis Main Unit serial number (Sticker on the outside of the enclosure)	
Number of Sensors Installed	