

Pulse-80

Inertial Measurement Unit

MADE IN FRANCE



TACTICAL GRADE
0.05°/h | 6µg



Best in class MEMS IMU for applications requiring highest accuracy



No Export Restriction



2-year Warranty



NAVIGATION



POINTING & STABILIZATION

The Pulse-80 is a premium tactical-grade MEMS IMU, engineered for applications demanding compact size and minimal weight without any compromise on performance.



Low run-to-run bias



Low noise



High data rate (2kHz)



RS422 communication



OEM variant for SWAP constrained integrations



Continuous built-in tests

1-sigma after 1 year accelerated aging over full temperature range [-40 to 71 °C]

GYROSCOPES & ACCELEROMETERS

Parameter	Gyroscope	Accelerometer
Measurement range	400°/s	± 15 g ± 40 g variant available*
One-year bias repeatability	7°/hr	1,000 µg
Bias instability	0.05 °/h	6 µg
Scale factor error	500 ppm	300 ppm
Random Walk	0.012 °/√h	0.02 m/s/√h
Bandwidth	100 Hz	450 Hz

Continuous Built-in-tests (CBIT) on accelerometers and Gyroscopes

* 40 g variant is dual use.

MECHANICAL & ENVIRONMENTAL

Parameter	Boxed version	OEM version
Size	56 x 56 x 50.5mm	52 x 52 x 36 mm
Weight	250 g	150 g
Operating Temperature range	-40 to 71°C	-40 to 71°C
Non operating Temperature range	-40 to 71°C	-40 to 71°C
Ingress Protection	IP4x	None (OEM)

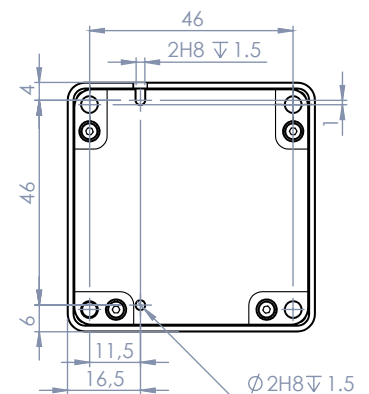
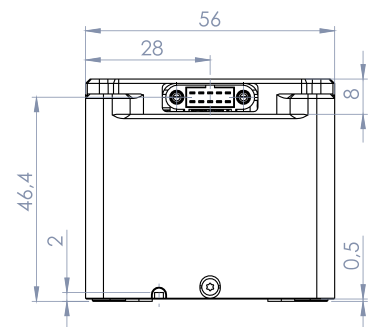
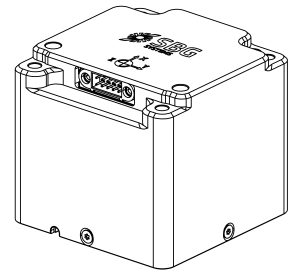
ELECTRICAL

Parameter	Boxed version	OEM version
Nominal Input Voltage	5 - 36 V	5 - 12 V
Power consumption	~ 2 W	~ 1.5 W

COMMUNICATION & INTERFACES

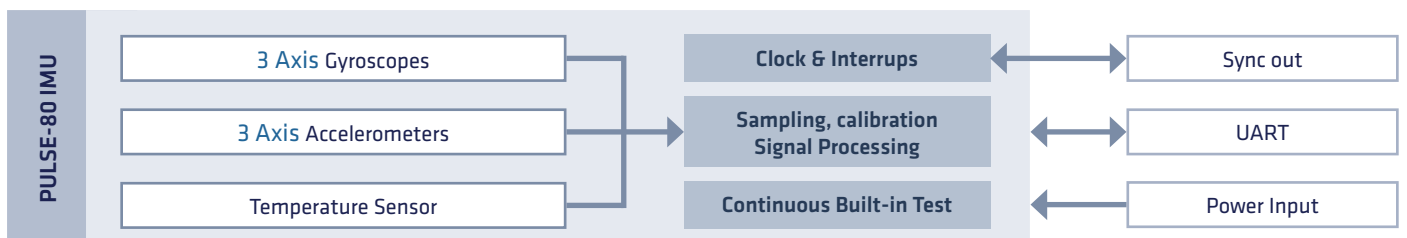
Parameter	Boxed version	OEM version
Connector	Board to Board Board to Wire	Board to Board
Digital interfaces	Serial : RS422/RS485 Sync out : RS422	UART : LVTTTL Sync in : LVTTTL
Output baud rate	Up to 4 Mbps	Up to 4Mbps
Output data rate	Up to 2 kHz Configurable with API	Up to 2 kHz Configurable with API

PULSE-80 BOXED DRAWINGS



Drawings of the OEM version available upon request

FUNCTIONAL BLOCK DIAGRAM



Free Technical Support

Unlimited Firmware Updates

2-year Warranty