The ARGC-2400 NIGHT VISION CAMERA is Obzerv's flagship product. It has been engineered to meet the stringent requirements of coastal & border surveillance as well as Critical Infrastructures protection. With a range-gated intensified camera for night surveillance and two color sensors (Narrow Field Of View (NFOV) and Wide Field Of View (WFOV)) for day operation, the ARGC-2400 is uniquely positioned to provide unequaled identification performance.

The ARGC-2400 takes advantage of a series of cutting-edge technologies developed by Obzerv. Its key features include: a patent pending laser illuminator operating in the near-infrared that matches perfectly the field of view, a unique range-gated Intensified Charge Couple Device (ICCD) camera incorporating a highly sensitive custom Gen III intensifier tube and an achromatic high magnification continuous zoom telescope. Such technology package would not be complete without Obzerv's friendly and intuitive user interface to control the ARGC-2400 suite of sensors. The ARGC-2400 supplies critical data in real time and its video stream can be recorded for further evidence or analysis.

**APPLICATIONS**

| COASTAL SURVEILLANCE | BORDER SECURITY | CRITICAL INFRASTRUCTURE PROTECTION | ANTITERRORISM OPERATIONS |

**FEATURES**

| HIGHLY SENSITIVE NIGHT SENSOR COUPLED WITH A NEAR IR LASER |

| ACTIVE RANGE-GATED TECHNOLOGY |

| HIGH MAGNIFICATION CONTINUOUS-ZOOM TELESCOPE |

| ALL ENCLOSED MULTI-SENSORS |

| BORESIGHT OF CAMERA SENSORS |

| COMMUNICATION INTERFACES TCP/IP, RS-232 AND RS-422 |

| IMAGE ACQUISITION AT VIDEO RATE (25-30 FRAMES/SEC) | - Ultra-long range capability |

| BENEFITS | - Cost effective deployment: less cameras to cover large areas, less infrastructure (towers, telecom network...), less human resources, less maintenance |

| BENEFITS | - Read markings |

| BENEFITS | - Identify individuals |

| BENEFITS | - No sensitivity to external light source or intense light in the field of view |

| BENEFITS | - See through glass: windshields, wheelhouses, etc. |

| BENEFITS | - Perform in harsh weather conditions |

| BENEFITS | - Detect pointed optics |

| BENEFITS | - Display natural contrasted images |

| BENEFITS | - High magnification up to 240 X for 24/7 night-time surveillance and up to 312 X in daytime |

| BENEFITS | - Day and night operation capability (NFOV) through the same high magnification telescope |

| BENEFITS | - ICCD in passive or active mode depending on the mission |

| BENEFITS | - Facilitate location of targets with the WFOV color camera |

| BENEFITS | - Ability to switch from WFOV color camera to NFOV color camera, and to active mode while keeping track of target |

| BENEFITS | - Offers flexibility and easy integration with radars, thermal cameras, Vessel Traffic Management System (VTMS), slew to queue capabilities |

| BENEFITS | - Remote control |

| BENEFITS | - Video broadcast |

| BENEFITS | - Real time video image, no delay, no loss of evidences |

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### MOTORIZED ZOOM TELESCOPE
- Aperture: 240 mm

### RANGE-GATED ICCD CAMERA (NIGHT-TIME)
- **Sensor type**: Custom variant of Gen III Intensifier Tube
- **Optical magnification** [1]: 60 to 240 X
- **Field of View (H x V)**: Min: 0.15” x 0.11” Max: 0.61” x 0.46”
- **Effective picture element**: PAL (CCIR): 782 x 582 px
  NTSC (EIA): 659 x 494 px

### LASER ILLUMINATOR (PATENT PENDING)
- **Wavelength**: 860 nm
- **Beam divergence**: Slaved to the zoom telescope FOV
- **Average power**: > 4 W
- **Average power control**: User selectable
- **Cooling system**: Thermo-electrically air cooled

### COLOR CAMERAS (DAYTIME)
- **NFOV Optical magnification** [1]: 78 to 312 X
  - **NFOV (HxV)**: Min: 0.12” x 0.09” / Max: 0.46” x 0.34”
  - **WFOV (HxV)**: Min: 1.6” x 1.2” / Max: 42” x 31.5”
- **NFOV Minimum illumination**: 1.5 lux (typical) at F1.4
- **WFOV Minimum illumination**: 2 lux (typical) at F1.6
- **Horizontal resolution**: PAL: 460 TV lines  NTSC: 470 TV lines
  - **Effective picture element**: PAL: 752 x 582 px  NTSC: 768 x 494 px

