

**PRODUCTS AND SYSTEM SOLUTIONS**

Overview Applications

Navigation  
& Surveying

Stabilization  
& Control

Automotive

Defence

GNSS Denied

Gravimetry

Drilling

Your needs?



**DEVELOPING SOLUTIONS FOR THE  
TASKS OF TODAY AND TOMORROW**

**Defence**



# DEFENCE

## Land



### **iCOMBANA**

INS/GNSS Solution  
Inertial navigation & guidance systems for north finding, true heading determination, stabilisation and motion analysis - e.g. for combat vehicle applications



### **iPRENA**

INS/GNSS Solution  
High performance inertial navigation and surveying systems for military applications, true north reference, fast and accurate gyro compassing



### **iSULONA**

INS/GNSS Solution  
Powerful MEMS based systems for inertial navigation, dead reckoning, surveying, guidance and control



# DEFENCE

## Mortar Alignment Systems



### iEMAS

High precision Gyro compassing Mortar Alignment System with MRSI (Multiple Round Simultaneous Impact) capability



### iLMAS

Lightweight Mortar Alignment System, with GNSS and/or Gyro based true north for 81 mm and 120 mm



### iTAHS

Ultra lightweight Mortar Alignment System for 60 mm



# DEFENCE

## Air - Avionics



**i**NAT-CFM



**i**NAT-RQT-400x  
**i**NAT-FSLG-01



**i**NAT-M300

Hybrid INS/GNSS systems with MEMS, FOG or RLG sensors  
iAvionics Suites with INS/GNSS, Magnetometer and AirData Computer

- Navigation
- Stabilisation
- Flight Guidance
- Flight Motion Detection
- Fixed and rotary wing A/Cs and UAVs
- MIL-STD qualified
- Customized Solutions



# DEFENCE

## Sea & Subsea

Navigation,  
Guidance & Control  
Systems for Ships, UUVs,  
Submarines, Torpedoes  
  
Stabilized Pedestals and  
Gimbals for Antennas and  
Naval Weapons  
  
Deep Sea Sensors



**i**ATHEMO-  
TRIDENT-Rx

Most accurate autonomous  
True North and  
Navigation



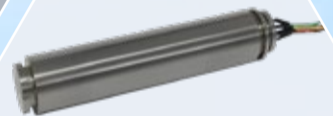
**i**TNAV

Strapdown AHRS in FOG  
Technology for Heavy Weight  
Torpedoes



**i**IPSC-PT-xx

Gyro stabilized Pan-Tilt  
Platforms for mobile and  
stationary applications, for  
standard and customer  
defined payloads



**i**TAHS

Sealed 3D Magnetic/Inertial  
Sensor for Towed Subsea  
Antennas. For up to  
3'000 m Depth



# DEFENCE

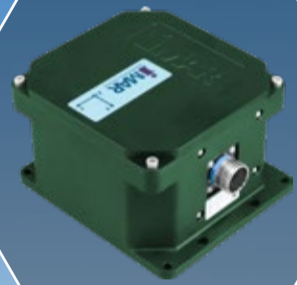
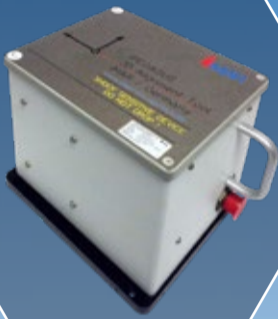
## Transfer Alignment & Gun Calibration Systems

