



## GSM 3000

### Gyro Stabilized Mount

The new *GSM 3000* is an airborne sensor platform for precise stabilization and drift control of aerial cameras and other sensor systems. The *GSM-3000* is based on proven Carl Zeiss technology which has been re-designed and improved. The *GSM 3000* mount is the fastest stabilized mount at the international market and has a large diameter to fit with nearly all available airborne sensors. Particularly, the mount fits with all new digital aerial camera systems.



*GSM 3000* mount with adapter ring for *LMK-2000* or *LMK-3000* aerial camera systems.

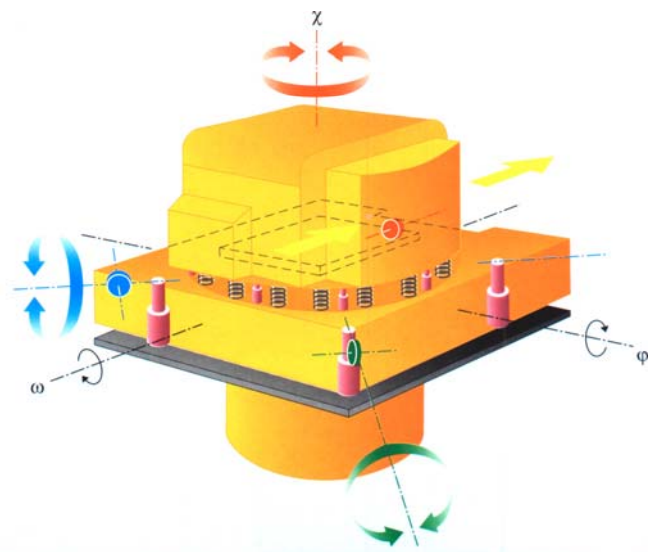
#### Performance features and benefits:

- Dynamic real-time stabilization and full correction of three axis (roll, pitch, yaw), incl. drift control resulting in minimum nadir distances by means of automatic leveling.
- Full image motion compensation together with FMC of the sensor.
- Automatic drift control via IGI's *CCNS4*.
- Integration with the automatic process control of the aerial sensor and *CCNS4* flight management system, offering fully automatic operations.
- Real-time read out of current pitch, roll and yaw angles for determination of the sensor coordinates, e.g. camera projection center, based on the aircraft's GPS antenna (lever arm correction).
- Isolation of aircraft vibrations.
- Compact and robust design.
- Number of photogrammetric models can be reduced.

- Faster flying speeds and lower flying heights are possible.
- Possibility of survey missions in rough flight conditions.
- Greater overlap accuracy and higher accuracy for pin-pointed aerial photography.
- Increased range of flying altitude and large photo scales.
- Optional adaptation to specific sensor weights.

#### Examples of GSM-3000 compatible sensors:

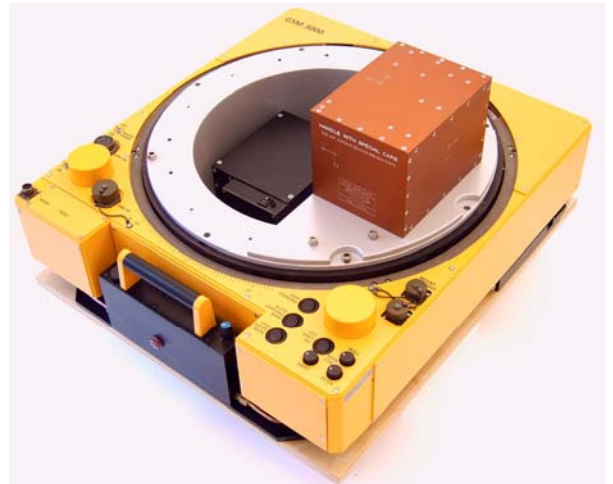
- VEXCEL: *UltraCam-D* digital camera
- IGI: *DigiCAM 14K* based on Kodak *DCS Pro SLR* digital camera
- IGI: *DigiCAM R & RI series* based on Rollei digital camera systems with PhaseOne digital back
- DIMAC Systems: *DiMAC* digital camera
- ZEISS: *LMK, LMK-1000, LMK-2000, and LMK-3000* aerial camera systems
- Z/I Imaging: *DMC* Digital Mapping Camera
- DLR, Berlin: *HRSC* sensor
- HyVista: *HyMap* hyperspectral scanner
- Aquarius Flight: *MEIS* multispectral electro optical imaging sensor
- Additionally, adaptations to other airborne sensors can be designed by IGI, e.g. Optech *ALTM* Laserscanners, etc.



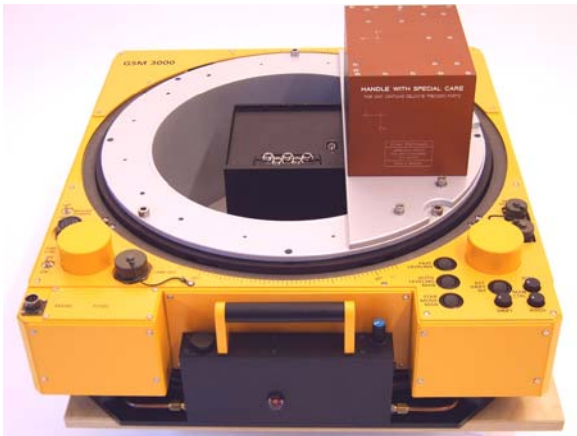
Compensation movements of the *GSM 3000* mount.



