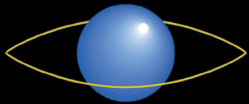
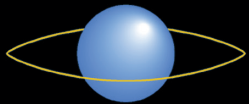
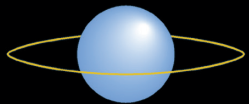
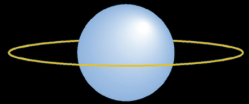


# PADNIS

**PA**noramic Day and Night Imaging System





# PADNIS

## PANORAMIC DAY AND NIGHT IMAGING SYSTEM

### Description

OIP's PADNIS is a generic, two-axis gyro-stabilised n x 360° Pan & Tilt Platform compatible with a large array of sensors for best customer-tailored configuration:

- Cooled Thermal Imager (3rd Gen.)
- Colour Day Zoom Camera
- Eye safe Laser Ranger Finder

PADNIS is a fully integrated imaging system, especially developed for Observation, Target Acquisition and Fire Control missions and intended to be employed indistinctively as Gunner or Commander sight on MBTs, AIFV with large calibre turret or as Gunner sight on AIFV with medium calibre weapons.

In its comprehensive version, PADNIS is a true Fire Control System able to link to various types of external sub-systems providing data for enhanced accuracy of the ballistic solutions.

PADNIS is a line replaceable unit (LRU) in a hermetically sealed enclosure with shop replaceable units (SRU) in open frame architecture, designed for compactness and modularity.

### Applications

- Fire Control & Panoramic Observation (Land Systems application)
- Reconnaissance & observation (RECCE)
- Border Control

### Features

- Latest Level of Technology
- High performances
- Compact and modularity
- Lightweight
- Excellent image quality
- Growth potential
- MOTS product
- Sealed unit
- High reliability

### Options

- Auto-Tracker
- Image Processing (360° image generator, multi-sensor fusion at calibrated FOVs)
- Full Fire Control System
  - Linked to:
    - Integrated Ballistic computer
    - Multi-Function Display (MFD)
    - Joystick (optional)
  - Compatible with:
    - Positional Accuracy Systems (GPS, NFM)
    - Laser Warning Systems
    - Etc....

### Quality

The quality management system applied by OIP Sensor Systems for design, development and manufacturing of opto-electronic systems, is compliant with and includes the requirements of ISO 9001:2008, AQAP-2110 Ed.2, ECSS-Q-20A and has been certified by the British Standard Institute under certificate N° FM 80768.

**OIP** N.V.  
 Westerring 21  
 B-9700 Oudenaarde  
 Belgium  
 Tel.: +32(0)55 333 811  
 Fax: +32(0)55 333 802  
 e-mail: sales@oip.be  
 www.oip.be

## TECHNICAL SPECIFICATIONS

### Pan & Tilt Platform

Azimuth	: N x 360°
Elevation	: -20° to +40°
LOS Stability	: < 0.2 mrad
Max LOS speed	: 1 rad/s (Az. & El.)

### Thermal Imager (MCT)

Wavelength band	: 7.7 to 9.5 µm
WFOV (H x V)	: 9.0° x 6.75°
NFOV (H x V)	: 2.2° x 1.65°
Electronic Zoom	: 2 x
Sensor format (pixels)	: 640 (H) x 512 (V)
Video format	: SMPTE-259M-C serial digital video (10 bit) and CCIR - Analog
NFOV range (D, R, I)	: 9 km, 5 km, 3 km (NATO target, ρ=0.39/km)

### Day Colour Camera

Sensor format	: 1/4" CCD (Approx. 740k pixels)
Optical zoom range	: 1.7° - 42°
Digital zoom ratio	: 12 x
Sensitivity	: 0.7 lux

### Laser Range Finder

Type	: Er :YAG
Wavelength	: 1.54 µm
Range	: 200 m to 10,000 m
Range resolution	: 5 m
Laser Safety	: Class1M Eye safe
Duty cycle	: 10 ppm

### Electronics & Power Units

Power supply (MIL-STD-1275B)	: +20 V to +32 V
EMI/EMC	: MIL-STD-461E
Power Consumption	: < 200 W
Communication protocol	: Serial Link / Ethernet / CanBUS

Mass (including armour)	: < 95 kg
Maximum height above turret interface	: 376 mm
Environmental	: MIL-STD-810F
Climatic conditions	: STANAG 2895: A1, A2, A3, B0, B1, B2, B3, C0, C1
Operational temperatures	: -20°C to +65°C