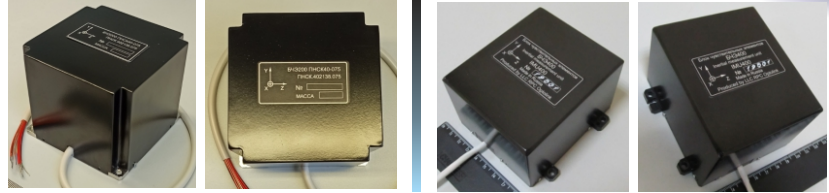


Inertial Measurement Units (IMU)

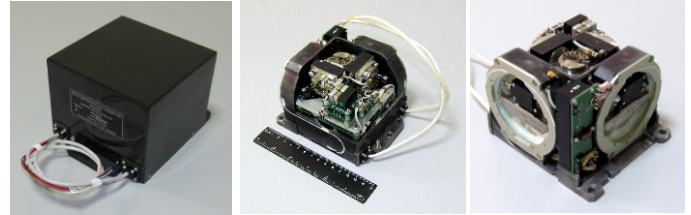
IMU200 & IMU400 (TRS200, TRS400)

IMU200 and IMU400 are state-of-art and *miniature* FOG IMU with low-noise *MEMS* accelerometers. TRS option without accelerometers is available.



IMU500

IMU500 is based on Optolink's TRS500 gyro and three pendulum accelerometers



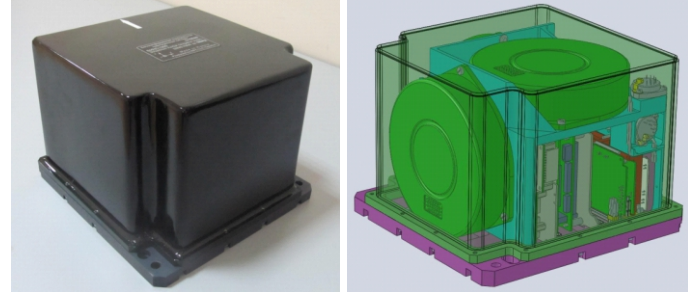
IMU501

IMU501 is based on three Optolink's SRS501 gyros and three pendulum accelerometers



High-precision IMU1000

IMU1000 is based on three Optolink's SRS1000 gyros and three pendulum accelerometers



Performance	IMU200	IMU400	IMU500	IMU501	IMU1000
Gyro					
Angular rate range, °/s	±950 (±495)	±540 (±495)	±400	±250 (**±1000)	±550
Bias drift at constant temperature (1σ, 100s-averaging), °/h	0.2	0.1	0.1	0.03	0.005
Bias drift (1σ, 100s-averaging) in operational temperature range, °/h	0.5 (*0.2)	0.3 (*0.2)	0.3 (*0.1)	0.1 (*0.05)	0.05 (*0.02)
Angle random walk, °/√h	0.02	0.01	0.007	0.005	0.0007
Scale factor error, ppm	300 (*150)	200 (*150)	200 (*100)	200 (*100)	100 (*50)
Bandwidth, Hz	> 1000 (user defined)				
Accelerometers					
Range, g	±10	±10	±10 (**±40)	±10 (**±40)	±10 (**±40)
Bias drift at constant temperature, mg	1.0	1.0	0.5	0.1	0.05
Bias drift in operational temperature range, mg	2.0 (*0.3)	2.0 (*0.3)	1.0 (*0.15)	0.5 (*0.1)	0.1
Scale factor error, ppm	500 (*150)	500 (*150)	300 (*100)	300 (*100)	100
Noise power density, mg/√Hz	0.08	0.08	0.02	0.02	0.015
Bandwidth, Hz	> 300 (user defined)				
Physical Characteristics					
Misalignment, °	0.08 (*0.015)				
Output sample rate, Hz	up to 2000				
Power supply, V / Consumption, W	5, 27±5 / 7	5 / 7	5, 27±5 / 10	27±5 / 20	27±5 / 20
Digital output interface	RS-485	RS-422	RS-422 / 485	RS-422	RS-422
Operational temperature range, °C	-40°C ~ +60°C				
Dimensions, mm	75×75×60	80×95×62.5	110×110×90	155×140×110	171×224×252
Weight, kg	0.5	0.7	1.4	3	8.4

* - improved calibration spec., ** - options of extended dynamic range, customizable (for export ±495°/s is a limit)

From optical components to navigation systems

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