

## EQUIPMENT PURCHASE SPECIFICATION

FOR BME REPRESENTATIVE USE ONLY	
Approved By	Name : Zaenul Rosli
	Signature : 
	Date 18/6/2026

<b>TITLE OF TENDER/QUOTATION</b>	TO SUPPLY, DELIVER, TEST AND COMMISSION <b>FOUR (4) UNITS CALIBRATED TEMPERATURE, HUMIDITY AND PRESSURE (THP) DATA LOGGERS WITH EXTERNAL SENSORS FOR QUALITY AND COMPLIANCE SECTION, THE DEPARTMENT OF SCIENTIFIC SERVICES, MINISTRY OF HEALTH. DSS/AQ/PROC/B50K/2025-2026/004(QC)</b>
----------------------------------	--

<b>TENDER REFERENCE NO.</b>	DSS/AQ/PROC/B50K/2025-2026/004(QC)
-----------------------------	------------------------------------

<b>NAME OF ITEM</b>	CALIBRATED TEMPERATURE, HUMIDITY AND PRESSURE (THP) DATA LOGGERS
---------------------	--

NO.	ITEM DESCRIPTIONS AND SPECIFICATIONS	VENDOR'S OFFER			
		COMPLY (Please tick v) (Provide evidence for compliance(s))		ITEM DESCRIPTIONS AND SPECIFICATIONS	PRICE (\$)
		YES	NO		
1	To supply, deliver, test & comission <b>Four (4) units ISO 17025 calibrated data loggers</b> with external sensors for ambient temperature, humidity and pressure (THP) with the below specifications.				
2	<b>EQUIPMENT-SPECIFIC REQUIREMENTS</b>				
2.1	Temperature Range: at least <b>0°C to +55°C</b>				
2.2	Temperature Resolution: ≤ <b>0.1°C</b>				
2.3	Calibrated Temperature Accuracy: ≤ ± <b>0.5°C</b>				

Procurement Ref. No. : DSS/AQ/PROC/B50K/2025-2026/004(QC)  
 Section/Laboratory Ref. No. : O2K/QC/2025/005

2.4	Humidity Range: at least <b>0 to 95 %RH</b> (non-condensing)				
2.5	Humidity Resolution: $\leq 0.1$ %RH				
2.6	Calibrated Humidity Accuracy: $\leq \pm 3$ %RH				
2.7	Pressure Range: at least <b>500 mbar to 1100 mbar</b>				
2.8	Pressure Resolution: $\leq 1$ mbar				
2.9	Calibrated Pressure Accuracy: $\leq \pm 10$ mbar				
<b>3</b>	<b>GENERAL REQUIREMENTS</b>				
3.1	Simultaneous display of temperature, humidity & pressure				
3.2	Each unit must be supplied with dongle with temperature, humidity, and pressure sensor that plugs onto the data logger				
3.3	LCD display				
3.4	User-selectable measurement units				
3.5	Status indicators				
3.6	User replaceable battery				
3.7	Comes with calibration certificate traceable to SI units.				

3.8	CE approved				
3.9	<p><u>Each unit must be supplied with:</u></p> <ul style="list-style-type: none"> <li>• 1 ambient external dongle sensor</li> <li>• Quick Start Guide</li> <li>• batteries</li> <li>• magnets</li> <li>• hook and loop tape</li> <li>• wall mount</li> <li>• a bench stand</li> </ul>				
<b>4</b>	<b>Calibration Requirements</b>				
4.1	The calibration laboratory engaged must have a Calibration and Measurement Capability (CMC) for temperature, humidity and pressure (THP) data loggers that meets the expanded uncertainty requirements specified in the table under point 4.5.				
4.2	The laboratory must provide a valid ISO/IEC 17025:2017 accreditation schedule, clearly indicating the validity period and the relevant scope of calibration. The schedule must explicitly highlight the scope of calibration and the CMC values for THP data loggers within the requested temperature, %RH and pressure ranges.				
4.3	The laboratory must provide ISO/IEC 17025 accredited calibration certificates for each data logger calibrated, with all measurements traceable to the International System of Units (SI) through an unbroken chain of calibrations.				

