



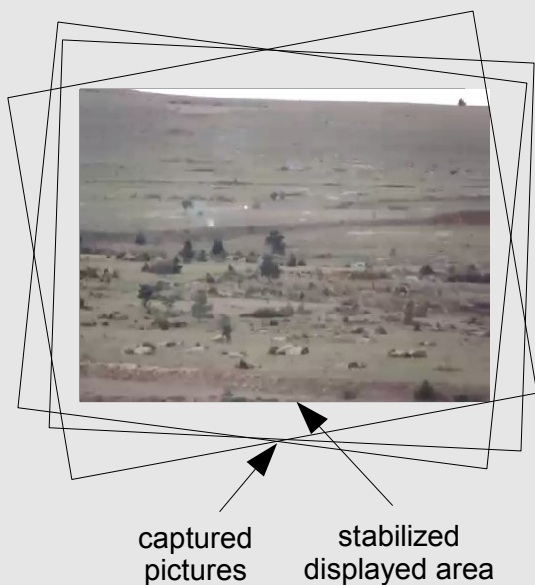
Light and efficient solution for local situation awareness on armoured vehicles

CASTEL is a smart, innovative and efficient imaging stabilization system. It provides armoured vehicle occupants with a constant, stable and detailed panoramic view of their surroundings. Dedicated to power projection operations where asymmetric threat is a concern, CASTEL's advantage is to be used when vehicle is moving and without exposing any part of human body.

Offering a compact design with flexible video and control interfaces, CASTEL allows fast and simple vehicle integration for first mount or for upgrade operation.

CASTLE is also suitable for tele-operated robots and drones platforms, where stabilized video is of great help for precise control.

Using an advanced proprietary motion estimation embedded algorithm, CASTEL is able to compensate 3 axis vibrations of the platform up to $\pm 25^\circ$, while delivering high resolution video.



CASTEL

Electronically Stabilized Camera



CASTEL implements SEBMA unique real-time motion estimation algorithm developed by InPixal.

Thanks to SEBMA, instantaneous motion of the platform is captured and compensated in real-time 30 times per seconds. An adjustable Kalman filter isolates and restores the smooth and natural motion of the platform while parasitic vibrations are eliminated.

CASTEL uses high definition, wobble free image sensor as a source, computes platform motion from the video, and then translates, rotates and crops the picture in order to deliver a perfectly stable and sharp video.





INPIXAL

CASTEL

SPECIFICATIONS

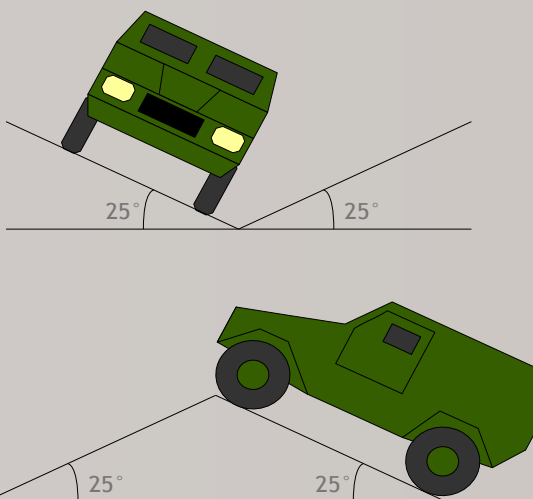
Video interfaces	Analog & Digital
Analog output	525/625 lines (STANAG 3350 Class B or C) VESA XGA (1024 x 768)
Digital output	MJPEG on Ethernet 100Mbps/s
Analog input	Up to VESA XGA (1024 x 768) for external thermal camera connection
Performances	Compensates vibrations up to $\pm 25^\circ$ on 3 axis
Power Supply	12-36 V DC, 7W nominal
Control	RS232, RS422, CAN, Ethernet
Dimensions	180 x 130 x 60 mm
Environment	MIL STD 810 GAM T13 DEFSTAN 00-35
Temperature	-40°C, +55°C
Electromagnetics	MIL STD 461 DEFSTAN 59-411

- provides clear overall vision
- works under extreme conditions
- no mechanics
- avoids body exposition



- emphasizes details
- panoramic view (optional)
- easy to install
- low cost solution

EXTREME TOLERANCE TO VIBRATION AMPLITUDE



120° TO 360° PANORAMIC VIEW

