

KETERANGAN PEMBELIAN TEMPATAN - JKP KEMANTAN

RUJUKAN SEBUTHARGA : MINDEF/DFA/FY2025/LB/LP/2000

TARIKH TUTUP SEBUTHARGA : 26 / 05 / 2025 (ISININ, 08.30 PAGI)

PETI PENERIMAAN SEBUTHARGA : BOX (05)

ALAMAT BARU: BANGUNAN ARKIB, ARAS BAWAH
KEMENTERIAN PERTAHANAN, BOLKIAH GARISSON

NAMA SYARIKAT :

COP SYARIKAT & TANDANTANGAN :

FAX PEMBEKAL :

TEL PEMBEKAL :

EMAIL PEMBEKAL :

TAFIS VENDOR ID :

BIL	KETERANGAN BARANG	KTI	HARGA SATU	HARGA SEMUA	TEMPOH SAH HARGA (MINIMUM 180 HARI)	TEMPOH PENGHANTARAN	BUATAN NEGERI	LAIN-LAIN HAL
	<u>PEMBELIAN DRONE COMPLETE TO SCHEDULE</u>							
1	DJI MAVIC 3 ENTERPRISE OR EQUIVALENT	2 EA						
2	DJI MAVIC 3 THERMAL OR EQUIVALENT	1 EA						
	PERHATIAN: KATALOG DISERTAKAN Perkara-perkara yang perlu (mandatori) dihadapkan sebelum tarikh tutup sebutharga ☐ / Katalog (Sila hadapkan katalog berwarna dan spesifikasi tersendiri yang jelas untuk dibuat penilaian) ☐ Contoh Katalog yang dihadapkan hendaklah bukan menggunakan katalog yang disertakan Jabatan ini. Jika didapati gagal, sebutharga tersebut tidak akan dipertimbangkan.							

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

TENDER SPECIFICATION REQUIREMENTS FOR DRONE

Requisition No	521549	
Item	DRONE	
Quantity	DJI Mavic 3T	02
Required	DJI Mavic 3E	01

Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes	No	
(a)	(b)	(c)	(d)	(e)
1	Formalities Other relevant supporting documents (i.e. past sales track records, company registration, product certification/ complimentary letters etc.), may also be included in the hardcopy submission, on or before the tender closing date as indicated in the tender notice.			
1.1				



Ser	Specifications				Compliance (Please Tick)		Remarks (To be completed by Tenderer)
					Yes	No	
(a)	(b)				(c)	(d)	(e)
2	Basic Requirements/ Features						
2.1	Capture accurate details in any engineer recce – highly versatile yet compact tool that packs a whole lot of performance upgrades. With high-resolution thermal and visual cameras that can supports up to 56 x digital zoom and capable of centimeter-level positioning accuracy.						
3	Physical Requirements - Aircraft						
3.1	Weight a. Mavic 3E : 915 g b. Mavic 3T : 920 g						
	Dimensions	L	W	H			
	Folded:	221mm	96.3mm	90.3mm			
	Unfolded	347.5mm	283mm	107.7mm			
	Unfolded + Speaker	320 - 350mm	240 - 270mm	130- 160mm			
	Unfolded + RTK Module	320 - 350mm	240 - 270mm	110 - 140mm			
3.3	Diagonal Distance – 380.1mm.						
3.4	Max Ascent Speed: a. 6m/s (Normal mode) b. 8m/s (Sport mode)						
3.5	Max Descent Speed: a. 6m/s (Normal mode) b. 6m/s (Sport mode)						
3.6	Max Speed: a. 15 m/s (Normal mode) b. 21 m/s (Sport mode) Max wind speed resistance 12m/s						
3.7	Max Take-off Altitude Above Sea Level: 6000 m.						
3.8	Max Flight Time a. Measured while flying at 25 kph in windless condition: 45 - 39 min. (Low-noise Propellers) b. Hover Time : 38 – 35 min (Low-noise Propellers)						



Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes	No	
(a)	(b)	(c)	(d)	(e)
	c. Flight Dist : 32km, 25km (Low-noise Propellers)			
3.9	Max Wind Speed Resistance: 12 m/s (scale 5)			
3.10	Max Tilt Angle a. 30° (N-mode, with remote controller). b. 35° (S-mode).			
3.11	Max Angular Velocity: a. 200°/s			
3.12	Operating Temperture: -10 to 40°C.			
3.13	GNSS: GPS+GALILEO+GLONASS(Supported only when RTK module is enabled).			
3.14	Hovering Accuracy Range: a. Vertical: 1) With RTK: $\pm 0.1\text{m}$. 2) With Vision Positioning: $\pm 0.1\text{m}$. 3) With GNSS Positioning: $\pm 0.5\text{m}$. b. Horizontal: 1) With RTK: $\pm 0.1\text{m}$. 2) With Hihg Precision Positioning: $\pm 0.5\text{m}$. 3) With Vision Positioning: $\pm 0.3\text{m}$.			
3.15	Operating Temperature range: -10° to 40° C (14° to 104° F)			
3.16	Motor model 2008 Propeller Model 9453E 8656F (Low Noise Propellers, Must be use d in countries and regions with C2 certification)			
3.17	Internal Storage: N/A.			
3.18	Beacon : Built into the aircraft			
4	Physical Requirements–Gimbal Mavic 3E / 3T			
4.1	Stabilization a. M3E 3-axis (tilt, roll, pan) b. M3T 3-axis (tilt, roll, pan)			
4.2	Mechanical Range a. M3E 3-axis (tilt: -135° to 100°, roll:-45° to 45°, pan: -27° to 27°) b. M3T3-axis (tilt: -135° to 100°, roll:-45° to 45°, pan: -27° to 27°)			
4.3	Controllable Range Tilt: -90° to 35°, Pan not controllable			
4.4	Max control Speed (tilt) 100°/s			



Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes	No	
(a)	(b)	(c)	(d)	(e)
4.5	Angular Vibration Range $\pm 0.007^\circ$			
5	Physical Requirements–Wide Camera M3E / M3T			
5.7	Sensor a. 4/3 CMOS, Effective pixels: 20MP b. 1/2" CMOS, Effective pixels: 48MP			
5.8	Lens a. FOV:84 Format Equivalent: 24 mm, Aperture: f/2.8-f/11, Focus: 1m to infinity (with autofocus) b. FOV:84 Format Equivalent: 24 mm, Aperture: f/2.8, Focus: 1m to infinity			
5.9	ISO Range a. 100-6400 b. 100-25600			
5.10	Shutter Speed a. Electronic Shutter: 8-1/8000 s, Mechanical Shutter 8-1/20000 s b. Electronic Shutter: 8-1/8000 s			
5.11	Max Image Size a. 5280x3956 b. 8000x6000			
5.12	Still Photography Modes: a. Single:20MP,Timed:20MP,JPEG:0.7/1/2/3/5/7/10/15/20/30/60 s,JPEG+RAW: 3/5/7/10/15/20/30/60 s,Smart low-lightShooting:20MP,Panorama:20MP(raw image),100MP (Stitched image) b. Single:20MP,Timed:20MP,JPEG:2/3/5/7/10/15/20/30/60 s,Shooting 48MP photo does not support 2s interval Smart low-light Shooting:12MP,Panorama:12MP(raw image),100MP (Stitched image)			
5.13	Video resolution: H.264, 4K: 3840x2160@30fps, FDH:19x1080@30fps			
5.14	Bitrate a. 4K: 130Mbps,FHD:70Mbps b. 4K: 85Mbps, FHD: 30Mbps			
5.15	Photo format: a. JPEG/DNG (RAW) b. JPEG			
5.16	Video Format: MP4 (MPEG-4 AVC/H.264)			
5.17	Supported File Format: ExFAT			



Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes	No	
(a)	(b)	(c)	(d)	(e)
6	Physical Requirements–Tele Camera M3E / M3T			
6.1	Sensor a. 1/2" CMOS, Effective pixels: 12MP			
6.2	Lens a. FOV:84 Format Equivalent: 24 mm, Aperture: f/2.8-f/11, Focus: 1m to infinity (with autofocus) b. FOV:84 Format Equivalent: 24 mm, Aperture: f/2.8, Focus: 1m to infinity			
6.3	ISO Range a. 100-6400 b. 100-25600			
6.4	Shutter Speed a. Electronic Shutter: 8-1/8000 s,			
6.5	Max image size: 4000x3000			
6.6	Photo format JPEG			
6.7	Video format MP4 (MPEG-4 AVC/H.264			
6.8	Still Photography Modes: a. Single:12MP,Timed:12MP,JPEG:0.7/1/2/3/5/7/10/15/20/30/60 s, Smart low-lightShooting:12MP b. Single:12MP,Timed:12MP,JPEG:2/3/5/7/10/15/20/30/60 s,Smart low-light Shooting:12MP			
6.9	Video resolution: H.264, 4K: 3840x2160@30fps, FDH:1920x1080@30fps			
6.10	Bitrate c. 4K: 130Mbps,FHD:70Mbps d. 4K: 85Mbps, FHD: 30Mbps			
6.11	Digital zoom 8x(56x hybrid zoom)			
7	Physical Requirements – Thermal Camera (Mavic 3T)			
7.1	Thermal Imager Uncooled Vox Microbolometer			
7.2	Pixel Pitch 12µm.			
7.3	Frame Rate: 30 Hz			



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		Yes	No	
(a)	(b)	(c)	(d)	(e)
7.4	Lens: a. FOV:61° Format Equivalent: 40 mm, Aperture: f/1.0, Focus: 1m to infinity			
7.5	Sensitivity: ≤50 mk@F1.1			
7.6	Temperature Measurement Method: Spot meter ,Area Measurement			
7.7	Temperature Measurement Range: -20° to 150° C (-4° to 302° F, High Gain Mode) 0° to 500° C (32° to 932° F, Low Gain Mode)			
7.8	Palette: White hot/Black Hot/Tint/Iron Red/Hot Iron/Arctic/Medical/Fulgurite/Rainbow 1/Rainbow 2			
7.9	Photo format: JPEG (8-bit), R-JPEG(16-bit)			
7.10	Video resolution: 640x512@30fps			
7.11	Bitrate 6Mbps			
7.12	Video format: MP4 (MPEG-4 AVC/H.264)			
7.13	Still Photography Modes: Single:640x512,,Timed:640x512,JPEG:/2/3/5/7/10/15/20/30/60 s			
7.14	Digital Zoom: 28x			
7.15	Infrared Wavelength: 8-14 μm			
7.16	Infrared Temperature Measurement Accuracy: ±2° C or ±2% (Using the larger Value)			
8	Physical Requirements – Sensing System			
8.1	Type: Omnidirectional binocular vision system, supplemented with an infrared sensor at the bottom of the aircraft.			
8.2	Forward: a. Measurement Range: 0.5 - 20m. b. Detectable Range: 0.5 - 200m. c. Effective Sensing Speed: ≤15m/s. d. FOV: Horizontal: 90°, Vertical: 103°.			
8.3	Backward: a. Measurement Range: 0.5 - 16m. b. Effective Sensing Speed: ≤15m/s. c. FOV: Horizontal: 90°, Vertical: 103°.			
8.4	Lateral: a. Measurement Range: 0.5 - 25m. b. Effective Sensing Speed: ≤15m/s. c. FOV: Horizontal: 90°, Vertical: 85°.			



Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes (c)	No (d)	
(a)	(b)	(c)	(d)	(e)
8.5	Upward: a. Measurement Range: 0.2 - 10m. b. Effective Sensing Speed: ≤6m/s. c. FOV: Horizontal: 100°, Vertical: 90°.			
8.6	Downward: a. Measurement Range: 0.3 - 18m. b. Effective Sensing Speed: ≤6m/s. c. FOV: Horizontal: 130°, Vertical: 160°.			
8.7	Operating Environment: a. Forward, Backward, Lateral and Upward: Surface with clear pattern and adequate lighting (lux > 15). b. Downward: Diffuse reflective surfaces with diffuse reflectivity (>20%) (Walls, tress, people, etc.). (lux > 15).			
9	Physical Requirements – Video Transmission			
9.1	Video Transmission System: DJI O3 Enterprise Transmission			
9.2	Live View Quality: Remote Controller: 1080p/30fps			
9.3	Operating Frequency: 2.400-2.4835 GHz, 5.725-5.850GHz			
9.4	Transmitter Power(EIRP): 2.4GHz: <33dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.8GHz: <33dBm (FCC), <14 dBm (CE), <30 dBm (SRRC)			
9.5	Max Transmission Distance (unobstructed, free of interference): 15 km (FCC), 8 km (CE/SRRC/MIC)			
9.6	Max Transmission Distance (unobstructed): Strong interference (dense buildings, residetial areas, etc): 1.5-3km (FCC/CE/SRRC/MIC) Medium interference (suburban areas, city parks, etc): 3-9 km (FCC), 3-6 km (CE/SRRC/MIC) Low interference (open spaces, remote ares, etc): 9-15 km (FCC), 6-8 km (CE/SRRC/MIC)			
9.7	Max Download Speed: 15 MB/s (with DJI RC Pro Enterprise)			
9.8	Latency (depending on environmental coditions and mobile device): Approx. 200 ms			
9.9	Antenna: 4 Antennas, 2T4R			
10	Physical Requirements – Remote Controller			
10.1	Screen Resolution: 1920x1080			
10.2	Screen Size: 5.5 inch			
10.3	Screen Frame Rate: 60fps			



Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes	No	
(a)	(b)	(c)	(d)	(e)
10.4	Screen Brightness: 1000 nit			
10.5	Touchscreen control: 10 point Multi-touch			
10.6	Built-in Battery: Li-ion (5000 mAh @ 7.2V)			
10.7	Charging Type: Recommended to be charged with the included DJI USB-C Power Adapter (100W) or USB Charger at 12 V or 15 V			
10.8	Charging Time: Approx. 1 H 30 min (with the included DJI USB-C Power Adapter (100W) only charging the remote controller or USB Charger at 15 V) Approx. 2 H (with a USB charger at 12 V)			
10.9	Operating Time: Approx. 3 H			
10.10	Rate Power: 12 Watt			
10.11	Storage Capacity: Internal Storage (ROM): 64GB Support microSD card to expand capacity			
10.12	Video Output Port: Mini HDMI port			
10.13	Operating Temperature Range: -10 to 40 C (14 to 104 F)			
10.14	Storage Temperature: -30 to 60 C (-22 to 140 F) (within one month) -30 to 45 C (-22 to 113 F) (one to three months) -30 to 35 C (-22 to 95 F) (three to six months) -30 to 25 C (-22 to 77 F) (more than six months)			
10.15	Charging Temperature: 5 to 40 C (41 to 104 F)			
10.16	GNSS: GPS + Galileo + GLONASS			
10.17	Dimensions: Antennas folded and controller sticks unmounted: 183.27x137.41x59.84 mm Antennas unfolded and controller sticks mounted: 183.27x203.35x59.84 mm			
10.18	Weight: Approx. 680 g			
10.19	Model: RM510B			
10.20	Video Transmission System: DJI O3 Enterprise Transmission			



Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes	No	
(a)	(b)	(c)	(d)	(e)
10.21	Max Transmission Distance (unodstructed,free of interference [3]: 15 kn (FCC, 8 km (CE/SRRC/MIC)			
10.22	Operating Frequency [2]: 2.400-2.4835 GHz, 5.725-5.850GHz			
10.23	Transmitter Power (EIRP): 2.4GHz:>33 dBm (FCC), <20 dBm (CE/SRRC/MIC) 5.8 GHz:>33dBm (FCC), <14 dBm (CE), <23 dBm (SRRC)			
10.24	Antenna: 4 Antennas,2T4R			
10.25	Wi-Fi			
10.26	Protocol: 802.11 a/b/g/n/ac/ax Support 2x2 MIMO Wi-Fi			
10.27	Operating Frequency [2]: 2.400-2.4835 GHz, 5 150-5.250 GHz,5.725-5.850 GHz			
10.28	Transmitter Power (EIRP): 2.4 GHz: <26 dBm (FCC),<20 dBm (CE/SRRC/MIC) 5.1 GHz: <26 dBm (FCC),<23 dBm (CE/SRRC/MIC) 5.8 GHz: <26 dBm (FCC/SRRC),<14 dBm (CE)			
10.29	Bluetooth			
10.30	Protocol: Bluetooth 5.1			
10.31	Operating Frequency: 2.400-2.4835 GHz			
10.32	Transmitter Power (EIRP) <10dBm			
11	Physical Requirements – Storage			
11.1	Supported Memory Cards: Aircraft: U3/Class 10/V30 or above is required. A list of recommended microSD cards can be foud below.			
11.2	Recommended microSD Cards Remote Controller: -SanDisk Extreme PRO 64GB V30 A2 microSDXC -SanDisk High Endurance 64GB V30 microSDXC -SanDisk Extreme 128GB V30 A2 microSDXC -SanDisk Extreme 256GB V30 A2 microSDXC -SanDisk Extreme 512GB V30 A2 microSDXC -Lexar 667x 64GB V30 A2 microSDXC -Lexar High Endurance 64GB V30 microSDXC -Lexar High Endurance 128GB V30 microSDXC -Lexar 667x 256GB V30 A2 microSDXC			



Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes	No	
(a)	(b)	(c)	(d)	(e)
	-Lexar 512GB V30 A2 microSDXC -Samsung EVO plus 64GB V30 microSDXC -Samsung EVO plus 128GB V30 microSDXC -Samsung EVO plus 256GB V30 microSDXC -Samsung EVO plus 512GB V30 microSDXC -Kingston Canvas Go! Plus 128GB V30 A2 microSDXC -Kingston Canvas React Plus 128GB V90 A1 microSDXC Aircraft: -SanDisk Extreme 32GB V30 A1 microSDHC -SanDisk Extreme PRO 32GB V30 A1 microSDHC -SanDisk Extreme 512GB V30 A2 microSDXC - Lexar 1066x 64GB V30 A2 microSDXC -Kingston Canvas Go! Plus 64GB V30 A2 microSDXC -Kingston Canvas React Plus 64GB V90 A1 microSDXC -Kingston Canvas Go! Plus 128GB V30 A2 microSDXC -Samsung PRO Plus 256GB V30 A2micro SDXC			
12	Physical Requirements – Intelligent Flight Battery			
12.1	Capacitor: 5000 mAH			
12.2	Standard Voltage: 15.4V			
12.3	Max Charging Voltage: 17.6V			
12.4	Type: LiPo 4S			
12.5	Chemical System: LiCo O2			
12.6	Energy: 77Mh			
12.7	Weight: 335.5g			
12.8	Charging Temp: 5° to 40° C (41° to 104° F)			
13	Physical Requirements – Charger			
13.1	Input: 100-240 V AC, 50-60 Hz, 2.5 A			
13.2	Output Power: 100W			
13.3	Output: Max. 100W (total) When both ports are used, the maximum output of one of the ports is 82W. The charger will dynamically allocate the output power of the two ports according to the load power.			
14	Accessories			



Ser	Specifications	Compliance (Please Tick)		Remarks (To be completed by Tenderer)
		Yes (c)	No (d)	
(a)	(b)	(c)	(d)	(e)
14.1	Additional Accessories or Battery: a. 3 x additional spare battery for the drone. b. RTK Module. c. Speaker d. Smart Controller e. Bag for drone and accessories.			
15	Training			
15.1	Training for drone operators.			
16	Maintenance and Other Requirements			
16.1	Special Maintenance Tools (If Any).			
16.2	Easy maintenance.			
17	Warranty			
17.1	How long the warranty.			
18	Delivery Time			
18.1	3-4 Months.			