4.4	<p>Calibration shall be performed at the following parameters to cover the full operating ranges of the data loggers:</p> <ul style="list-style-type: none"> <li>• Temperature: 18°C, 19°C, 21°C, 23°C and 25°C</li> <li>• Humidity: 64%RH, 70%RH, 80%RH and 85%RH</li> <li>• Pressure: 100 KPa, 100.5 KPa and 101 KPa or 1000 mbar, 1005 mbar and 1010 mbar.</li> </ul>												
4.5	<p>The calibration expanded uncertainty (coverage factor k=2, approximately 95% confidence) must be consistent with the laboratory's accredited CMC for data loggers and meet or be better than the following maximum allowable values:</p> <table border="1" data-bbox="273 655 860 866"> <thead> <tr> <th>Parameters</th> <th>Maximum Allowed Expanded Uncertainty (k=2) for Calibration</th> </tr> </thead> <tbody> <tr> <td>Temperature</td> <td>≤ ±0.2°C</td> </tr> <tr> <td>Relative Humidity</td> <td>≤ ±2.5% RH</td> </tr> <tr> <td>Pressure</td> <td>≤ ±0.5 kPa or 5 mbar</td> </tr> </tbody> </table>	Parameters	Maximum Allowed Expanded Uncertainty (k=2) for Calibration	Temperature	≤ ±0.2°C	Relative Humidity	≤ ±2.5% RH	Pressure	≤ ±0.5 kPa or 5 mbar				
Parameters	Maximum Allowed Expanded Uncertainty (k=2) for Calibration												
Temperature	≤ ±0.2°C												
Relative Humidity	≤ ±2.5% RH												
Pressure	≤ ±0.5 kPa or 5 mbar												
4.6	<p>The calibration laboratory shall use reference standards and methods traceable to SI units, such as:</p>												
4.6.1	<p><b>Standards:</b> NIST/PTB/EURAMET-traceable reference instruments.</p>												
4.6.2	<p><b>Methods:</b> ISO/IEC-compliant.</p>												
4.7	<p>The calibration laboratory shall comply with all applicable requirements of ISO/IEC 17025:2017 related to the reporting of calibration results.</p>												

4.7.1	Specifically, the laboratory must report the expanded measurement uncertainty for each calibration point, expressed with a coverage factor k=2, corresponding to approximately 95% confidence level.				
4.7.2	Each calibration result shall be accompanied by the expanded uncertainty value, a clear statement of the coverage factor and confidence level, and a reference or summary of the uncertainty budget and its evaluation method.				
5	<b>TRAINING</b> Training shall be included as follows:				
5.1	On-site training for ALL staff members expected to handle the equipment. Please ensure that adequate time is allocated such that training will take place in small groups to minimize disruption to laboratory work.				
5.2	The training modules should include but not limited to:- <ul style="list-style-type: none"> <li>• Setup &amp; Configuration;</li> <li>• Calibration Verification;</li> <li>• Software Integration, if applicable;</li> <li>• Placement Guidelines;</li> <li>• Stabilization Protocols;</li> <li>• Drift Detection;</li> <li>• Battery replacement, storage conditions</li> <li>• Basic troubleshooting.</li> </ul>				
5.3	Certificate of competence is to be issued to all trainees after completion of training.				
6	<b>TENDER BRIEFING</b>				

6.1	It is <b>MANDATORY</b> for the tenderer to attend tender briefing by Quality and Compliance Section, Department of Scientific Services prior to tender submission. Non-attendance will be considered as non-compliance.				
<b>7</b>	<b><u>WARRANTY</u></b>				
7.1	A minimum of one (1) year warranty for manufacturer's defect on the hardware, software (if applicable) and all cost of repairs and/or replacements should be included.				
7.2	After-sales services must be provided for the product after one (1) year.				
7.3	One-time performance check by ISO 17025 accredited calibration laboratory to ensure the data loggers remain within their specified accuracy, including drift checks to monitor sensor stability.				
7.4	One-off preventive maintenance to be carried out just before or soon after the one-year warranty period. Scope of work to follow manufacturer's manual/ recommendation specific for the equipment offered.				
<b>8</b>	<b><u>DELIVERY</u></b> Items offered <b>MUST be delivered within</b> _____ from date of Purchase Order. (Vendor to indicate the delivery period.)				
<b>9</b>	<b><u>PRICE VALIDITY</u></b> Price validity <b>MUST NOT BE LESS THAN 270 days or nine (9) months.</b>				
					<b><u>TOTAL PRICE (\$)</u></b>

No.	GENERAL SPECIFICATIONS*	VENDOR'S OFFER
A	Total Price: B\$	
B	Delivery Period:	
C	Model & Brand:	
D	Country of Origin:	
E	Where marketed:	
F	Year of Manufacture:	
G	Warranty:	
H	Power Requirement:	
I	Battery Back-up:	
J	International Safety Standard:	
K	Technical Support:	
L	Equipment Whole Life Support:	
M	Dimensions (WxHxD) cm:	
N	User Manuals:	

Procurement Ref. No. : DSS/AQ/PROC/B50K/2025-2026/004(QC)  
Section/Laboratory Ref. No. : O2K/QC/2025/005

No.	GENERAL SPECIFICATIONS*	VENDOR'S OFFER
O	Service Manuals:	
P	Spare-parts & Consumables Listing:	
Q	Technical Training On-Site:	
R	Site Requirements:	

\*To all participating companies, please fill in the table above along with your other documents during submission of tender.

Bahagian/Unit/Makmal :	QUALITY AND COMPLIANCE SECTION		
Bil. Rujukan Bahagian/Unit/Makmal :	O2K/QC/2025/005		
Pegawai dirujuk :	Nama :	Sia Fwu Shii/ Nurnisrinah Hj Awg Yusof	
	E-mail :	fwushii.sia@moh.gov.bn/ nurnisrinah.yusof@moh.gov.bn	
	Tel.No.:	2382424 ext 6123/ 6234	Fax No. : 2381946