

Pulse-20

Inertial Measurement Unit

MADE IN FRANCE



INDUSTRIAL GRADE
7°/h | 14μg



Best in class MEMS IMU for applications requiring highest accuracy in the smallest package



No Export Restriction



2-year Warranty



AMMUNITIONS



ROBOTIC APPLICATIONS

Pulse-20 provides precise measurements of angular rate and acceleration in all three axes. Its lightweight and compact design makes it ideal for integration into unmanned systems, robotics, handheld devices, and other embedded platforms where space and efficiency are critical.



Sub miniature package



Temperature calibrated



Ultra light
10g



RS422
and CAN



Embedded
magnetometer



Resilient to
vibrations

1-sigma errors over full temperature range [-40 to 85 °C]

GYROSCOPES & ACCELEROMETERS

Parameter	Gyroscope	Accelerometer
Measurement range	± 1000 °/s	± 40 g
Scale factor error	500 ppm	1000 ppm
Non-Linearity	50 ppm of FS	1500 ppm of FS
Bias repeatability	750 °/hr	1,500 µg
In-run bias instability	7°/h	14 µg
Random Walk	0.18°/√h	0.02 m/s/√h
Misalignment	0.34 mrad	0.34 mrad
Orthogonality	0.07 mrad	0.07 mrad
Vibration Rectification Coefficient	1°/h/g ²	0.05 µg/g ²
Acceleration sensitivity	20°/h/g	-
Bandwidth	133 Hz	390 Hz

MECHANICAL & ENVIRONMENTAL

Size	26.8 x 18.8 x 9.5 mm
Weight	10 g
Operating Temperature range	- 40°C to + 85°C
Non operating Temperature range	- 40°C to + 85°C
Ingress Protection	IP4x
MTBF	> 200,000 hours

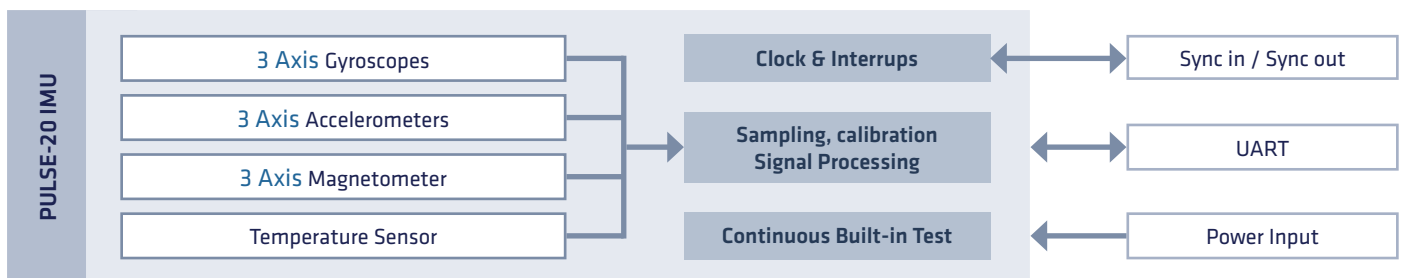
ELECTRICAL

Nominal Input Voltage	5 - 15 V
Power consumption	400 mW

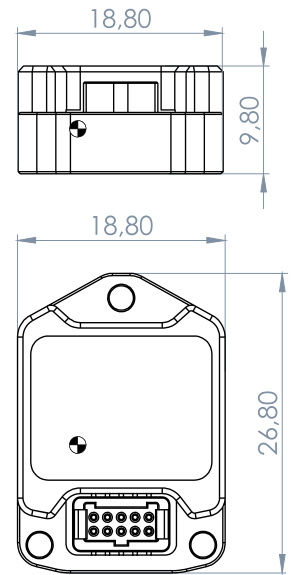
COMMUNICATION & INTERFACES

Connector	Board to Board Board to Wire
Digital interfaces	Serial : 1xRS422 CAN 2.0A/B
Sync in/out	2x Sync in/out LvTTL levels (configurable)
Output baud rate	Serial: Up to 2Mbps CAN: up to 1Mbps
Output data rate	Up to 2kHz

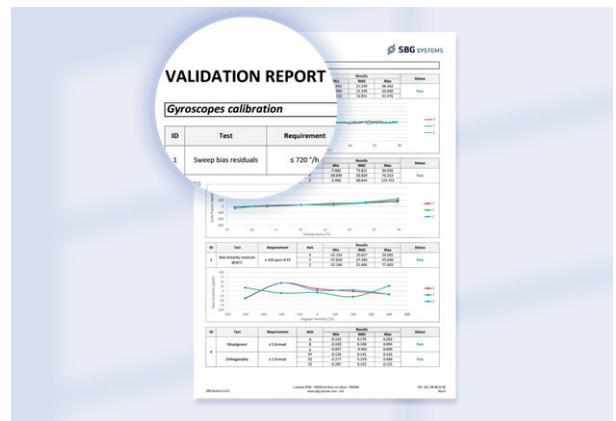
FUNCTIONAL BLOCK DIAGRAM



PULSE-20 DRAWINGS



TEMPERATURE CALIBRATION



All Pulse-20 units are individually calibrated across the full temperature range, with a validation report detailing key measured parameters.

Free Technical Support

Unlimited Firmware Updates

2-year Warranty

