

4.5.2. Specifications

4.5.2.1. Mechanical drawings

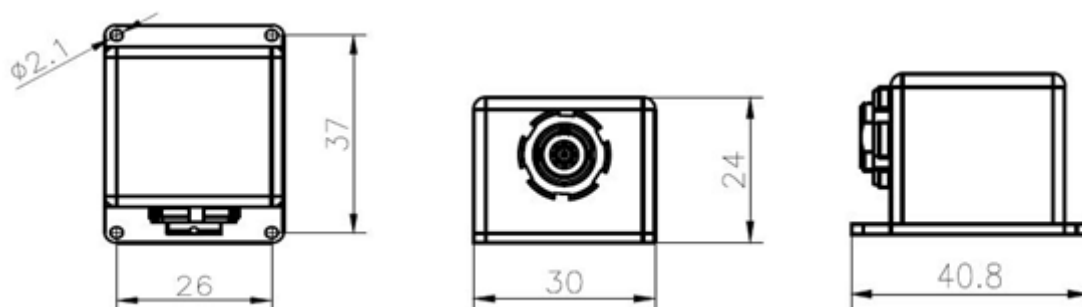


Image 25: Mechanical drawing for DS-GYRO1

4.5.2.2. Navigation specifications

Parameter	Value
Roll & Pitch accuracy (static)	0.2 °
Heading accuracy (static)	0.5 °
Roll & Pitch accuracy (dynamic)	0.6 °
Heading accuracy (dynamic)	1.0 °
Orientation range	Unlimited
Hot start time	500 ms
Internal filter rate	1000 Hz
Output data rate	Up to 500 Hz

4.5.2.3. Sensor specifications

Parameter	Accelerometers	Gyroscopes	Magnetometers
Range (dynamic)	2 g 4 g 16 g	250 °/s 500 °/s 2000 °/s	2 G 4 G 8 G
Noise density	400 µg/√Hz	0.005 °/s/√Hz	210 µg/√Hz
Non-linearity	< 0.05 %	0.005 °/s/√Hz	< 0.05 %
Bias stability	5 mg	18 °/hr	-
Scale factor stability	< 0.05 %	< 0.05 %	< 0.05 %

The DS-IMU-2 needs additional Power-supply.

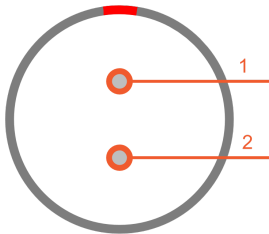
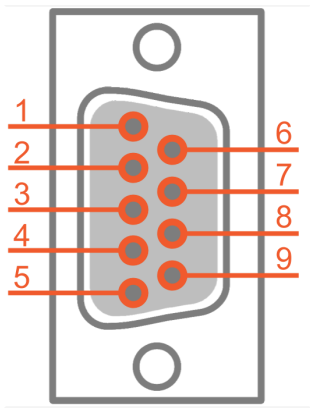


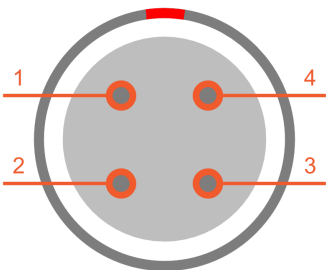
Image 10: Power supply connector (2-pin LEMO male)
EXJ.1B.302.HLD

Pin	Description
1	+9 to +36 VDC power supply
2	GND power supply

4.7.2. DS-IMU1 cable and DS-GYRO1 cable



PIN	Function
1	+5V (USB)
2	TX AUX
3	RX AUX
4	PPS FLT
5	GND
6	PPS RADIO
7	Not Connected
8	GPIO1 FLT
9	Not Connected



Sync connector: pin-out (4-pin LEMO female)

Pin	Name	Description
1	CLK	Clock
2	Trigg	Trigger
3	GPS-PPS	GPS - PPS
4	DGND	Digital Ground

Interface connector: EEG.00.304.CLL
Mating connector: FGG.00.304.CLAD27Z