RioV360

Cat / Mitsubishi Forklift Fitment Guide

Find your Cat / Mitsubishi series, match the power, and order the right RioV360 kit.

UNIVERSAL FIT

One RioV360 Kit for Cat / Mitsubishi Forklifts

RioV360 is a 4-camera AI pedestrian detection system that alerts the operator and people on foot before a collision. The same complete kit fits the Cat / Mitsubishi series in this guide, from 3,000 lb electric trucks to 22,000 lb IC pneumatic machines. It runs on 8 to 32 V DC, mounts on the overhead guard, counterweight or cab, and needs no tags, software or subscription.



4 AI Cameras
1080p, 130° view, infrared night vision, IP69K. Full 360° coverage.

Detects People
Standing, crouching, kneeling or partly hidden, 0 to 5 m, alert in under 400 ms.

7 Inch Monitor
Live view with red, yellow and green zones set per camera.

120 dB Beacon
External voice alert and light so people on foot know to move.

Onboard Recording
Continuous video, 256GB card included, about 30 hours.

Fast Install
Complete kit with harness and hardware. Most teams finish in under 2 hours.

How to Use This Guide

1. Find your Cat / Mitsubishi series in the tables below.
2. Match the power column to your truck. RioV360 runs on 8 to 32 V DC, so IC trucks connect directly to the switched ignition circuit.
3. Confirm the model and voltage on the truck data plate. Model ranges change by year and region.
4. Check attachments. Side shifters, clamps and long forks can change where cameras need to go.
5. Order the complete kit, plus any accessories listed for your truck type.

Power: IC and Electric Forklifts

- **Gas, LP and diesel:** 12 V system. Connect to a fused, key-switched 12 V circuit and the constant 12 V line, as the user manual shows.
- **Electric:** 24, 36, 48 or 80 V traction battery. Never connect RioV360 to the traction battery.
- **Accessory circuit:** electric trucks run lights, horn and dash on a key-switched 12 or 24 V circuit. A qualified installer can tap it, with no converter needed.
- **No low-voltage circuit:** add the RV360-DCC isolated DC-DC converter. Electric forklift batteries are isolated from the frame, so the converter must be isolated too.

RioV360 User Manual

Installation, settings and troubleshooting: **Download the RioV360 User Manual (PDF, v4.4)**.

Fitment by Truck Type

Truck type	Capacity	Power	Power / RioV360 connection	RioV360 Accessories	Notes
IC Pneumatic	3,000 to 15,500 lb	12 V	Direct: 12 V key-switched circuit	EXT, 512	Outdoor yards and docks. Rear camera on the counterweight or overhead guard.
IC Cushion	3,000 to 8,000 lb	12 V	Direct: 12 V key-switched circuit	EXT, 512, MAG	Indoor and dock work. RV360-MAG speeds installs on steel guards.
Electric Cushion	4,000 to 8,000 lb	36, 48 or 80 V battery	Truck accessory circuit (12/24 V, key-switched). Fallback: RV360-DCC	EXT, 512, DCC if needed	The most common warehouse truck. Tap the key-switched accessory circuit.
Electric Pneumatic	3,000 to 7,000 lb	48 or 80 V battery	Truck accessory circuit (12/24 V, key-switched). Fallback: RV360-DCC	EXT, 512, DCC if needed	Never connect RioV360 to the traction battery.
High-Capacity IC	13,000 to 22,000 lb	12 or 24 V (check the machine)	Direct: key-switched circuit	EXT, CBX, 512	Ports, steel and lumber. Mount cameras high on the counterweight and cab.

Codes shortened from RV360-EXT, -512, -MAG, -CBX and -DCC. Details on page 3.

Cat / Mitsubishi Models by Truck Type

Truck type	Series and models	Capacity
IC Pneumatic	Cat GP15N-GP35N, DP15N-DP35N; Mitsubishi FG and FD series	3,000 to 15,500 lb
IC Cushion	Cat GC15N-GC40CN, 2C7000-2C8000; Mitsubishi FGC series	3,000 to 8,000 lb
Electric Cushion	Cat Q Series Electric Cushion; Mitsubishi FBC20Q-FBC40Q	4,000 to 8,000 lb
Electric Pneumatic	Cat EP series; Mitsubishi FB series (48 and 80 V)	3,000 to 7,000 lb
High-Capacity IC	Cat DP60HP-DP100CP	13,000 to 22,000 lb

Older Cat / Mitsubishi Forklifts

Truck type	Older series	How to match
IC	Earlier K and N generations, Cat T-series	A Cat GC25K fits like the GC25N
Electric	Earlier Cat EP and Mitsubishi FB/FBC series	Use the accessory circuit, or the RV360-DCC
UniCarriers	UniCarriers and Nissan IC trucks	Same 12 V connection as other IC trucks

Older trucks fit by truck type and power. IC trucks connect directly to 12 V. Electric trucks use the key-switched accessory circuit or the RV360-DCC. Not listed? Send the data plate photo and we will confirm the kit within one business day.