### VIDEO
- **Format**: PAL or NTSC

### ENVIRONMENTAL
- **IP rating**: IP-66
- **Operating temperature**: -31°C to 55°C
- **Storage temperature**: -21°C to 63°C

### PHYSICAL AND ELECTRICAL
- **Weight**: < 55 kg
- **Dimensions (L x W x H)**: 56 x 52 x 37 cm
- **Power supply**: 100 - 240 VAC, 47 to 63 Hz
- **Power consumption (without the Pan & Tilt)**: < 350 W
- **Power consumption (with the Pan & Tilt)**: < 900 W

### OPTIONS
- **Console/Display terminal**: Touchscreen 19”, 1280 x 1024 px
- **Thermal imager (external)**: Thermovision 3000 (FLIR)
  FOX/P 720-ZE (CONTROP)
- **Pan & Tilt with joystick**: Azimuth range continuous 360˚
- **Electronic image stabilizer**: 0.5 to 25 Hz
- **Laser Range Finder**: 80 m to 20.5 km

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### NIGHT-TIME PERFORMANCES

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Man</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 x 2.3 m</td>
<td>1.8 x 0.5 m</td>
</tr>
</tbody>
</table>

**Identification**
- Vehicle: 0 km
- Man: 0 km

**Recognition**
- Vehicle: 16 km
- Man: 16 km

ARGC-2400: range performance with NFOV and a visibility better than 25 km

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(1) Compared to a SLR 35 mm camera with a 50 mm focal length lens.
# ARG-C-2400 Environmental Specifications

**Active Range-Gated Camera**

## ARG-C-2400 Environmental Specifications

### Operating Temperature

-31°C to 55°C  
(-31°C according to MIL-STD-810G, Method 502.5, Procedure II)  
(55°C according to MIL-STD-810G, Method 501.5, Procedure II)

### Storage Temperature

-21°C to 63°C  
(-21°C according to MIL-STD-810F, Method 502.4, Procedure I)  
(63°C according to MIL-STD-810G, Method 501.5, Procedure I)

### Temperature Shock

-33°C to 63°C  
MIL-STD-810G, Method 503.5, Procedure I-D

### IP Protection

- IP-66  
  International Standard IEC 60529 (IP 6X, X5, X6)

### Rain

- IP-66 Test Method  
  International Standard IEC 60529 (IP 6X, X5, X6)

### Humidity

- MIL-STD-810G, Method 507.5, Procedure II

### Salt Spray

- MIL-STD-810G, Method 509.5

### Dust

- IP-66 Test Method  
  International Standard IEC 60529 (IP 6X, X5, X6)

### Shock Operational

- Installed in wheeled vehicle  
  MIL-STD-810G Method 516.6 Procedure I

### Vibration

- **Ground vehicle / Installed in wheeled vehicle**  
  MIL-STD-810G Method 514.6, Procedure I C4

- **Ships / Installed material**  
  MIL-STD-810G Method 514.6, Procedure I C21  
  Figure: 514.6D-9  
  MIL-STD-810G Method 514.6, Procedure I Method 528 (referring to MIL-STD-167-1A Type 1)

### EMC

- **CS 101**  
  MIL-STD-461E, Section 5.7.2

- **CS 114**  
  MIL-STD-461E, section 5.12.2

- **CS 115**  
  MIL-STD-461E, Section 5.13.2

- **CS 116**  
  MIL-STD-461E, Section 5.14.2

- **RE 101**  
  MIL-STD-461E, Section 5.15.2  
  Figure: RE101-1 & RE101-2 (Army & Navy)

- **RE 102**  
  MIL-STD-461E, Section 5.16.2  
  Figure: RE102-1 (Surface Ship)

- **RS 101**  
  MIL-STD-461E, Section 5.18.2  
  RS101-1 & RS101-2 (Army & Navy)

- **RS 103**  
  MIL-STD-461E, Section 5.19.2, (Ground Navy & Ships below deck)