## CERTIFICATE OF COMPLIANCE



Los Gatos Research 67 East Evelyn Ave., Suite 3 Mountain View, CA 94040 USA

Declares that the following instrument:

Product Name:	Greenhouse Gas Analyzer (GGA/FGGA)
Model Number:	911-0010-0002
Serial Number:	13-0159

Has been extensively tested and shown to meet all of the specifications listed in this document and is warranted for 1 year if used according to the instructions provided in the User's Manual.

## **Greenhouse Gas Analyzer Specifications:**

Total Uncertainty (without calibration):	<1% of reading (Benchtop / Rackmount)
* *	<0.25% of reading (Enhanced Performance Package)
Maximum Drift (Enhanced Performance Model)	CH <sub>4</sub> : 0.8 ppb
(15 min. average at STP in 24 hrs.)	CO <sub>2</sub> : 120 ppb
(10 11-11)	H <sub>2</sub> O: 100 ppm or 1% of reading (whichever is greater)
	CH <sub>4</sub> : 0.1 - 25 ppm
Measurement Range (meets all specs):	CO <sub>2</sub> : 200 – 4000 ppm
	H <sub>2</sub> O: 7000 – 70000 ppm
	CH <sub>4</sub> : 0 - 1000 ppm
Operational Range (external cal. may be required):	CO <sub>2</sub> : 0 - 20000 ppm
	$H_2O: 0 - 70000 \text{ ppm}$
0.8°	CH <sub>4</sub> : 1 ppb (5 sec), 0.3 ppb (100 sec)
Repeatability / Precision (1-sigma):	CO <sub>2</sub> : 150 ppb (5 sec), 50 ppb (100 sec)
	H <sub>2</sub> O: 100 ppm (5 sec), 30 ppm (100 sec)
	10 s (with standard internal pump),
Response Time (flow time through meas. cell):	<0.1 s (with optional external dry scroll vacuum pump)
Outputs:	Digital (RS-232), Analog, Ethernet, USB
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Data Storage:	Internal Hard Disk Drive (optional Solid State Drive)
Carralla Tarrana ratura	0 - 50 °C
Sample Temperature:	(Ambient Humidity < 98% RH non-condensing)
On anti-	5 - 45 °C (Benchtop / Rackmount Package)
Operating Temperature:	0 - 45 °C (Enhanced Performance Package)
Inlet / Outlet Fittings:	<sup>1</sup> / <sub>4</sub> ", <sup>3</sup> / <sub>8</sub> ", and <sup>1</sup> / <sub>2</sub> " Swagelok <sup>®</sup>
	115/230 VAC; 50/60 Hz,
Power Requirements:	100 W (Standard Package), 300 W (Enhanced Perf.)
	10" H x 38" W x 14" D (Benchtop)
Dimensions:	8.75" H x 19" W x 24" D (Rackmount)
Difficultions,	14" H x 19" W x 24" D (Enhanced Performance)
*	65 lbs (Rackmount), 80 lbs (Benchtop)
Weight:	
	95 lbs (Enhanced Performace)

Certified by:	Suson Jostson	
	Susan Fortson, Testing and Calibration Manager	
	8/20/13	
	Date	