
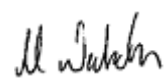


### EMC TEST CERTIFICATE

<b>Issued by:</b>	<b>Eurofins York Ltd</b>	<b>Issued to:</b>	Mr David Barrass IOT Routers Ltd The Barn 22 Brackendale Bradford West Yorkshire BD10 0SJ	<b>Project Number:</b> <b>C5877</b>
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<b>Electromagnetic Compatibility Test/s were performed on the apparatus as detailed: -</b>			
<b>Description</b>	AKKR8 Sensor		
<b>Serial number</b>	16001000003		
<b>Model Number</b>	EUT: AKKR8, PSU: SMI 12-5		
<b>Version</b>	Full Board_CE		
<b>Part number</b>	PSU: SMI 12-5-KB-P5		
<b>Configuration/ Mode of Operation</b>	The device is a sensor for Temperature, Humidity and Motion. Powered by 5V input, the device relays its data via LTE Data. Testing all interfaces and internal sensors, reporting via cellular, charging. Powered by 230V, PSU down to 5V dc.		
<b>Date received</b>	12/07/21	<b>Dates Tested</b>	12/07/21 to 16/07/21
<b>Specification/s</b>	Emissions Immunity	EN61326-1: 2013 Electrical equipment for measurement, control and laboratory use – EMC requirements - Part 1: General requirements	
<p><b>The apparatus to which this certificate relates was tested against the above specifications. Full results are retained on file at Eurofins York, Castleford. The apparatus was found to be compliant to the above specifications subject to the following conditions: None.</b></p> <p><b>Opinions/Interpretations/Additional information: None.</b></p>			

<b>Certificate No: -</b>	<b>14245TC2</b>	<b>Job No: -</b>	<b>C5877</b>	<b>Date: -</b>	<b>04/08/2021</b>	<b>Page 1 of 2</b>
<b>PDF copy</b>						

<b>Tested by: -</b>  <b>Steve Brennan, Senior EMC Test Technician</b>	<b>Approved signatory: -</b>  <b>M Nicholson BEng (Hons), Laboratory Technical Manager</b>
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**A BEIS  
 Designated  
 Notified Body  
 No 2636**

**Registered Address:**  
 Eurofins York  
 i54 Business Park, Valiant Way  
 Wolverhampton, WV9 5GB, UK  
 Registered in England and Wales  
 Company Reg. No. 6048589  
 VAT Reg. No. GB 887 1276 83

<b>EN61326-1: 2013</b>		
<b>Electrical equipment for measurement, control and laboratory use – EMC Requirements consisting of:– Part 1: Emissions</b>		
	<b>Level</b>	<b>Result</b>
Conducted emissions AC mains port CISPR11: 2009 +A1: 2010 EN55011: 2009 +A1: 2010 (Dated Reference)	0.15-0.5MHz 66-56dB $\mu$ V QP 0.5-5MHz 56dB $\mu$ V QP 5-30MHz 60dB $\mu$ V QP 0.15-0.5MHz 56-46dB $\mu$ V Ave 0.5-5MHz 46dB $\mu$ V Ave 5-30MHz 50dB $\mu$ V Ave	Pass
Radiated RF emission Enclosure CISPR11: 2009 +A1: 2010 EN55011: 2009 +A1: 2010 (Dated Reference)	30-230MHz 40dB $\mu$ V/m 230-1000MHz 47dB $\mu$ V/m	Pass
EN61000-3-2: 2014 Part 3-2: Limits – Limits for harmonic current emissions (equipment input current up to and including 16A per phase.	Class A	Pass
EN61000-3-3: 2013 Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq$ 16A per phase and not subject to conditional connection.	Pst Dmax	Pass

<b>EN61326-1: 2013</b>		
<b>Electrical equipment for measurement, control and laboratory use – EMC Requirements consisting of:– Part 2: Immunity – Requirements for Industrial Environment</b>		
Consisting of;	<b>Level</b>	<b>Result</b>
EN61000-4-2: 2009 Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test.	$\pm$ 8kV air discharge $\pm$ 4kV contact discharge	Pass
EN61000-4-3: 2006 +A1: 2008, +A2: 2010 Part 4-3. Testing and measurement techniques – Radiated, radio frequency, electromagnetic field immunity test	10V/m, 80MHz to 1000MHz, 1kHz 80% AM 3V/m, 1400MHz to 2000MHz, 1kHz 80% AM 1V/m, 2000MHz to 2700MHz, 1kHz 80% AM	Pass
EN61000-4-4: 2004 +A1: 2010 Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	$\pm$ 2kV AC Power lines	Pass
EN61000-4-5: 2006 Part 4-5: Testing and measurement techniques - Surge immunity test	$\pm$ 2kV line to earth $\pm$ 1kV line to line	Pass
EN61000-4-6: 2009 Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	10Vrms AC Power lines 150kHz to 80MHz 1kHz 80% AM	Pass
EN61000-4-11: 2004 Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	0% residual for 250 cycles 70% residual for 25 cycles 40% residual for 10 cycles 0% residual for 1 cycle	Pass

**The Decision Rule is applied on the basis of the following:**

- EMC testing - CISPR16-4-2 and/or EN61000-4-x (TR61000-1-6)

These standards provide guidance on how to calculate and apply measurement uncertainty whilst providing maximum uncertainties allowance.

In all cases due consideration will be given to JCGM 106:2012, ILAC-G8:09/2019 and LAB 48.

This laboratory has demonstrated by calibrating its equipment and facilities, and calculating its own uncertainties, that it complies with the above requirements and therefore no allowance of uncertainties has been given to the tolerances.

Where a result is considered marginal in respect of its proximity to the limit line, for example, the customer would be made aware of situation so that they can make an informed decision on how to proceed.

EUT Submitted

These results apply only to the particular EUT submitted, in the configuration used and in the mode of operation tested.