

Strapdown Inertial Navigation System

Bemol-M

With financial support from the Ministry of Education and Science of the Russian Federation
(project No. 02.G25.31.0044)



STABILIZATION PARAMETERS

Generation errors (P=0.997), max

Roll/pitch angles	1 arc min
Angular rates of roll/ pitch and heading change	0.2 °/s

NAVIGATION PARAMETERS

(in autonomous mode with log correction)

Position coordinates (latitude, longitude) over 6 hours	5 km
--	------

Heading

at $\varphi \leq 60^\circ$	6 arc. min
at $\varphi > 60^\circ$	3 sec(φ) arc. min

The output data are generated in digital form via interfaces
RS-232, CAN with frequency up to 100 Hz

APPLICATION

BEMOL-M is used onboard ships and vessels to generate navigation and dynamic parameters providing navigation and stabilization of the ship equipment

DISTINCTIVE FEATURES

- Accuracy of generated data
- Short readiness time
- Low power consumption
- No routine maintenance required

GENERATED PARAMETERS

- Geographical heading
- Roll angles measured in the transverse sectional plane
- Pitch angles measured in the vertical plane
- Latitude and longitude
- Roll/pitch rates

PERFORMANCE CHARACTERISTICS

DC power supply 27.00±1.35 V
Power consumed from 27 V supply line does not exceed 50 W
Overall dimensions $\varnothing 380 \times 336$ mm
Weight 30 kg
Mean time between failures – 30000 hours
Readiness time – not more than 60 min



Concern CSRI Elektropribor, JSC
State Research Center of the Russian Federation

30, Malaya Posadskaya St., Saint Petersburg, 197046, Russia
tel. (812) 499 81 81, 499 83 01. fax (812) 232 33 76
<http://www.elektropribor.spb.ru>, e-mail: marketing@eprib.ru
© CONCERN CSRI ELEKTROPRIBOR, JSC, 2016