Transfer alignment between sensors and effectors, on static and moving platforms

Improvement of weapon accuracy by calibration of kinematic chain

Alignment of missile protection systems on mobile carriers

Easy to operate, independent from external references



### iPEGASUS-HP

High Precision Gyro Based Transfer Alignment Systems

0.005° relative 3D accuracy @ 10 minutes

### iPEGASUS-LT

Gyro Based Transfer Alignment System - Lite

0.02° relative 3D accuracy @ 10 minutes

2 mil sec lat absolute true north



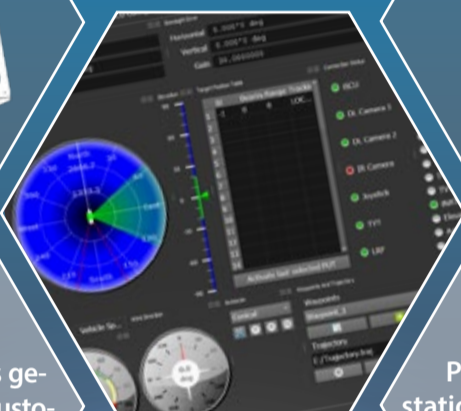
# STABILIZATION & CONTROL

Detection – Surveillance – Tracking



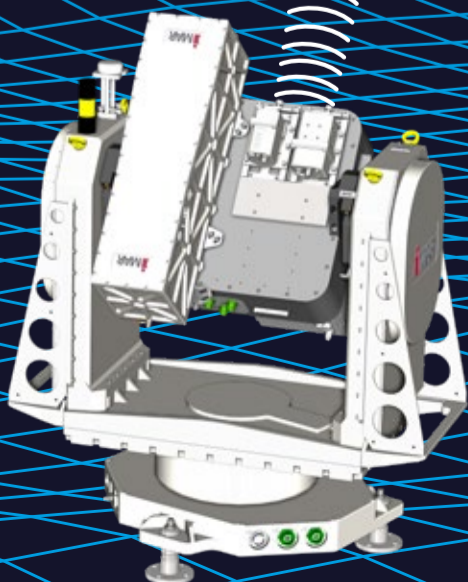
### iIPSC-MSG-xx

Gyro stabilized electro optical tracking systems as general-purpose platforms or customized solutions. Observation and surveying platforms with different and also customized features



### iIPSC-PT-xx

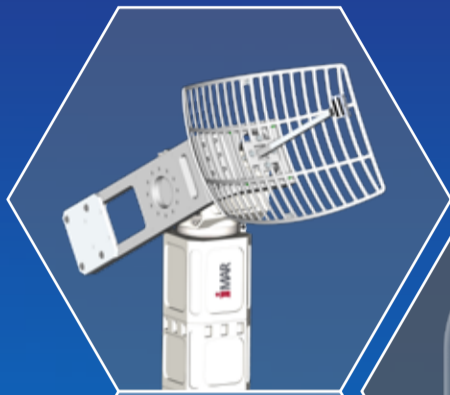
Gyro stabilized Pan-Tilt Platforms for mobile and stationary applications featuring TV, IR, high-speed camera, laser range finder, optical target tracker, antennas





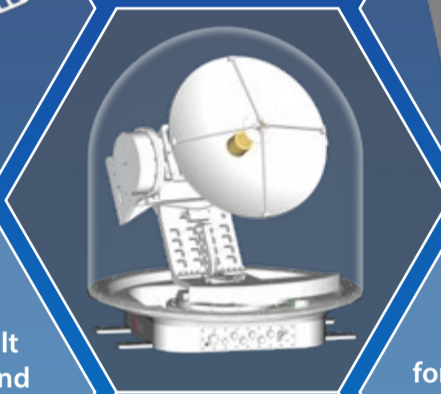
# STABILIZATION & CONTROL

## Customized Solutions



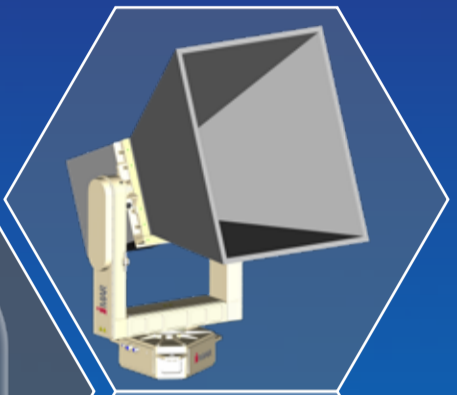
### **i**IPSC-PT-xx

Gyro stabilized Pan-Tilt Platforms for mobile and stationary applications, for standard and customer defined payloads



