QUARTERHILL

HAZMAT Placard Reader

The Hazmat Placard Reader speeds up safety checks for trucks carrying dangerous goods by automatically reading and matching Hazmat signs to truck data.

Enhanced E-screening

IRD's e-screening systems can easily incorporate a camera system that jointly performs Hazmat Placard reading & USDOT number identification. The Hazmat placard reader captures excellent images and uses advanced OCR technology to identify symbols and characters to provide reliable, real-time, actionable data.

Incidents involving motor vehicles carrying hazardous materials are common (21,860 in 2020) and can cause serious safety concerns which is why collecting data and automating procedures to improve inspection processes are so important.

When paired with a License Plate Reader or Overview Camera, officials have multiple vehicle data points with which to make quick and informed decisions. An officer can quickly determine if the vehicle needs to be sent to an inspection lane and if the Hazmat placards match the vehicle's paperwork, all without needing to look up from the computer screen.

The addition of a Hazmat placard reader to a commercial vehicle enforcement officer's toolkit can automate several labor-intensive and time-consuming processes such as:

- Collecting reliable data needed for traffic studies, mandatory reporting, and trend analyses
- Identifying vehicles that display Hazmat placards in real time so they can seamlessly be selected for inspection or diverted
- Quickly assessing compliance with laws and regulations

Features

- Provides an image of the placard and reports hazard class, division and UN number
- The Hazmat Placard Reader reads up to six hazardous materials placards on commercial vehicles or containers
- Can be a software add-on to the USDOT Number Reader so minimal additional hardware is needed
- Standard and wide angle options maximize image capture based on site geometry and vehicle speed
- Scalable architecture and proven integration with WIM and other screening systems

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Specifications

Imager Specifications	
Camera Resolution	5MP (2,576 horizontal pixels)
Field of View (depends on lane geometry)	11 - 20 ft (3.3 - 6m) based on lane geometry
Operating Range (depends on lane geometry)	11.5-22 ft or 3.5-6.7m (Wide Angle) 16.5-45 ft or 5-13.7m (Standard Angle)
Vehicle Speed	Up to 45mph or 72kph (Wide Angle) Up to 75mph or 120kph (Standard Angle)
Operating Conditions	
Operating Temperature Range	-40 to +70 °C (-40 to 175 °F)
Humidity	10%~90% (non-condensing)
Protection Rating	IP67
Physical Characteristics	
Imager Dimensions	6.6”W x 6.4”H x 12”D (168mm x 163mm x 305mm)
Imager Weight	9.8 lbs (4 kg)
Illuminator Dimensions	7.7”W x 7.4”H x 22.7”D (196mm x 188mm x 577mm)
Illuminator Weight	23 lbs (10.5 kg)
Processor	Hardened microprocessor to run OCR software
Material	Anodized aluminum sun shield, extruded anodized aluminum body
Connectors	3-pin power, 4-pin signal, 6-pin trigger, Ethernet
Electrical & I/O	
Imager Voltage	120VAC, 50/60HZ, 55W
Illuminator Voltage	120VAC, 200W (static) 1250W (peak)
Ethernet Port	10/100 Mbps