

# Payload EO/IR Sensor Selection Guide for iMAR's Gyro Stabilized Platforms of Type iPSC

## ► Motivation for this Selection Guide

iMAR Navigation is a worldwide operating manufacturer and designer of precise inertial measurement systems for navigation, guidance, surveying and control for defense, industrial, aviation and space applications. Extended in-house know-how and technology of precise mechanics, sensors, system design and manufacturing make a sound basis to provide advanced stabilized platforms, being used for observation tasks, geo-surveying or governmental / defense / rescue operations. They always consist of 3 items:

- Electro-mechanical gimbal with torque drives, servo controllers, power conditioning, joystick control, remote interface etc.,
- gyroscopes and/or INS/GNSS for platform stabilization, motion control and optional georeferencing,
- electro-optical sensors like daylight / infrared cameras, laser range finder, laser designator, laser illuminator etc.



Most of the platforms designed and manufactured by iMAR in Germany are following our "open architecture" design. This allows the highest flexibility in choosing adequate payload sensors for the specific customer's application. There-



fore nearly all kind of optical sensors and antennas or any other assemblies - from the market or customized - can be integrated into our iPSC platforms.

iMAR's extensive test

lab incl. an agile hexapod for up to 1 ton payload with up to 1 g acceleration as well as a MIL grade vibration and shock table allow us to qualify our manufactured platforms under operational real-motion environment. On the following pages, a few typical EO/IR sensors are presented. The customer can select the most suitable sensors or he is invited to propose his own preferred



sensor constellations to be integrated into a custom designed platform at iMAR, also deliverable as OEM product.

Contact us for detailed information to analyze your requirements and to provide a solution meeting your specific needs.

The following pages with detailed information about several available laser range finders, daylight cameras and infrared cameras on our stabilized, video tracking platforms are only distributed after exchange of an NDA.

Please do not hesitate to contact our sales department for details.

Thank you for your understanding.

**Contact**

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