

DSM 400 – Specifications



Specifications Metric*

Angular Stabilization Ranges			
> Pitch (at 0° roll):			$\leq \pm 10.5^\circ$
> Roll (at 0° pitch):			$\leq \pm 10.5^\circ$
> Yaw (drift):			$\leq \pm 25.0^\circ$
Residual angular rate of the horizontal axes¹		< 0.5°/s rms	
Deviation from perpendicular¹:			
Without IMU support/ with “Performance Boost”		$\leq 0.3^\circ$ rms	
With IMU support²		$\leq 0.08^\circ$ rms	
Interface		RS 232	
Operational voltage		28 VDC (24 ... 30 VDC)	
Power consumption at 28 VDC		30 W rms / peak 120 W	
Recommended pre-fuse		15 Amp fuse	
Operating temperature		-25 °C ... +60 °C	
Storage temperature		-40 °C ... +85 °C	
Useable diameter		270 mm	
Payload		0 ... 35 kg	
Mass		14 kg	
Dimensions DSM 400 (regular leveling positions)		Length	Width
		460	430
		mm	mm
			Height
			165³
			mm
Applied standards		RTCA DO-160-G, EUROCAE-14G ISO 7137, 2006/42/EC Machinery	

*Preliminary data, subject to change

1 Vehicle angular motion < 10°/ s and with typical data acquisition profile frequency spectrum

2 Deviation from perpendicular depends on accuracy of used IMU

3 Minimum: 131 mm/ Maximum: 199 mm

Specifications Imperial*

Angular Stabilization Ranges			
> Pitch (at 0° roll):			≤± 10.5°
> Roll (at 0° pitch):			≤± 10.5°
> Yaw (drift):			≤± 25.0°
Residual angular rate of the horizontal axes¹		< 0.5°/s rms	
Deviation from perpendicular¹:			
Without IMU support/ with “Performance Boost”		≤ 0.3° rms	
With IMU support²		≤ 0.08° rms	
Interface		RS 232	
Operational voltage		28 VDC (24 ... 30 VDC)	
Power consumption at 28 VDC		30 W rms / peak 120 W	
Recommended pre-fuse		15 Amp fuse	
Operating temperature		-13 °F ... +140 °F	
Storage temperature		-40 °F ... +185 °F	
Useable diameter		10.6 in	
Payload		0.0 ... 77.2 lb.	
Mass		30.9 lb.	
Dimensions DSM 400 (regular leveling positions)		Length	Width
		460	430
		mm	mm
			Height
			165 ³
			mm
Applied standards		RTCA DO-160-G, EUROCAE-14G ISO 7137, 2006/42/EC Machinery	

*Preliminary data, subject to change

1 Vehicle angular motion < 10°/ s and with typical data acquisition profile frequency spectrum

2 Deviation from perpendicular depends on accuracy of used IMU

3 Minimum: 5.2 in/ Maximum: 7.8 in