



Alphasense A4 (2-way) Air Quality Sensor Module  
Calibration Certificate

Customer	<u>DIGITAL KINEMATICS</u>
Order No	
Zero Cal Date	<u>11-10-16</u>
AFE Serial No	<u>12-000029</u>
Test PSU voltage	
AFE Type	<input checked="" type="checkbox"/> 810-0021-xx (2xA4)

Circuit Type			SN1	SN2
	<input type="checkbox"/>	-00	NO <sub>2</sub> /O <sub>3</sub>	NO <sub>2</sub> /O <sub>3</sub>
	<input type="checkbox"/>	-01	NO <sub>2</sub> /O <sub>3</sub>	NO
	<input checked="" type="checkbox"/>	-02	NO <sub>2</sub> /O <sub>3</sub>	CO/SO <sub>2</sub> /H <sub>2</sub> S
	<input type="checkbox"/>	-03	NO	CO/SO <sub>2</sub> /H <sub>2</sub> S
	<input type="checkbox"/>	-04	CO/SO <sub>2</sub> /H <sub>2</sub> S	CO/SO <sub>2</sub> /H <sub>2</sub> S

	SN1	SN2
Sensor Type	<u>NO2 A4SF</u>	<u>CO A4</u>
Serial Number	<u>212060332</u>	<u>132950241</u>
WE Electronic Zero (mV)	<u>299</u>	<u>282</u>
WE Sensor Zero (mV)*	<u>-1</u>	<u>43</u>
TOTAL WE Zero (mV)	<u>298</u>	<u>325</u>
AE Electronic Zero (mV)	<u>297</u>	<u>287</u>
AE Sensor Zero (mV)*		<u>7</u>
TOTAL AE Zero (mV)	<u>296</u>	<u>294</u>
Sensitivity (nA/ppb)*	<u>-0.251</u>	<u>0.267</u>
Sensitivity NO <sub>2</sub> (nA/ppb)*	<u>-0.251</u>	<u>—</u>
PCB gain (mV/nA)	<u>-0.73</u>	<u>0.80</u>
Sensitivity (mV/ppb)	<u>-0.183</u>	<u>0.213</u>
Sensitivity NO <sub>2</sub> (mV/ppb)	<u>-0.183</u>	<u>—</u>

\* at 101kPa, 23 (±2)°C, 40 (±15) %RH



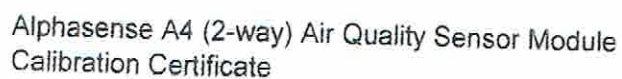
Alphasense A4 (2-way) Air Quality Sensor Module  
Calibration Certificate

Customer	<u>DIGITAL KINEMATICS</u>
Order No	_____
Zero Cal Date	<u>11-10-16</u>
AFE Serial No	<u>12-000028</u>
Test PSU voltage	_____
AFE Type	<input checked="" type="checkbox"/> 810-0021-xx (2xA4)

Circuit Type			SN1	SN2
	<input type="checkbox"/>	-00	NO <sub>2</sub> /O <sub>3</sub>	NO <sub>2</sub> /O <sub>3</sub>
	<input type="checkbox"/>	-01	NO <sub>2</sub> /O <sub>3</sub>	NO
	<input checked="" type="checkbox"/>	-02	NO <sub>2</sub> /O <sub>3</sub>	CO/SO <sub>2</sub> /H <sub>2</sub> S
	<input type="checkbox"/>	-03	NO	CO/SO <sub>2</sub> /H <sub>2</sub> S
	<input type="checkbox"/>	-04	CO/SO <sub>2</sub> /H <sub>2</sub> S	CO/SO <sub>2</sub> /H <sub>2</sub> S

