

Vision of the future **OPTRONITALIA**

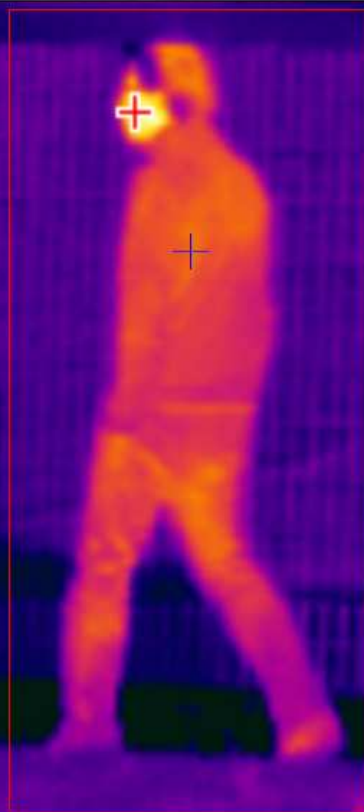
26.8 °C

Unattended mobile systems

Vehicular systems

Infrared cameras

2010



OPTRONITALIA

ARES SYSTEMS

ARES produced by OPTRONITALIA are pointing systems integrated to one shooting camera unit in the visible and long infrared. Precise and reliable systems, suitable for day/night monitoring imaging 24/h.

They can be wall installed, fixed pole fitted and through proper adaptable kits positioned on board of vehicles and boats.

To be able to access to all their potentialities it is necessary one common PC, or rugged laptop networked with the system and the operator SW interface included with ARES.

It is possible to configure ARES with different typologies of thermal cameras and appropriate spectral lenses from 3-5 μm or 7-14 μm .



They are classified in 3 basic configurations:

SHORT RANGE	ARES1 & ARES 2
MEDIUM RANGE	ARES 3
LONG RANGE	ARES 4



ARES 1 & 2 use a camera system in the visible -Nir and thermal of 7-14 μm , while ARES 3 & 4 adopt a system with visible-Nir spectrum and thermal of 3-5 μm .

The whole electronics of control is on board of the system, reducing in this way the dimensions and global weight. One interface box allows the linkage connection of ARES to Ethernet and to power supply system.

All specific parts of ARES are produced by machining from solid aluminium with CNC machines and carbon is used in the structural parts to keep content weights.

From the basic configurations can be customized the optics, the performances of the pointing system, the software, up to the final colouring of the product.

OPTIONALS

LASER RANGEFINDER R/1 4500 MT. (ARES 1-2)

LASER RANGEFINDER R/2 20000 MT. (ARES 3-4)

GPS (ARES 1-2-3-4)

OPTICAL RADAR (ARES 1-2-3-4)

ARES 1

VISIBLE CAMERA

SPECTRUM: 0.5-0.75 μm
TYPE: CCD
ELEMENTS: approx. 800K pixels
H.RIS.: 460 tv lines
IL. MIN.: 0.01 lux/1/3 sec.
S/N : 49 db
OPTICAL : zoom, 2.4mm to 60mm
digital zoom12x

THERMAL CAMERA

SPECTRUM: 7,5 -13,5 μm
TYPE: A Si
PIXELS: 384X288
PITCH: 25 μm
SENS.: 50 mK
OPTICAL : 50 mm.
H.VIEW: 13.8°
FOCUS: Mot.

GENERAL

SIZE: 715x221x330 mm.
WEIGHT: 17,550 Kg
STRUCTURE: Alum./steel/Carbon
ROTATION: Continuous H. 360°
+ 60° - 60° vertical.
SPEED: Variable 0,5° - 120° sec.
MOTORS: Step motors

ARES 2

VISIBLE CAMERA

SPECTRUM: 0.5-0.75 μm
TYPE: CCD
ELEMENTS: approx. 800K pixels
H.RIS.: 460 tv lines
IL. MIN.: 0.01 lux/1/3 sec.
S/N : 49 db
OPTICAL : zoom, 2.4mm to 60mm
Digital zoom 12x

THERMAL CAMERA

SPECTRUM: 7,5 -13,5 μm
TYPE: A Si
PIXELS: 640X480
PITCH: 25 μm
SENS.: 50 mK
OPTICAL : Zoom 25 - 150 mm.
H.VIEW: 22° - 3.6°
FOCUS + ZOOM: Mot.

GENERAL

SIZE: 715x221x330 mm.
WEIGHT: 22,500 Kg
STRUCTURE: Alum./steel/Carbon
ROTATION: Continuous H. 360°
+ 60° - 60° vertical.
SPEED: Variable 0,5° - 120° sec.
MOTORS: Step motors



ARES 3

VISIBLE CAMERA

SPECTRUM: 0.5-0.75 μm
TYPE: HAD CCD
ELEMENTS: approx. 800K pixels
H.RIS.: 470 tv lines
IL. MIN.: 0.01 lux/1/3 sec.
S/N : 49 db
OPTICAL : zoom, 4.8 mm to 120 mm
Digital zoom 12x

THERMAL CAMERA

SPECTRUM: 3 -5 μm
TYPE: Cooled HgCdTe MWIR
PIXELS: 384X288
PITCH: 15 μm
SENS.: 20 mK
OPTICAL : Bifocal 15 - 300 mm.
H.VIEW: 22° - 1.5°
FOCUS: Mot.