### **i**IPSC-ANTRAD

Multi axes stabilizers with high angular resolution and high dynamics, for land, sea and air applications



### **i**IPSC-TAP

Two-Axes Platforms for mobile and stationary land and sea applications, for several payloads and in different configurations





## iLIANE

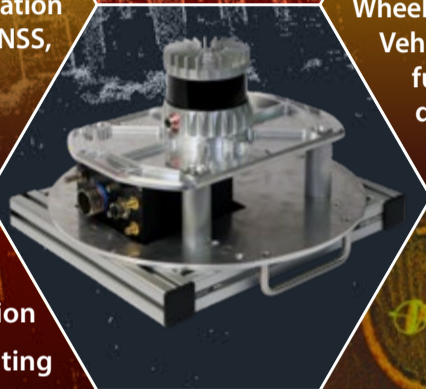
### LiDAR aided Navigation Equipment

#### iLIANE-LI

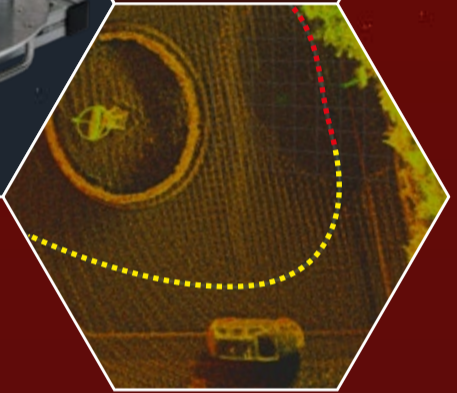
Accuracy of about 0.1 % of distance travelled, independent on mission duration (without any aiding, no GNSS, no odometer used)

#### iLIANE-LIGO

Seamless Integration of Imaging LiDAR / IMU / GNSS / Wheel Odometer. Most accurate Vehicle Localization even in fully GNSS and Radio denied Environment



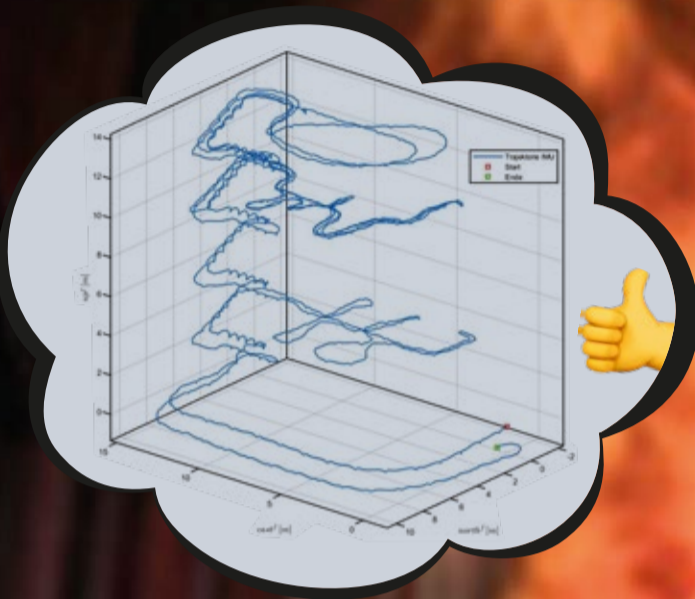
Autonomous Localization & Navigation  
Map Acquisition & Updating  
Precise Infrastructure Surveying, bridging of long and systemic GNSS outages





## iTHESEUS

Infrastructure-independent Pedestrian Navigator



**iTHESEUS**  
Localization Assistance System for Special Forces.  
Accuracy about 1% of total distance travelled, independent on mission duration and on any Infrastructure (neither GNSS nor WiFi nor beacons required)



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**32U LV 66120 59546**