

**PAKISTAN AERONAUTICAL COMPLEX, KAMRA
AIRCRAFT MANUFACTURING FACTORY
TENDER NOTICE**

Tender No AMF/2803/306/LOG dated 11 May, 2024

1. Sealed tenders are invited from sales tax registered Suppliers who are on Active Taxpayers List (ATL) of FBR for procurement of following item:-

S NO	PART NO	DESCRIPTION	U/I	QTY
01	AMF-002	Bullet Proof Helmet (As per attached specifications and special Notes)	EA	50
02	LEVEL-III-7.62MM	Bullet Proof Jacket (As per attached specifications and special Notes)	EA	25
03	DS-2TD6267-100C4L/W	HIKVISION THERMAL CAMERA (As per attached specifications and special Notes)	EA	01

2. **Delivery of Tender**

- (a) **Technical Offer:** It should be without price and contain all relevant essential specification along with literatures / brochures. Tender number, date of opening and word "**Technical offer**" should be clearly marked on the face of envelope.
- (b) **Commercial Offer:** It should indicate price of quoted item and confirmation to the terms and conditions of our tender inquiry. The words "**Commercial offer**" be marked on its envelope.
- (c) **Bid Money / Earnest Money:** The registered / unregistered firm with PAC Board will provide 5% or Rs 150,000.00 (whichever is less) as earnest money of the quoted value through bank draft in favor of MD AMF PAC Kamra.

NOTE Quotations must be submitted in two copies for required stores i.e one copy with technical details without price and one copy as commercial offer in separate envelop. Moreover, in case witnessing of Technical / Commercial opening, detail of participant is required 02 days in advance for security clearance.

Both the envelopes of **Technical and Commercial** offers should be enclosed in one cover properly sealed and bear the following address of this office.

Deputy Director Procurement,
Aircraft Manufacturing Factory,
Pakistan Aeronautical Complex, Kamra
Distt Attock
Phone: 051-90995283

3. **Opening of Tender**

The quotations must be in original and are to reach at this factory till **27-05-2024 (1000 Hrs)**. No quotation will be accepted in photocopy, through Fax

and after due date and time. Tender will be opened at 1100 Hrs on the same day. We reserve the right to cancel or rejected all bids/ proposals at any time prior to acceptance as per PPRA Rules.

4. **Pattern of Quoted Prices**

- (a) The quoted Prices are to be exclusive of all taxes levied by the Government and these should be in accordance with the current Local market prices.
- (b) GST and all other taxes must be mentioned separately.

5. **Validity of offer**

The quotation should be valid for 180 days from technical opening date.

6. **Delivery Period**

Delivery is required after 04 weeks after signing of contract. However, the delivery period should be factual as no extension will be subsequently granted except under extreme / un-avoidable circumstances.

7. **Release of Payment**

DBA AMF will release 100% amount of contract including 18% GST on production of following documents:-

(i)	Invoice/ Bill	:	03 copies
(ii)	CRV	:	01 copy
(iii)	Professional Tax Certificate	:	01 copy
(iv)	General Sales Tax Certificate	:	01 copy
(iv)	Active Tax Payer LIST (ATL)	:	01 copy
(v)	BG acceptance	:	01 Copy
(vi)	Delivery Challan	:	01 Copy

8. **Disqualification**

Offers are liable to be rejected if: -

- (a) There is a deviation from any instruction.
- (b) Offers are found conditional or incomplete in any respect.
- (c) Multiple rates are quoted against one item or overwriting / erasing in prices.
- (d) Bid money / Earnest money.

NOTE:-THIS TENDER ADVERTISEMENT IS ALSO AVAILABLE ON www.pac.org.pk

TERMS AND CONDITIONS

(1) PAC / AMF, its customers and regulatory authorities reserve the right of access to all facilities of supplier firms coupled with sub-tier suppliers in applicable production of stores provided to PAC/ AMF under contracts concluded by PAC Board:-

- (a) Stores (**Security Equipment**) is required on FOR Kamra basis. (Quotes should be in PKR only)
- (b) Store should be factory new and from latest production.
- (c) Inspection / acceptance will be carried out as per PAC Board and AMF Quality Control procedure, on the parameters of specifications mentioned in the tender.
- (d) Price should be firm and final.
- (e) Delivery is required after 04 weeks after signing of contract with at least $\frac{3}{4}$ of its shelf life remaining.
- (f) In case of official holiday the Tender will be open on next working day.
- (g) Technical details and brochure be provided with quotation for technical evaluation (whenever applicable)
- (h) OEM packing worthy of transportation by road / air be carried out.

