



BizGyro®

Bizclap MRU Solutions



BizGyro GNSS



BizGyro

Bizclap MRU Solutions – BizGyro

- **10 x faster** – Real-time performance and excellent filtering powered by AI extension and Neural Network Acceleration
- **Extremely low latency measurements and estimation**
- **3 x Smaller** – Designed to achieve low weight
- **3 Times more Cost effective solution**

The Bizclap MRU device overcomes computational challenges in real-time applications through an AI powered MCU, leveraging recursive algorithms for state estimation based on matrix inversion and adaptive filters.

BizGyro delivers exceptionally high performance with low energy consumption via AI-supported processors and predictive models. It seamlessly integrates with diverse technologies such as FOG, RLG and MEMS.

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0.01° Roll, Pitch, Yaw	Internal Filter Speed 1000Hz	Heave accuracy 5cm or 5%	Weighting max 500gr	Small Size: 7.5x7.5x6.5cm	Interface 2XRS232/1XRS422 fully customized for GPS and output string	Ethernet DHCP/UPD

Measurements Accuracy (All Errors are RMSE unless mentioned)

BizGyro

	RMSE	P2P ERROR	RANGE
Roll	0.01°	0.1°	± 45°
Pitch	0.01°	0.1°	± 45°
Yaw	0.05°	0.1°	0–360°
Heave Motion	—	5% or 5 cm	—



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	RMSE	P2P ERROR	RANGE
Roll	0.05°	0.1°	± 45°
Pitch	0.05°	0.1°	± 45°
Heading	0.5°	1°	0–360°



BizGyro – GNSS +

	RMSE	P2P ERROR	RANGE
Roll	0.05°	0.1°	± 90°
Pitch	0.05°	0.1°	± 90°
Yaw	0.05°	0.1°	0–360°
Heave Motion	—	5% or 5 cm	—
Heading	0.1°	1°	0–360°



Communication

PARAMETER	BizGyro / BizGyro – GNSS / BizGyro GNSS +
Serial Interface	Standard RS232 and RS422
Serial Speed	4800 to 0.5M baud
Ethernet	DHCP, UDP, TCP
Ethernet Speed	Supports one 10/100 Base-T Port.
Serial Output Protocol	Up to 15 parameters, user customized (NMEA)
Peripheral Interface	1 × Auxiliary RS232 (for GPS in BizGyro)

Power

PARAMETER	BizGyro	BizGyro - GNSS	BizGyro – GNSS +
Operating Voltage	6.5 to 36 V (12 V recommended)	6.5 to 36 V (12 V recommended)	6.5 to 36 V (12 V recommended)
Power consumption	—	< 1 W	< 1 W
Operating Temperature	–15 °C to 70 °C	–15 °C to 70 °C	–15 °C to 70 °C
Boot time	< 15 sec	< 15 sec	< 15 sec
Shock Limit	100 g	100 g	100 g
Environmental protection	IP68	IP66	IP66

Physical Characteristics

PARAMETER	BizGyro	BizGyro - GNSS	BizGyro – GNSS +
Weight	500 gr	250 gr	500 gr
Enclosure	Anodized Aluminium	Anodized Aluminium	Anodized Aluminium

BizGyro internal filter runs at minimum speed of 1000Hz and data can also be output at this rate over high speed Serial Port or over Ethernet. Its cost-effectiveness and great immunity to noise and vibrations makes it the best choice for unstable platforms control.

