

KETERANGAN PEMBELIAN TEMPATAN - JKP KEMANTAN

RUJUKAN SEBUTHARGA : **MINDEF/DFA/FY2026/NAU/CSTRAD/LP/1003**

TARIKH TUTUP SEBUTHARGA : 24 - 9 - 2026 (KHAMIS, 08:00 PAGI)

PETI PENERIMAAN SEBUTHARGA : **BOX** (4)

**ALAMAT BARU: BANGUNAN ARKIB, ARAS BAWAH, KEMENTERIAN PERTAHANAN,
BOLKIAH GARISON**

NAMA SYARIKAT : _____

CAP SYARIKAT DAN TANDATANGAN : _____

TEL PEMBEKAL : _____ FAX PEMBEKAL : _____

E-MAIL PEMBEKAL : _____

VENDOR ID PEMBEKAL : _____

BIL	KETERANGAN BARANG	KTI	HARGA SATU	HARGA SEMUA	TEMPOH SAH HARGA (MINIMUM 180 HARI)	TEMPOH PENGHANTARAN	BUATAN NEGERI	LAIN-LAIN HAL
	<u>PEMBELIAN SERTA PEMASANGAN TERMASUK TRAINING BAGI PERALATAN ELEKTRONIK UNTUK KEGUNAAN PROJEK PENYELIDIKAN P3ST</u>							
1	<i>Portable Spectrum Analyser</i>	1 set						
2	<i>Thrust Stand</i>	1 unit						
	(Sila rujuk Spesifikasi yang di sertakan)							

PERHATIAN:

Perkara-perkara yang perlu (mandatori) di hadapkan sebelum tarikh tutup sebut harga :

☒ Katalog & Spesifikasi Teknikal mesti di sertakan untuk penilaian.

Contoh

Jika di dapati gagal, sebut harga tersebut tidak akan di pertimbangkan.

PERINGATAN:

Tidak dibenarkan menggunakan katalog Jabatanarah ini.

JUMLAH SEMUA HARGA YANG DI TAWARKAN - ANGKA B\$ _____ DAN PERKATAAN: _____

SENARAI SPESIFIKASI DAN CONTOH GAMBAR PERALATAN ELEKTRONIK UNTUK KEGUNAAN PROJEK PENYELIDIKAN P3ST

a) Senarai Spesifikasi Peralatan Elektronik

Bil.	Perkara	Kuantiti	Spesifikasi
1.	Portable Spectrum Analyser	1 set	• A portable, handheld device to measure and visualise the strength of radio frequency (RF) signals across a range of frequencies • Frequency Range: ○ Minimum range: 9.0 kHz or lower ○ Maximum range: 3.0 GHz or higher ○ Frequency resolution: 1 Hz • Resolution Bandwidth (RBW) -3dB Bandwidth: ○ Lower limit: 10 Hz or lower ○ Upper limit: 1 MHz or higher • Video Bandwidth (VBW) -3dB Bandwidth: ○ Lower limit: 1 Hz ○ Upper limit: 1 MHz or higher • Display Average Noise Level ○ (Pre-amp off): ▪ Below 1 MHz: -108 dBm or less ▪ 1 MHz to 10 MHz: -128 dBm or less ▪ 10 MHz to 2.0 GHz: -141 dBm or less ▪ 2.0 GHz to 3.0 GHz: -136 dBm or less ○ (Pre-amp on): ▪ Below 1 MHz: -131 dBm or less ▪ 1 MHz to 10 MHz: -136 dBm or less ▪ 10 MHz to 2.0 GHz: -159 dBm or less ▪ 2.0 GHz to 3.0 GHz: -155 dBm or less • Display screen: ○ Display screen resolution: At least 640 x 480 pixel ○ Display screen size: At least 5.7 inch ○ Coloured display screen: Yes • Physical Dimension: ○ Dimension: Must not exceed 300 mm x 300 mm x 180 mm ○ Weight: Below 3.5 kg with battery • Features: ○ Portable and handheld ○ Able to display data or waveform in various scales ○ Able to do data logging of measurements and export data for further data processing ○ Built-in rechargeable battery ▪ Able to last at least 2 hours of continuous operation • Warranty: ○ Warranty period: Minimum 1 year upon delivery



