# UNIAXIAL GYROSCOPES DYN-G-6000 SERIES

# **DynaLabs**

Dynalabs MEMS based gyroscopes are designed by micro-mechanical silicon structures.





#### Features

- Proven and robust silicon MEMS gyro
- Analog voltage output
- High shock and vibration rejection
- Class-leading bias and noise over temperature
- Low noise high resolution

Gyroscopes are insensitive to external impacts and vibrations. For harsh environmental conditions Dynalabs gyroscopes are preferred. 6000 Series Uniaxial Gyroscopes feature a lightweight, reliable aluminum housing and they have an integrated cable with configurable length. They offer angular velocity ranges of  $\pm 75$ ,  $\pm 150$ ,  $\pm 300$  and  $\pm 900^{\circ}$ /s, ensuring versatile performance. Additionally, their IP68 protection class allows them to operate reliably in challenging environments.



#### **Applications**

- Automotive in-car navigation
- GPS vehicle and personal navigation aiding
- Vehicle yaw, pitch and roll rate sensing
- Antenna stabilization
- Motion control

		DYN-G-6075	DYN-G-6150	DYN-G-6300	DYN-G-6900
Frequency range	(°/s)	± 75	± 150	± 300	± 900
Non-linearity (full scale)	(Hz)	0-150	0-150	0-150	0-150
Noise (in band)	(%)	0.06	0.06	0.06	0.06
Scale factor (nominal)	(°/s/√Hz)	0.0075	0.0075	0.0075	0.0075
Scale factor var. over temp.	(V/°/s)	0.012	0.006	0.003	0.001
Bias variation with temp.	(%)	0.5	0.5	0.5	0.5
Scale factor var. over temp.	(°/s)	± 1	± 2	± 3	± 4
Shock survivability	(g)	10,000	10,000	10,000	10,000



#### DYNALABS MUHENDISLIK LTD STI

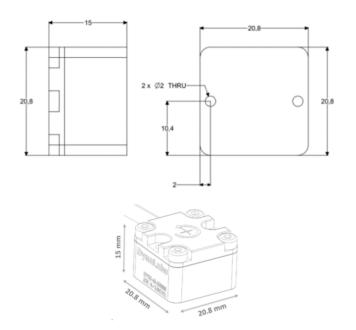
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# DynaLabs UNIAXIAL GYROSCOPES

## **DYN-G-6000 SERIES**



### **OPTIONS:**

- Custom Cable Length (5m standard cable)
- Custom Housing Material
- Custom Connector

## CABLE CODE/PIN CONFIGURATION:

- Red
- : V+

Supply voltage 6V to 35V

- Black : Ground Power GND
- RX : Yellow : Gyro Signal Single-ended analog output voltage signal

Cable: 4x #28 AWG Conductors PFA Insulated, Braided Shield, TPE Jacket

Protection Level	Operating Voltage	Operating Temperature	Weight (without cable)	Housing Material
IP 68	6V - 35V	-40 °C to +100 °C	12 g (aluminum) 25 g (steel)	Aluminum or Steel



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