

Leica PAV100 series

Gyro-stabilised sensor mount

NEW
PAV100-HPH



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. 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 data quality. PAV100 keeps the sensor in stable nadir view and fully compensates for aircraft movement. It provides automatic drift correction with pitch and roll compensation using precise IMU data and introduces a 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 stress for your flight crew. The system features adaptive control to optimise stabilisation for any sensor from 5 to 100 kg. The new PAV100-HPH high-performance heavy load version provides twice the stabilisation accuracy of the prior PAV100 model.

Leica PAV100 series product specifications

OPERATIONAL

Stabilisation range in roll	- 7° to + 7°
Stabilisation range in pitch	- 8° to + 6°
Stabilisation range in drift	- 30° to + 30°
Sensor weight	
PAV100-HP	25 kg to 60 kg
PAV100-HPH	35 kg to 100 kg
Typical residual deviation from vertical*	< 0.02° RMS
Typical residual deviation from drift*	< 0.02° RMS, depends on GNSS/IMU

INTERFACES

Command interface	RS232
GNSS/IMU system	NovAtel SPAN (part of installed sensor system)

ELECTRICAL

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

MECHANICAL

Mechanical sensor interfaces	SH100, SH120, DMC III, CityMapper, CityMapper-2, TerrainMapper, TerrainMapper-2
Sensor hole dimension	410 mm
Dimensions	
PAV100-HP	673 mm x 532 mm x 240 mm
PAV100-HPH	673 mm x 532 mm x 240 mm
Weight excluding sensor adapters	
PAV100-HP	44.8 kg
PAV100-HPH	42.3 kg

ENVIRONMENTAL

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

APPLIED STANDARDS

General	ISO 7137, RTCA DO-160-G, EUROCAE-14G
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CONFORMITY

Conformity to national regulations	CE, FCC Part 15
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Leica PAV100 aircraft installation
Aircraft: Cessna 208
Sensors: Leica ADS100 and Leica SPL100

* For photo flight situations, i.e. aircraft angular motion $\lt; 10^\circ/\text{s}$ and with typical aircraft photo flight frequency spectrum
** For balanced weight

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808522en - 03.20

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