SSA

PAS-2006

PERISCOPE & Camera ALIGNMENT Tool

The PAS-2006 Periscope and Camera Alignment Tool is a transportable instrument – system, developed for the accurate alignment of any camera or submarine periscope system.
It has been tested on the SERO400 and OMS100.

The same alignment principles can be used in stations and vehicles which are equipped with electro-optical devices.

Features:

- Software/hardware simulation interface for relevant platform subsystems
- Alignment signal processing (automodes, such as QLR, including line of sight position changes in azimuth and elevation depending on the alignment signals).
- Video chain between sensor system and output interface
- Drift comparison and compensation
- Stabilization in azimuth (potentially with limited function)
- Stabilization in elevation
- DeScan function (azimuth and elevation)
- Calibration aids
- Optical Encoder testing
- MIL-C-4150J cases used for transportation

Internal interfaces:

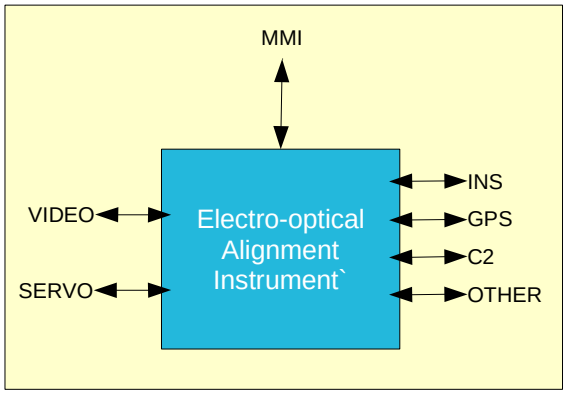
- OMS100/SERO400 internal interfaces
- OMS100/SERO400 interfaces to the other platform subsystems.

External interfaces:

- Voltage supply (AC or DC).
- Configurable MMI easily adaptable suitable e.g. for the OMS100/SERO400 system.
- Simulation features with suitable MMI for the other relevant platform subsystems.
- Video display on analog or digital monitors.
- Interfaces between the optical sensors and the environment.
- Interfaces between temperature sensors and the environment.
- Special adapters
- Automation of specific tasks
- New sensors interfaces for analog and gital signals

Optional Equipment & Services

- System Adapters (System Specifications)
- LLLTV camera
- HDTV camera
- Thermal camera
- Portable Color printer
- PAS Field Wires
- Customer Specific development services to meet any need.



Block Diagram of the Alignment Instrument

Application

The PAS-2006 Periscope Alignment System is able to perform Software simulation for SERO400 and OMS100 system along with azimuth and elevation measurements.

The PAS-2006 features a number of electrical interfaces to accommodate optical sensors and equipment on various platforms, such as submarines, ships and different kind of vehicles.

The basic concept of PAS-2006 is to check the electronic parts with simulation and then feed the measuring system with the output of both the sensors of the system to be aligned and the test sensors, while following the general periscope alignment method. The sources from both sensors are used to estimate the alignment of the sensor relative to the platforms center line.

Custom Adaptation

The PAS-2006 can be customized to meet specific customer requirements.

PAS-2006 Periscope Alignment System Specifications	
Interfaces	to all platform subsystems as the C2, radar, ESM, INS, GPS etc.
Mechanical design	The modules of the reference test unit are to be stored in 19" racks. The rack shall not exceed a depth of 800mm and a height of 1800mm.
Voltage supply	220V DC supply is provided to power the components of the reference test unit that use original modules from the OMS100/SERO400 system. 230V/50Hz AC supply is provided to power components of the reference test unit when standard laboratory devices are used.
Image Processing Unit	The original module of the electro-optical system under test, is designated as the image processing unit at the Alignment Tool. It is possible that an additional monitor is necessary to display the video signals. A combination of multifunctional monitors is provided (SVGA/XVGA/SVHS/FBAS).
Operating temperature	0°C...+50°C
Storage temperature	-40°C - +70°C dry
Rel. humidity	90% non-condensing
Shock	Appropriate transport
Vibration	Industry standard transport
Material	Halogen free and generally anti-magnetic
Safety	VDE 0100 , EN 61010-1:2001 rated voltage 500 VDC, Grounding design according to EMC,CE conformity,Type of protection: corresponding to IP 52

List of Services Offered	
Training	Maintenance Personnel.
Pre-Installation	Application planning, installation study.
Installation	Installation, Setting to work.
Post-Installation	After sales technical support.

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 Specifications are subject to change without notice.