Camera / Beacon Layout

- **Rear:** on the counterweight or the rear overhead guard crossbar, aimed at the reverse path.
- **Sides:** on the overhead guard posts, aimed along the turning arc.
- **Front:** on the front overhead guard crossbar, looking past the load and mast.
- **Monitor:** on the overhead guard post or dash with the RV360-EXT kit.
- **Beacon:** high on the rear guard, where people on foot can see and hear it.

A common alternative layout is two cameras forward, one rear and a side curtain zone on the passenger side. No tags for workers to wear: the AI cameras detect any person in the zone.

RioV360 Accessories

- **RV360-EXT:** Monitor Extension and Mounting Kit: rail clamp, round base, cab-frame bracket or T-attachment.
- **RV360-512:** Upgraded Storage: 512GB card for about 60 hours of continuous video.
- **RV360-MAG:** Magnetic Camera Mounts: no-drill mounting on steel guards and counterweights (US shipments).
- **RV360-CBX:** Extension Cables: two 3 m and two 5 m camera cables plus a 5 m monitor cable for long trucks.
- **RV360-DCC:** Isolated DC-DC Converter: for electric trucks with no low-voltage circuit. Priced on quote.

Common Questions

Does RioV360 fit Cat and Mitsubishi forklifts? Yes. Cat and Mitsubishi IC trucks run 12 V and RioV360 runs on 8 to 32 V, so they connect directly. Electric trucks use the key-switched accessory circuit.

Which Cat and Mitsubishi forklift models does RioV360 fit? All current Cat and Mitsubishi IC and electric counterbalance series. IC pneumatic: Cat GP15N-GP35N, DP15N-DP35N; Mitsubishi FG and FD series. IC cushion: Cat GC15N-GC40CN, 2C7000-2C8000; Mitsubishi FGC series. Electric cushion: Cat Q Series Electric Cushion; Mitsubishi FBC20Q-FBC40Q. Electric pneumatic: Cat EP series; Mitsubishi FB series (48 and 80 V). High-capacity IC: Cat DP60HP-DP100CP. Older trucks fit by truck type and power.

Does RioV360 work on electric Cat / Mitsubishi forklifts? Yes. Connect to the key-switched 12 or 24 V accessory circuit. If the truck has none, add the RV360-DCC isolated converter. Never connect to the traction battery.

Where do the cameras go on a forklift? On the overhead guard and counterweight: rear, both sides and front, looking past the load and mast. The monitor goes on the guard post or dash.

Do workers need to wear tags? No. RioV360 uses AI cameras to detect any person in the zone, with nothing to wear or charge.

PILOT UNIT PROGRAM

Prove It on Your Cat / Mitsubishi Before You Commit

$500 off

PILOT discount applies to all RioV360 units through December 31, 2026

Put RioV360 on your highest-risk Cat / Mitsubishi forklift and let your operators, supervisors and EHS team see it work in your own operation. No long trial agreements and no software to set up. Install it, run it, and decide.

1. **Pick the truck**
   Choose the forklift with the most foot traffic or the worst blind spots.
2. **Order**
   Send the model and serial number. Pay by credit card.
3. **Ships fast**
   In-stock units ship from Arizona in 2 business days.
4. **Install**
   Follow the user manual and the layout in this guide.
5. **Roll out**
   Use the same kit and layout across the rest of the fleet.

Included with the PILOT unit: 4 AI cameras, 7 inch monitor, 120 dB voice beacon, 256GB card, wiring harness, mounting hardware, user manual and 18-month warranty. Phone, email or Teams support for your installer.

Recommended PILOT Unit Accessories

RV360-512
Upgraded Storage
512GB high endurance card for about 60 hours of continuous video.

RV360-EXT
Monitor Extension and Mounting Kit
Rail clamp, round base, cab-frame bracket or T-attachment.

RV360-MAG
Magnetic Camera Mounting Kit
No-drill camera mounts to trial positions on steel guards.

RV360-PWR
Bench Test AC Power Adapter
Run the system from a wall outlet and learn it on a table before install.

Order a PILOT unit: **+1 (520) 501-0602** | **info@riodatos.com**

Series, capacities and model lists are approximate and vary by year and region. Cat and Mitsubishi is a trademark of its owner. RioDatos is not affiliated with or endorsed by Cat and Mitsubishi. Model names are used only to identify compatible machines.