Fixed Under Vehicle Scan System

- High Resolution Supporting 2 K Per Line and Maximum Image Resolution up to 20 MP
- Low Image Distortion
- Supports a Maximum Vehicle Speed of 80 kph (50 mph)
- Less Than One (1) Second to Synthesize Whole Vehicle Image
- Large Field of View, up to 180°, Captures the Entire Under Vehicle Image

System Overview

The Dahua Fixed Under Vehicle Scan System (UVSS) uses a line scan camera to take a high-resolution image of the entire vehicle undercarriage to provide a top security solution. The system effectively scans for security risks presented by bombs, biochemicals, and individuals. The UVSS is designed for use at important checkpoints, including airports, government buildings, prisons, banks, and military bases.

Functions

Clear and Sharp Image

The UVSS scanning module adopts a high-resolution line scan camera with a low-distrotion fisheye lens, and long-life LED array lights. Integrated with Dahua advanced distortion correction algorithms, it provides a clear and sharp under vehicle image regardless of tough lighting conditions.

Wide Speed Range

The recommended typical speed is 50 kph (31 mph), and the UVSS supports up to 80 kph (50 mph) for vehicle image capture in motion. Portable UVSS detects a vehicle's undercarriage image without requiring the vehicle to stop. The UVSS synthesizes the undercarriage image in less than one (1) second.

Professional and Accessible Software

PC-based software with an easy-to-use GUI provides linear image stitching, plate number integration, and live video on the home page. It supports quick retrieval of the history records and checking the under vehicle image details. Integrated algorithm supports images comparison of the same vehicle or recognizing suspicious areas which help operator to improve efficiency.

High Efficiency Video Coding (H.265)

The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

Environmental

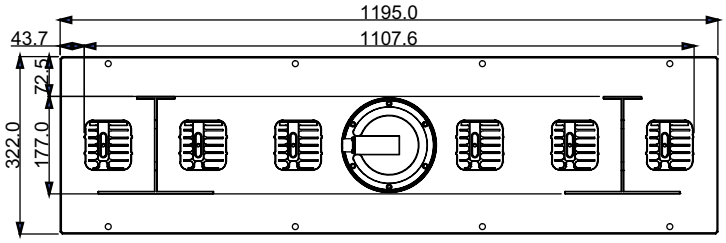
With a working temperature range from –35° C to +60° C (–31° F to 140° F), the UVSS scanning module is designed for extreme temperature environments. Subjected and certified by rigorous dust and water immersion tests, its IP68 rating makes it suitable for most harsh environments.

Technical Specifications

System

Scan Mode	Automatic Trigger from External Source
Resolution	2048 pixels, 18 kHz
Image Type	JPEG Color Image
Field of View	180°
Maximum Vehicle Speed	80.0 kph (49.70 mph) Recommended: <50.0 kph (31.07 mph)
Height of Vehicle Chassis	60.0 mm to 2000.0 mm (2.36 in. to 78.74 in.)
Width of Vehicle Chassis	≤ 4500.0 mm (177.17 in.)
Installation Area	Approximately 1200.0 mm x 360.0 mm x 290 mm (47.24 in. x 14.17 in. x 11.42 in.)
Illumination Module	Six (6) Single Sealed 80 W LEDs LED Light Life Span: ≥ 60,000 Hours
Weight	15.0 kg (33.07 lb)
Dimensions	1195.0 mm x 322.0 mm x 278.60 mm (47.05 in. x 12.68 in. x 10.97 in.)
Operating Temperature	–35° C to +60° C (–31 °F to 140° F)
Ingress Protection	IP68

Dimensions (mm)



Ordering Information

Type	Part Number	Description
UVSS	DH-MV-VDF5020CE-00	Under Vehicle Scan System