	SN1	SN2
Sensor Type	<u>NO2 A43F</u>	<u>CO A4</u>
Serial Number	<u>212060338</u>	<u>132950239</u>
WE Electronic Zero (mV)	<u>297</u>	<u>268</u>
WE Sensor Zero (mV)*	<u>0</u>	<u>43</u>
TOTAL WE Zero (mV)	<u>297</u>	<u>311</u>
AE Electronic Zero (mV)	<u>309</u>	<u>272</u>
AE Sensor Zero (mV)*	<u>0</u>	<u>7</u>
TOTAL AE Zero (mV)	<u>309</u>	<u>279</u>
Sensitivity (nA/ppb)*	<u>-0.257</u>	<u>0.283</u>
Sensitivity NO <sub>2</sub> (nA/ppb)*	<u>-0.257</u>	<u>—</u>
PCB gain (mV/nA)	<u>-0.73</u>	<u>0.80</u>
Sensitivity (mV/ppb)	<u>0.187</u>	<u>0.226</u>
Sensitivity NO <sub>2</sub> (mV/ppb)	<u>0.187</u>	<u>—</u>

\* at 101kPa, 23 (±2)°C, 40 (±15) %RH



Circuit Type	SN1	SN2
<input type="checkbox"/> -00	NO <sub>2</sub> /O <sub>3</sub>	NO <sub>2</sub> /O <sub>3</sub>
<input type="checkbox"/> -01	NO <sub>2</sub> /O <sub>3</sub>	NO
<input checked="" type="checkbox"/> -02	NO <sub>2</sub> /O <sub>3</sub>	CO/SO <sub>2</sub> /H <sub>2</sub> S
<input type="checkbox"/> -03	NO	CO/SO <sub>2</sub> /H <sub>2</sub> S
<input type="checkbox"/> -04	CO/SO <sub>2</sub> /H <sub>2</sub> S	CO/SO <sub>2</sub> /H <sub>2</sub> S

<sup>a</sup> at 101kPa, 23 (±2)°C, 40 (±15) %RH



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Customer	<u>DIGITAL KINEMATICS</u>
Order No	_____
Zero Cal Date	<u>11-10-16</u>
AFE Serial No	<u>12-000026</u>
Test PSU voltage	_____
AFE Type	<input checked="" type="checkbox"/> 810-0021-xx (2xA4)

Circuit Type			SN1	SN2
	<input type="checkbox"/>	-00	NO <sub>2</sub> /O <sub>3</sub>	NO <sub>2</sub> /O <sub>3</sub>
	<input type="checkbox"/>	-01	NO <sub>2</sub> /O <sub>3</sub>	NO
	<input checked="" type="checkbox"/>	-02	NO <sub>2</sub> /O <sub>3</sub>	CO/SO <sub>2</sub> /H <sub>2</sub> S
	<input type="checkbox"/>	-03	NO	CO/SO <sub>2</sub> /H <sub>2</sub> S
	<input type="checkbox"/>	-04	CO/SO <sub>2</sub> /H <sub>2</sub> S	CO/SO <sub>2</sub> /H <sub>2</sub> S

	SN1	SN2
Sensor Type	<u>NO2 A43F</u>	<u>CO A4</u>
Serial Number	<u>212060337</u>	<u>132950240</u>
WE Electronic Zero (mV)	<u>302</u>	<u>283</u>
WE Sensor Zero (mV)*	<u>6</u>	<u>37</u>
TOTAL WE Zero (mV)	<u>308</u>	<u>320</u>
AE Electronic Zero (mV)	<u>303</u>	<u>270</u>
AE Sensor Zero (mV)*	<u>1</u>	<u>-2</u>
TOTAL AE Zero (mV)	<u>304</u>	<u>268</u>
Sensitivity (nA/ppb)*	<u>-0.310</u>	<u>0.303</u>
Sensitivity NO <sub>2</sub> (nA/ppb)*	<u>-0.310</u>	<u>—</u>
PCB gain (mV/nA)	<u>-0.73</u>	<u>-0.80</u>
Sensitivity (mV/ppb)	<u>0.226</u>	<u>0.242</u>
Sensitivity NO <sub>2</sub> (mV/ppb)	<u>0.226</u>	<u>—</u>

\* at 101kPa, 23 (±2)°C, 40 (±15) %RH