

# Leica PAV100 series

## Gyro-stabilised sensor mount

**NEW**  
**PAV100 HP**



### Common sensor platform

The Leica PAV100 gyro-stabilised sensor mount provides angular motion compensation, perfectly vertical photography and fully automated operation for all Leica Geosystems airborne sensors and a wide range of other sensors. The system allows the user to change quickly between sensors inside a unified aircraft installation, reducing cost and simplifying operation.



### Improved image quality

Precise sensor stabilisation during camera exposure is essential for good image quality. PAV100 keeps the camera in stable nadir view and fully compensates for any aircraft movement. It provides automatic drift control and pitch, roll compensation using precise IMU data and introduces an unique Adaptive Control feature which filters out environmental vibrations.



### Increased efficiency

PAV100 increases the efficiency of every flight by reducing flight lines with perfect drift compensation and lessening the stress on your flight crew. The system features adaptive control to optimise the output for any sensor from 5 to 100 kg. The new PAV100 HP high performance version provides twice the efficiency of the standard model.

# Leica PAV100 series product specifications

## OPERATIONAL

<b>Stabilisation range in roll</b>	
Standard protection cover	- 7° to + 7°
Low height protection cover	- 5° to + 5°
<b>Stabilisation range in pitch</b>	
Standard protection cover	- 8° to + 6°
Low height protection cover	- 5° to + 5°
<b>Stabilisation range in drift</b>	
PAV100	- 30° to + 30°
<b>Sensor weight</b>	
PAV100	5 kg to 75 kg
PAV100 High Performance	5 kg to 60 kg
PAV100 Heavy Load	65 kg to 100 kg
PAV80 RCD	5 kg to 35 kg
<b>Typical residual deviation from vertical*</b>	
< 0.02° RMS	
<b>Typical residual deviation from drift*</b>	
< 0.02° RMS, depends on GNSS/IMU	

## INTERFACES

<b>Command interface</b>	RS232
<b>GNSS/IMU system</b>	RS232 to Leica IPAS20, Novatel SPAN or 3 <sup>rd</sup> party GNSS/IMU system

## ELECTRICAL

<b>Voltage input</b>	22.0 to 30.3 VDC
<b>Power consumption at 28 VDC</b>	Average ** 35 W, peak 250 W
<b>Pre-fuse rating</b>	Min 10 A, max 15 A

## MECHANICAL

<b>Mechanical sensor interfaces</b>	SH81, SH82, SH91, SH92, SH100, SH120, RCD30, RCD30 Oblique, DMC IIe, DMC III, ALS60/70/80 with RCD30, CityMapper, DragonEye, Chiroptera, generic
<b>Sensor hole dimension</b>	410 mm
<b>Dimension</b>	
PAV100	673 mm x 532 mm x 168 mm
PAV100 High Performance	673 mm x 532 mm x 240 mm
<b>Weight excluding sensor adapters</b>	
PAV100	38.0 kg
PAV100 High Performance	44.8 kg

## ENVIRONMENTAL

<b>Operating temperature</b>	- 20 °C to + 55 °C
<b>Storage temperature</b>	- 40 °C to + 85 °C
<b>Pressurised aircraft / non pressurised</b>	ICAO 50,000 ft / ICAO 25,000 ft
<b>Humidity</b>	0 % to 95 % rH according to ISO 7137

## APPLIED STANDARDS

<b>General</b>	ISO 7137, RTCA DO-160-G, EUROCAE-14G
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## CONFORMITY

<b>Conformity to national regulations</b>	CE, FCC Part 15
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\* For photo flight situations, i.e. aircraft angular motion < 10 °/s and with typical aircraft photo flight frequency spectrum  
 \*\* For balanced weight

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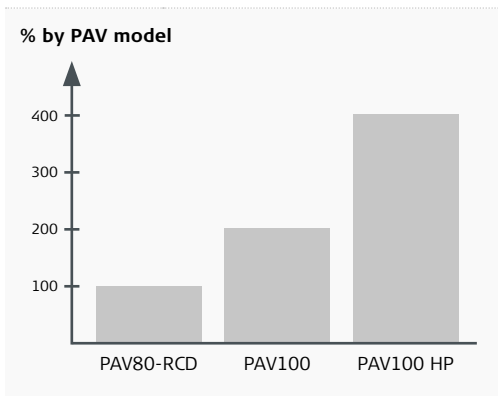
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## STABILISATION PERFORMANCE



## RECOMMENDED PLATFORM

Platform for optimum performance by sensor	
<b>PAV80-RCD</b>	RCD30
<b>PAV100</b>	DMC IIe, DMC III RCD30 Oblique ADS80 SH8x, SH9x DragonEye, Chiroptera
<b>PAV100 Heavy Load</b>	CityMapper ALS60, ALS70, ALS80 with RCD30
<b>PAV100 High Performance</b>	ADS100 SH100, SH120

- when it has to be right

**Leica**  
Geosystems