



# HD39E

## 1080p H.264 Ethernet Camera

**COMPACT | RUGGED | DUAL-STREAMING**

**Built for interior/exterior aerospace & beyond including:**  
**eVTOL • UAV/USV • hypersonic flight • cabin/cockpit monitoring**  
**space launch & rocket telemetry • flight test instrumentation**

- Extremely compact and lightweight
- IP68 waterproof + Fog-Free Argon gas backfill
- MIL-STD-704 power input protection
- Dual H.264 streams + MJPEG stream
- Wide range of options & configurations
- Built-in backup recording



# SPECIFICATIONS

## VIDEO

|                   |                                                                                                                                                                                                                                                                                                                  |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SENSOR            | Sony Starvis IMX-327 1/2.8" 2.16MP                                                                                                                                                                                                                                                                               |
| IMAGE RESOLUTION  | 1080p, 720p, 800x600, 704x480/400, 640x480/360, 320x240                                                                                                                                                                                                                                                          |
| FRAME RATE        | 30, 25, 15, 10, 6, 5, 3, 2, 1 [frames per second]                                                                                                                                                                                                                                                                |
| MIN. ILLUMINATION | 0.05 Lux / 0.005Lux (Sens-up)                                                                                                                                                                                                                                                                                    |
| SHUTTER SPEED     | auto/manual: 1/30 - 1/30,000                                                                                                                                                                                                                                                                                     |
| SIGNAL PROCESSING | adjustable AGC, anti-sat, sens-up, HLC & BLC backlight, 3D digital noise reduction, adaptive contrast enhancement (ACE), WDR, AWB, manual & push-lock WB, saturation, RGB color gains, sharpness, defog, shading, privacy, motion detect, flip, mirror, gamma, configurable day/night, color/B&W, + more effects |

## NETWORK

|                     |                                                                                                         |
|---------------------|---------------------------------------------------------------------------------------------------------|
| VIDEO STREAMING     | independent H.264 primary, secondary, & MJPEG streams<br>each stream: frame rate, resolution, bandwidth |
| H.264 MAIN STREAM   | 128kb to 20Mb/sec                                                                                       |
| H.264 SUB STREAM    | 128kb to 20Mb/sec                                                                                       |
| H.264 PROFILES      | Baseline, Main                                                                                          |
| M-JPEG STREAM       | 1Mb to 50Mb/sec                                                                                         |
| LATENCY             | ~175mS, glass-glass                                                                                     |
| SUPPORTED PROTOCOLS | TCP/IP, UDP/IP, DHCP, ICMP, CGI, HTTP, UPnP, FTP, SMTP, SNTP<br>time stamp, RTSP, RTMP, ONVIF           |

## SETUP / DOWNLOAD

|                      |                                            |
|----------------------|--------------------------------------------|
| CAMERA CONFIGURATION | built-in HTTP web server & CGI command API |
| DOWNLOAD RECORDINGS  | built-in web interface or FTP              |

## OPTIONS

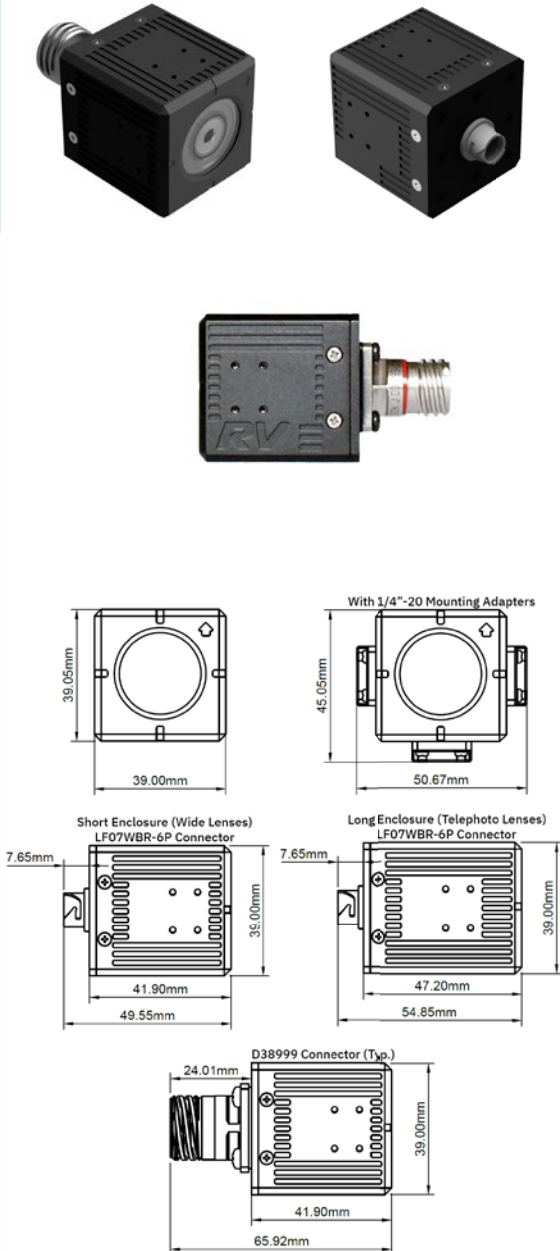
|               |                                                                                                    |
|---------------|----------------------------------------------------------------------------------------------------|
| LENS          | factory-installed & focused, options from 142° to 23° FOV (diag)<br>optional near-IR sensitization |
| FOG-PROOFING  | inert gas purge/backfill (Argon)                                                                   |
| RUGGEDIZATION | circuit encapsulation                                                                              |
| RECORDING     | internal MicroSD card up to 256GB                                                                  |
| CONNECTOR     | D38999/21NA35PN or LF07WBR-6P                                                                      |
| MOUNTING      | (16x) M2 machine threads<br>1/4"-20 machine thread mount adapters (attach to L/R/top/bott)         |

## ELECTRICAL INTERFACE

|                   |                                                                                                             |
|-------------------|-------------------------------------------------------------------------------------------------------------|
| POWER             | 12-32VDC universal input, 1.4watts typ, 1.8watts max                                                        |
| PROTECTION        | MIL-STD-704: reverse polarity, ESD, overvoltage, overcurrent,<br>hot swap, surge ride-thru & 250V+ standoff |
| NETWORK INTERFACE | 10/100 Base-T ethernet                                                                                      |

## GENERAL

|                           |                                                                                       |
|---------------------------|---------------------------------------------------------------------------------------|
| OPERATING TEMP            | -40° to +80°C (*cold-start ratings available from 0 to -40°C)                         |
| ENVIRONMENT/QUALIFICATION | IP68 Waterproof, designed for DO-160, MIL-STD-704                                     |
| DIMENSIONS                | 39mm x 39mm x 41.9mm (47.2mm w/narrower FOV lenses)                                   |
| WEIGHT                    | ~3-4oz                                                                                |
| ENCLOSURE                 | machined, anodized 6061-T6 aluminum, SS 316 hardware<br>scratch-proof sapphire window |



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