GSM 3000 mount with VEXCEL *UltraCam-D* aerial camera system. The *AEROcontrol IMU-IId* is mounted inside the *UltraCam-D* sensor.



GSM 3000 mount with IGI *DigiCAM 14K* airborne sensor system. A configuration with two *DigiCAM 14K* sensors is equally possible. The *AEROcontrol IMU-IId* is mounted on an adapter plate. In configuration with one *DigiCAM 22R* the IMU can alternatively be mounted inside the sensor pod.



GSM 3000 mount with IGI *DigiCAM 22R* airborne sensor system. A configuration with two or four *DigiCAM 22R* sensors is as well possible. The *AEROcontrol IMU-IId* is mounted on an adapter plate. In configuration with one *DigiCAM 22R* the IMU can alternatively be mounted inside the sensor pod beside the *DigiCAM 22R*.



GSM 3000 mount in survey aircraft with complete *DiMAC* aerial camera together with *CCNS4* and *AEROcontrol* system. The *AEROcontrol IMU-IId* is mounted in the *DiMAC* sensor pot.

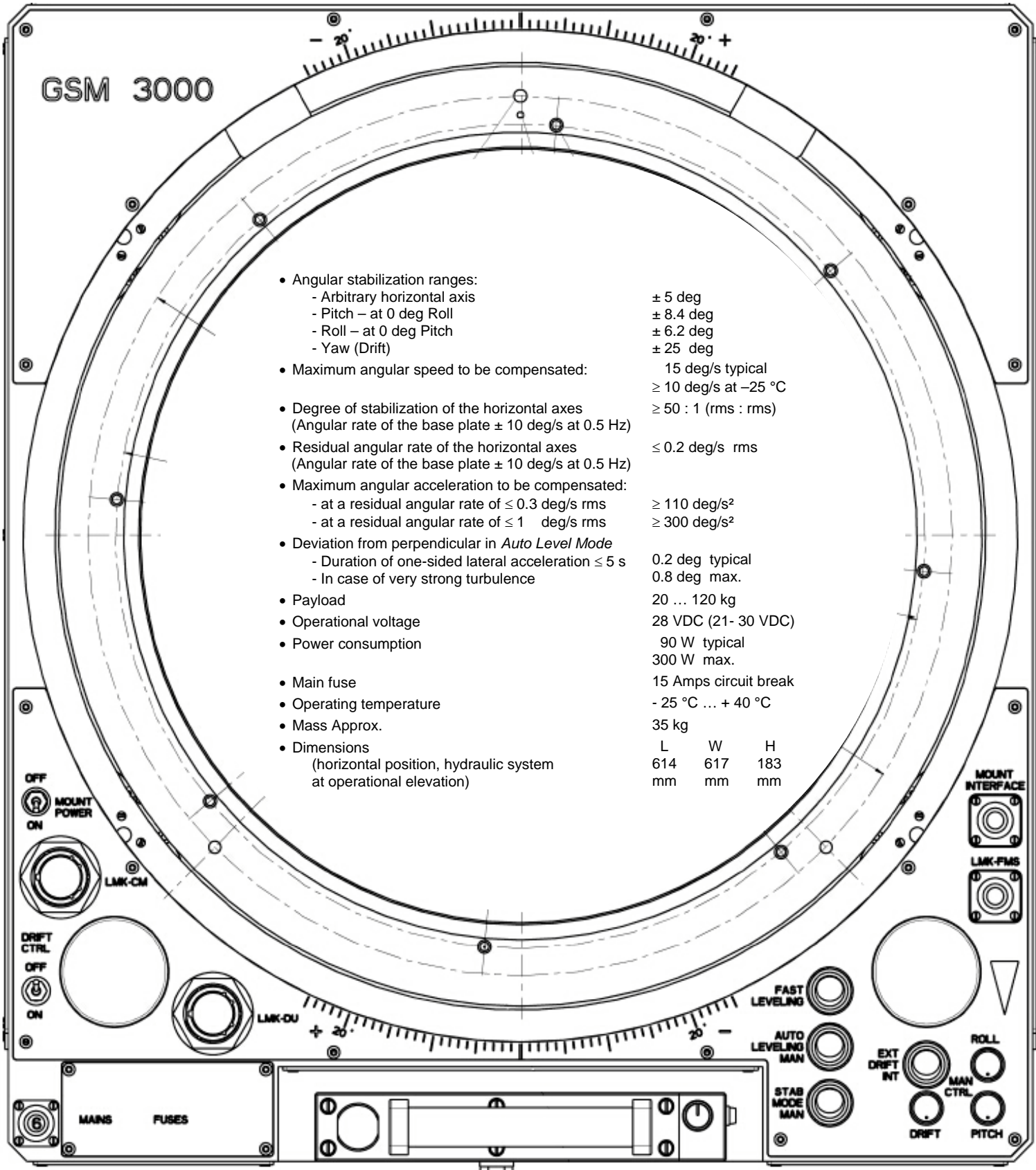


GSM 3000 mount with Zeiss *LMK* aerial camera system. The *AEROcontrol IMU-IId* is mounted on the adapter-ring.



GSM 3000 mount with HyVista *HyMap* hyperspectral scanner.

# GSM 3000 Specifications



Specifications subject to change without notice.