DC-100

HD IP Camera with Super Stabilization

The DC-100 is high-definition IP smart camera built around the innovative Sony FCB-EW9500 block and Qualcomm Snapdragon processor. It combines superior low light sensitivity with 30x optical zoom and super image stabilization for the highest quality images in any environment. With wide support for software platforms and standards, the DC-100 can be easily integrated into existing installations.

DC-100 Features

- 1/1.8" Sony STARVIS™ 4M CMOS Sensor
- Integrated Sony FCB-EW9500 Block
- Full Linux System with Processing
- HEVC and H.264 Video Streaming
- 10/100/1000 Ethernet
- RTSP with Authentication
- Sony VISCA Serial Control
- 30x Enhanced Optical Zoom
- Super Image Stabilizer
- High Sensitivity for Low Light Applications
- Wide Dynamic Range
- Noise Reduction
- Spot Focus, Exposure and White Balance

- Visibility Enhancer
- IR Correction
- Flicker Detection and Reduction
- 7 Blade IRIS for Flare Reduction
- HDMI Preview Output
- Integrated Micro SD Card for Recording
- Serial/VISCA Camera Control over IP
- ONVIF S Compliant
- Simple Web Setup and Configuration
- Optional 802.11ac WiFi
- Web Services API
- Support for 3rd Party Application Integration

DC-100 Applications

- Surveillance Systems
- Broadcast
- Medical Imaging
- Professional A/V Applications

- Traffic Control
- Real-Time Video Streaming
- Video Analytics
- Object Tracking

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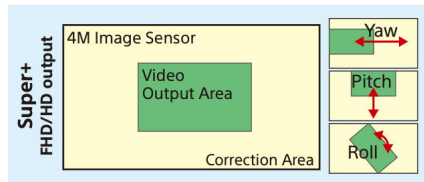
Linux-Based Smart Camera

The DC-100 is a high-definition linux-based smart camera designed around the Sony FCB-EW9500 camera block and powerful Qualcomm Snapdragon processor for the best image quality and performance. It provides a reliable RTSP video stream in HEVC (H.265) or H.264 formats and contains all the necessary services for complete configuration and control.

30x Enhanced Optical Zoom

The DC-100 lens provides high resolution and dramatically reduced chromatic aberration, making it capable of showing high resolution images in full sharpness with no image deterioration in the surrounding edges.

Super Image Stabilizer

By using a wide correlation area with the 4M sensor, the Super/Super+ stabilizer modes suppress vibrations and reduces blurring, making it perfect for harsh environments like vehicles, UAVs, and bridges.

High Sensitivity and Wide Dynamic Range

The Sony STARVIS™ sensor has high spectral sensitivity in near infrared and infrared wavelengths, making it especially effective at capturing clear images in very low light. An anti-reflective coating on the sensor helps reduce ghosting, and the Wide Dynamic Range function allows for an image with large light intensity differences to be normalized.

Camera Control and Configuration

The DC-100 camera adjustments can be controlled using the Sony VISCA™ protocol through the camera's serial connector or remotely using the dPict Imaging Configuration Manager. The Configuration Manager is also used for device network discovery and configuration of the camera's network, video and administrative settings.

Integration Tools

The DC-100 supports a wide range of tools for installation into existing systems or integration in an OEM development. For existing systems, the DC-100 supports the ONVIF protocol for network-based cameras. For OEM installations, an optional web services API is available with sample code. The DC-100 can even run supported 3rd party services right on the camera.

Specifications

Image Sensor[1]
- 1/1.8" Sony STARVIS™ 4M CMOS
- Image S/N: 50 dB (Weight On)
- Gain: Auto/Manual 0 - 50 dB- 28 Steps
- Shutter Speed: 1/1 to 1/10000s - 22 steps
- Exposure Control: -10.5 dB to 10.5 dB - 15 Steps
- White Balance: Auto, ATW, Indoor, Outdoor, One Push WB, Manual WB, Outdoor Auto, Sodium Vapor Lamp (Fix/Auto/Outdoor Auto), Spot AWB
- Auto Exposure: Full Auto, Manual, Priority mode (shutter/iris), EV compensation, Spot AE, Slow AE
- Zoom: 30x Enhanced Optical Zoom, 12x Digital Zoom, 36x Stable Zoom
- Lens: f = 6.5 mm to 162.5 mm, F1.6 to 4.8
- Horizontal Viewing Angle: 58.1° to 2.3°

Video Processing
- Streaming Resolutions: 2688x1512p[2], 2560x1440p[2], 1920x1080p, and 1280x720p
- HEVC and H.264 Encoding
- HDMI Video Output
- RTSP with Authentication
- Configuration of Frame and Bit Rate

System I/O
- 10/100/1000 Ethernet
- Optional 802.11ac WiFi
- VISCA Serial Interface
- SD Memory Card Interface

System Services
- User Authentication and Configuration
- Web Server with Video
- VISCA Server
- ONVIF Server
- NTP Time Server
- Deployment/Upgrade Server

Configuration
- Device Discovery Application
- HTTP Web Configuration Manager
- Available Web Services API

Physical and Environmental
- Size: 185mm x 68mm x 70mm
- Weight: 860g (with mounting plate)
- Power Requirement: 12V
- Power Consumption[3]: 13W
- Operating temperature: -5° C to 60° C
- Storage temperature: -20° C to 60° C
- Operating humidity: 20% to 80% non-condensing
- Storage humidity: 20% to 95% non-condensing

Ordering Information
- DC-100 Ethernet: 30013-001
- DC-100 With Wireless: 30013-002
- DC-100 Power Supply: 99103

1. *See Sony FCB-EW9500 documentation for complete sensor specifications.*
2. *The 2688x1512 or 2560x1440 image is output in 2160p with a surrounding black frame.*
3. *Power measured in 1080p60 output utilizing HEVC encoding.*