Bil.	Perkara	Kuantiti	Spesifikasi
			- Includes coverage for <u>faults</u> such as mechanical and electrical defects not caused by user error or wear and tear - The device is supplied fully pre-calibrated with <u>a calibration certificate or manufacturer/ supplier report in English Language</u> that is valid for a minimum of 1 year and within the warranty period upon delivery - To be supplied inclusive of user manual in English Language
	Supporting software	Included	- Supplied with a compatible supporting software for the main device which may include: - Datalogging - Data Analysis - System settings - Software licensing (if required): Minimum of 2 years upon delivery and must be inclusive of the first renewal (if required) - To be supplied inclusive of user manual in English Language
	Accessories	Included	- Supplied with the compatible antenna(s) covering the entire frequency range - Supplied with appropriate battery charger - Supplied with a suitable carrying case
	Training	Included	- Training for a minimum of 3 person - Training duration: Vendor to propose - Training content/syllabus must include (not limited to): - Standard operation of device and software - Basic or user-level maintenance procedure and guidance of the unit
	After-sales support	Included	Includes <u>preventive maintenance</u> such as equipment cleaning, performance testing and calibration of the device in the case the device's pre-calibration validity elapsed within warranty period
	Delivery, installation and setup	Included	- Full delivery inclusive of any delivery charges, export clearance, import duties, customs clearance, permits, and other associated requirements to Ministry of Defence, Brunei Darussalam with installation and setup of: - Supplied device - Supporting software



Bil.	Perkara	Kuantiti	Spesifikasi
2.	Thrust Stand	1 unit	• Tool used to measure the pulling and the lifting force generated by a motor and propeller • Maximum Stand Input Voltage: 220-240V with 3-pin replaceable fuse British standard plug (where applicable) or support up to 24S (if battery operated) • Maximum Thrust Measurement: At least 10 kg • Thrust Resolution: 0.05 N or better • Thrust Measurement Accuracy: $\pm 1\%$ or better • Maximum Torque Measurement: At least 5 Nm • Torque Resolution: 0.005 Nm or better • Torque Measurement Accuracy: $\pm 1.5\%$ or better • Sampling rate: At least 100 Hz • RPM Range: ○ Lower limit: 60 RPM or less ○ Upper limit: 15,000 RPM or more • Temperature Probe Measurement: ○ Lower limit: -10°C or lower ○ Upper limit: $+100^{\circ}\text{C}$ or higher • Built-in Electronic Speed Controller (ESC): ○ Supports standard Pulse Width Modulation (PWM) ○ Supports Dshot150, Dshot300 and Dshot600 ○ Supports Oneshot42 and Oneshot125 ○ Supports Multishot • Warranty: ○ Warranty period: Minimum 1 year upon delivery ○ Includes coverage for <u>faults</u> such as mechanical and electrical defects not caused by user error ○ The device is supplied fully pre-calibrated with <u>a calibration certificate or manufacturer/ supplier report in English Language</u> that is valid for a minimum of 1 year and within the warranty period upon delivery • To be supplied inclusive of user manual in English Language
	Supporting software	Included	• Supplied with a <u>compatible supporting software</u> for the main device that can: ○ Measure, record, display and export thrust, torque, voltage and current data for further data processing • Software licensing (if required): Minimum of 2 years upon delivery and must be inclusive of the first renewal (if required) • To be supplied inclusive of user manual in English Language



Bil.	Perkara	Kuantiti	Spesifikasi
	<i>Features/Sensors</i>	Optional	• Airspeed sensor capable of measuring up to 100 m/s • Barometric sensor with range of up to 120 kPa • Humidity sensor with at least 1% RH resolution and $\pm 3\%$ RH accuracy • Upgradable for back-to-back dual-motor testing • Supporting software supports Distributed Electric Propulsion test up to 8 motors
	<i>Training</i>	<i>Included</i>	• Training for a minimum of 3 person • Training duration: Vendor to propose • Training content/syllabus must include (not limited to): ○ Standard operation of device and software ○ Basic or user-level maintenance procedure and guidance of the unit
	<i>After-sales support</i>	<i>Included</i>	• Includes <u>corrective maintenance</u> of wear-and-tear items within the warranty period, such as (not limited to) replacement of wiring or load cell replacement • Includes <u>preventive maintenance</u> such as equipment cleaning, performance testing and calibration of the device in the case the device's pre-calibration validity elapsed within warranty period
	<i>Delivery, installation and setup</i>	<i>Included</i>	• Full delivery inclusive of any delivery charges, export clearance, import duties, customs clearance, permits, and other associated requirements to Ministry of Defence, Brunei Darussalam with installation and setup of: ○ Supplied device ○ Supporting software



b) Senarai Contoh Gambar Peralatan Elektronik

<i>Item 1:</i> <i>Portable Spectrum</i> <i>Analyser</i>	CONTOH GAMBAR 1 	CONTOH GAMBAR 2 
<i>Item 2:</i> <i>10kg Thrust Stand</i>	CONTOH GAMBAR 1 	CONTOH GAMBAR 2 