
**HIGH-PERFORMANCE PAN/TILT MULTI-SENSOR CAMERA**

# FLIR SAROS™
## DM-Series

The FLIR Saros DM-Series introduces eight new VGA and QVGA resolution options to FLIR's multi-sensor security lineup. Capable of capturing video in complete darkness, bright sunlight, and through smoke, dust, or light fog, the Saros DM-Series provides superior perimeter protection in the toughest lighting and environmental conditions. A built-in 4K visible light camera operates alongside the thermal sensor to capture minute details in low light conditions. The Saros DM-Series also integrates with the FLIR United Video Management System (UVMS), as well as other ONVIF-compliant video management systems. This gives users complete control over the all new dual-sensor viewing mode, alarm functions, and fully programmable preset tour.

www.flir.com/security

### INDUSTRY-LEADING THERMAL

Superior thermal image quality and a built-in 4K visible camera offer versatile, multi-spectral surveillance.

- Delivers market-leading images in tough conditions, including darkness, glaring light, and through obscurants
- Onboard 4K visible light camera with e-zoom and low light capability
- Available 640 × 512 and 320 × 256 thermal resolutions


### MULTIPLE LENS OPTIONS

Choose from a wide range of lenses, along with VGA and QVGA sensors, for optimal detection ranges in challenging conditions.

- Choose from eight high-performance lenses, ranging from 95° × 72° to 12° × 9° FOV
- Athermalized, focus-free lenses

### DESIGNED FOR CYBERSECURITY

Engineered to reduce exposure to remote security attacks.

- End-to-end encryption for setup, web, and video streams
- Eliminates the need for port-forwarding
- Configuration lockdown after initial setup for increased tamper prevention

## SPECIFICATIONS

### Thermal Sensor & Optics

| | |
|---|---|
| Array Format (NTSC) | 320 × 256, 640 × 512 |
| Thermal Sensitivitiy | < 50mK@ 25°C F# 1.0 |
| Detector Type | Long-Life, Uncooled VOx Microbolometer |
| Pixel Pitch | 12 µm |
| Thermal Frame Rate | NTSC: 30 Hz<br>PAL: 25 Hz / 8.3 Hz |

| Optical Characteristics | Model | FOV (H × W) | Focal Length | F# |
|---|---|---|---|---|
| | DM-392 | 92° × 69° | 2.3 mm | F/1.0 |
| | DM-350 | 50° × 38° | 4.3 mm | F/1.0 |
| | DM-324 | 24° × 18° | 9.1 mm | F/1.0 |
| | DM-312 | 12° × 9° | 18 mm | F/1.0 |
| | DM-695 | 95° × 72° | 4.9 mm | F/1.0 |
| | DM-650 | 50° × 38° | 8.7 mm | F/1.0 |
| | DM-624 | 24° × 18° | 18 mm | F/1.0 |
| | DM-612 | 12° × 9° | 36 mm | F/1.0 |

| | |
|---|---|
| E-Zoom | Continuous E-Zoom to 4x |
| Spectral Range | 7.5 µm to 13.5 µm |
| Focus Range | Athermalized, Focus-Free |

### Video

| | |
|---|---|
| Video Compression | Thermal: One channel of H.264 & M-JPEG<br>Visible: Two independent channels of H.264 & M-JPEG |
| Streaming Resolution | Thermal: QVGA to VGA<br>Visible: VGA to 4K |
| Thermal Image Settings | Auto AGC, Dynamic Detail Enhancement (DDE), Brightness, Sharpness, Contrast |
| Thermal AGC Region of Interest (ROI) | Default, Presets and User definable to insure optimal image quality on subjects of interest |
| Image Uniformity Optimization | Automatic Flat Field Correction (FFC) - Thermal and Temporal Triggers |

### System Integration

| | |
|---|---|
| Ethernet | Yes |
| Network APIs | FLIR SDK, FLIR CGI, ONVIF Profile S |
| Digital I/O | Input: Four sets / 5V 10kΩ pull up<br>Output: Two sets / relay output, 120mA max at 24 VDC / 24VAC |
| Audio I/O | Bi-Directional Audio - connection - Terminal block |

### Network

| | |
|---|---|
| Supported Protocols | IPV4, HTTP, UPnP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, ICMP, IGMP, DHCP, ARP |

### Pan/Tilt Performance

| | |
|---|---|
| Pan Angle | Continuous 360° |
| Tilt Angle | -10° – 190° |
| Programmable Presets | 256 |

### General

| | |
|---|---|
| Dimensions | Diameter: 207mm (8.15 in) Height: 300mm (11.8 in) |
| Weight | 3.8 Kg (8.38 lbs.) |
| Input Voltage | 12VDC, 24VAC, Universal PoE Injector |
| Power Consumption | 12VDC, 2.5A, 30W<br>24VAC, 2.36A, 57VA<br>55VDC (PoE), 0.62A, 34W |

### Environmental

| | |
|---|---|
| IP Rating (Dust & Water Ingress) | IP66 |
| Operating Temperature Range | -40°C – 55°C |
| Storage Temperature Range | -40°C – 85°C |
| Humidity | 10 – 90% |
| Shock | IEC 60068-2-27 |
| Vibe | IEC 60068-2-64 |

### Compliance & Certifications

| |
|---|
| FCC Part 15 (Subpart B, Class A) |
| CE Marked |
| RoHS |
| IP66 |
| ONVIF Profile S |
| WEEE (Waste Electrical and Electronic Equipment Directive) |
| IEC 62368 |

### Visible Light 4K Camera

| | |
|---|---|
| Sensor Type | Full HD 4K<br>1/1.8"-type Exmor R CMOS |
| E-Zoom | Continuous E-Zoom to 8x |

| | | | Sensitivity |
|---|---|---|---|
| Visible lens 1 | Lens FOV | HFOV = 110°<br>VFOV = 59° | Color: 0.25 Lux (@ (f1.6 AGC On, 30FPS)<br>B/W: 0.10 Lux (@ (f1.6 AGC On, 30FPS) |
| | Focal Length | 2.8mm | |
| | F/# | F 1.6 | |
| | Corresponding Models | DM-392, DM-695, DM-350, DM-650 | |
| Visible lens 2 | Lens FOV | HFOV = 55°<br>VFOV = 30° | Color: 0.25 Lux (@ (f1.6 AGC On, 30FPS)<br>B/W: 0.10 Lux (@ (f1.6 AGC On, 30FPS) |
| | Focal Length | 6mm | |
| | F/# | F 1.6 | |
| | Corresponding Models | DM-324, DM-624 | |
| Visible lens 3 | Lens FOV | HFOV = 36°<br>VFOV = 20° | Color: 0.40 Lux (@ (f2.0 AGC On, 30FPS)<br>B/W: 0.16 Lux (@ (f2.0 AGC On, 30FPS) |
| | Focal Length | 12mm | |
| | F/# | F 2.0 | |
| | Corresponding Models | DM-312, DM-612 | |

### Cyber Security

802.1x
TLS/HTTPS
User authentication
Access control via firewall
User credentials with policy enforcement
Digest authentication

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com

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