## D-ULPSM Rev 0.3 LMP91000 Settings

Vref = 2.048V

Part Number	GAS	TIA_GAIN	RLOAD	REF_SOURCE	INT_Z	BIAS_SIGN	BIAS	FET_SHORT	OP_MODE
110-102	СО	Ext	10	Ext	20% (0.41V)	+	1% (20.5 mV)	0	3-lead
110-202	EtOH	120k	10	Ext	20% (0.41V)	+	4% (81.9 mV)	0	3-lead
110-303	H2S <sup>1</sup>	Ext	10	Ext	20% (0.41V)	+	0% (0 mV)	0	3-lead
110-601	SO2 <sup>1</sup>	Ext	10	Ext	50% (1.024V)	+	10% (205 mV)	0	3-lead
110-501	NO2 <sup>2</sup>	Ext	10	Ext	50% (1.024V)	-	10% (205 mV)	0	3-lead
110-401	O3 <sup>2</sup>	Ext	10	Ext	50% (1.024V)	-	1% (20.5 mV)	0	3-lead
110-801	IAQ <sup>3</sup>	Ext	10	Ext	20% (0.41V)	+	8% (163.8 mV)	0	3-lead
110-901	RESP <sup>4</sup>	Ext	10	Ext	50% (1.024V)	-	10% (205 mV)	0	3-lead

- SO<sub>2</sub> is cross sensitive with H<sub>2</sub>S and NO
  - H<sub>2</sub>S is cross sensitive with SO<sub>2</sub> but selective among NO
- $^{2}$  NO<sub>2</sub> is cross sensitive with O<sub>3</sub>
  - O<sub>3</sub> is cross sensitive with NO<sub>2</sub>
- <sup>3</sup> IAQ is sensitive to most oxidizing gases but has strong response to H<sub>2</sub>S and CO
- <sup>4</sup> RESP is sensitive to most reducing gases but has strong response to NO<sub>2</sub>, O<sub>3</sub>, and Cl<sub>2</sub>
- CO, ALC, H2S, SO2, and IAQ will have increasing signals with increasing gas concentration.
- O3, NO2, and RESP will have decreasing signals with increasing gas concentration.