



Physical Logic



# MAXL-OL-2000

## Open Loop Products

Advanced MEMS sensors for multiple applications;  
Taking accuracy to the next level

# MAXL-OL-2000 Key Parameters

Parameter	MAXL-OL-2002*	MAXL-OL-2005*	MAXL-OL-2010*	MAXL-OL-2015*	MAXL-OL-2020*	MAXL-OL-2040*	MAXL-OL-2070
Sensing Range g	±2	±5	±10	±15	±20	±40	±70
<b>Bias</b>							
Long Term repeatability mg (typ.)	0.5	0.8	1.5	2	2	4	7
Short Term Stability (1h) µg (typ., [max])	40 [100]	60 [150]	120 [200]	120 [250]	120 [250]	120 [350]	180 [900]
Temperature sensitivity µg/°C (typ., [max])	110 [210]	165 [330]	165 [360]	225 [450]	225 [450]	450 [900]	800 [1600]
Temperature residual µg (typ., [max])	375 [1250]	450 [1500]	500 [1500]	600 [1500]	600 [1500]	900 [2000]	1600 [2400]
Turn On to Turn On repeatability µg (typ., [max])	30 [90]	50 [240]	75 [450]	75 [500]	75 [500]	120 [600]	240 [800]
<b>Scale Factor</b>							
Long Term repeatability ppm (typ.)	600	600	600	600	600	600	600
Short Term Stability (1h) ppm (typ., [max])	60 [200]	60 [200]	60 [200]	60 [200]	60 [200]	60 [200]	90 [300]
Temperature sensitivity ppm/°C (typ., [max])	65 [160]	65 [160]	65 [160]	65 [160]	65 [160]	65 [160]	65 [160]
Temperature residual ppm (typ., [max])	120 [600]	120 [600]	120 [600]	120 [600]	120 [600]	120 [600]	120 [600]
Linearity Error % (typ.)	0.25	0.25	0.25	0.25	0.25	0.25	0.25
<b>Other</b>							
Bandwidth (-3dB) Hz	200 (500)**	250 (800)**	250 (1000)**	250 (1200)**	250 (1200)**	300 (2000)**	300 (2400)**
Noise Density (measured @ 0g) µg/√Hz (typ., [max])	1.1 [1.2]	1.3 [1.6]	1.5 [2.2]	1.6 [4]	2.2 [4]	2.5 [5]	4 [5]
VRE (20-2000Hz), sensing axis µg/g <sup>2</sup> <sub>RMS</sub> (typ.)	250	150	80	60	30	25	15

➤ Parameters are specified for operation temperature range -40°C to +85°C

\* Also available as export control free products (Operating temperature range tested @ -10°C to +60°C)

\*\*()Special order required for adjusted Bandwidth. No degradation in other parameters.

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