GENERAL

SIZE: 925x580x653 mm.
WEIGHT: 40 Kg
STRUCTURE: Alum./steel/Carbon
ROTATION: Continuous H. 360°
+ 45° - 45° vertical.
SPEED: Variable 0,5° - 120° sec.
MOTORS: Step motors

ARES 4

VISIBLE CAMERA

SPECTRUM: 0.5-0.75 μm
TYPE: Cooled CCD
ELEMENTS: approx. 800K pixels
H.RIS.: 420 linee tv
IL. MIN.: 0.00025 lux
S/N : 50 db
OPTICAL : zoom 12.5 to 750 mm X2
Digital zoom 12x

THERMAL CAMERA

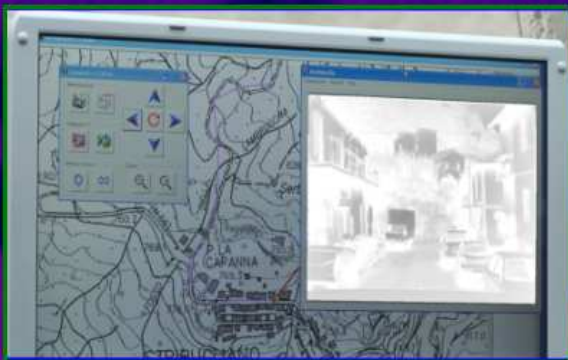
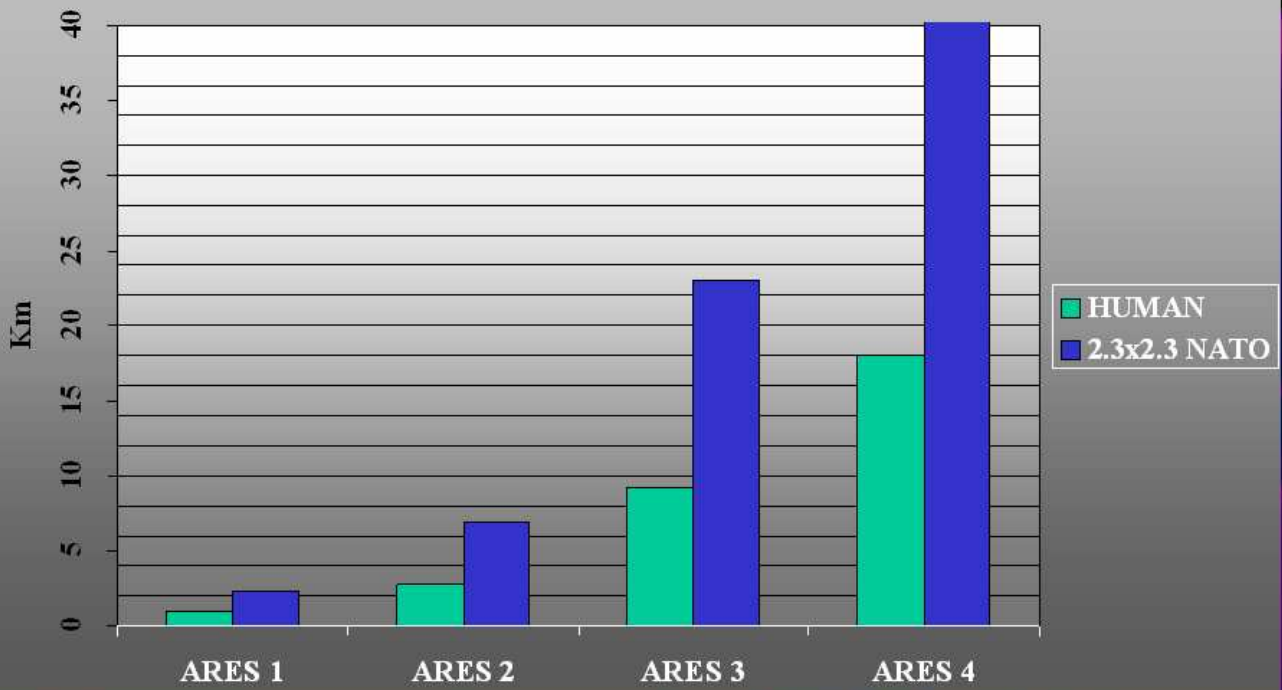
SPECTRUM: 3 -5 μm
TYPE: Cooled HgCdTe MWIR
PIXELS: 640X480
PITCH: 15 μm
SENS.: 20 mK
OPTICAL : Bifocal 30 - 600 mm.
H.VIEW: 11° - 0.6°
FOCUS: Mot.

GENERAL

SIZE: 715x221x330 mm.
WEIGHT: 47 Kg
STRUCTURE: Alum./steel/Carbon
ROTATION: Continuous H. 360°
+ 45° - 45° vertical
SPEED: Variable 0,5° - 120° sec.
MOTORS: Step motors



TARGET DETECTION



OPTRONITALIA