(2) The supplier will provide following documents with supplied stores at a time of delivery:-

- (a) Quality certificate.
- (b) OEM Certificate of conformance.
- (c) Warranty documents & certificate (if applicable).
- (d) Preservation Record / Certificate (if applicable)
- (e) OEM standard Warranty of 03 Years is required

AMF QUALITY SYSTEM REQUIREMENTS

Following are the requirements to be satisfied by the Supplier (External Provider) / Sub-Contractor (Local Vendor) of AMF:-

1. The processes, products, and services to be provided including the identification of relevant technical data (e.g., specifications, drawings, process requirements, work instructions).
2. The approval of products and services, methods, processes, equipment, and the release of products and services.
3. Provide inspection and testing criteria for acceptance by AMF.
4. Notify AMF about non-conformance product or material supplied.
5. Obtain approval from AMF of changes in product / process.
6. Access by AMF, its customers and regulatory authorities be ensured to applicable areas of all facilities involved in the order and to all applicable records at any level of the supply chain.
7. Provide Objective evidence of the quality of product.
8. To ensure product conformance to specified requirements.
9. To provide manufacturing date and Lot number.
10. To provide shelf life and expiry date as applicable.
11. Competence, including any required qualification of persons.
12. The external providers' interactions with the organization.
13. Control and monitoring of the external providers' performance to be applied by the organization.
14. Verification or validation activities that the organization, or its customer; intends to perform at the external providers' premises.
15. Supplier (External providers) apply appropriate controls to their direct and sub-tier Suppliers (external providers), to ensure that requirements are met.

16. Design and development control.
 17. Special requirements, critical items, or key characteristics.
 18. Test, inspection, and verification (including production process verification).
 19. The use of statistical techniques for product acceptance and related instructions for acceptance by the organization.
 20. To provide Material / Metallurgical test reports along with raw material for traceability through Lot / Batch No. External Provider will also provide date of manufacture of provided Lot / Batch No of raw material.
 21. The need to:-
 - (a) Implement a Quality Management System.
 - (b) Use customer-designated or approved external providers, including process sources (e.g., special processes).
 - (c) Notify the organization of nonconforming processes, products, or services and obtain approval for their disposition.
 - (d) Prevent the use of counterfeit parts.
 - (e) Notify the organization of changes to processes, products, or services, including changes of their external providers or location of manufacture, and obtain the organization's approval.
 - (f) Flow down to external providers applicable requirements including customer requirements.
 - (g) Provide test specimens for design approval, inspection/verification, investigation, or auditing.
 22. Retain records (documented information), including retention periods and disposition requirements.
- Ensuring that persons are aware of:-
- (a) Their contribution to product or service conformity.
 - (b) Their contribution to product safety.
 - (c) The importance of ethical behavior.

Yours Faithfully,


(ASIF AYAZ)
Squadron Leader
for Managing Director
AMF PAC Kamra
Tele No. 051-90995292

SPECIFICATION OF SECURITY EQUIPMENT

BULLET PROOF JACKET

Composition	<ul style="list-style-type: none"> • Front and rear soft Armour Panels (SAPs). • Front and rear Hard Armour Plates (02 HAPs). • Integrated Neck protection. • Removable Groin protection. • Pouches of ammunition and communication (6-8) (As specified by Dte of Security during finalization of advance sample). 				
Protection Level	<ul style="list-style-type: none"> • Only SAPs (without HAPs) : Level PK III-A • HAPs (in conjunction with SAPs) : Level PK III 				
Weight	<ul style="list-style-type: none"> • Weight of SAPs : Max 2.5 Kg • Weight of HAP (each plate) : Max 1.8 Kg • Total Weight of complete Bullet Proof Jacket including Outer Cover, pouches, SAPs & HAPs Max 7.5 Kg 				
Size of Jacket	S No	Description	Size		
			Chest	Waist	Length
	(a)	Medium	42-44	36-38	21-22
(b)	Large	45-47	39-41	20-21	
Design	<ul style="list-style-type: none"> • The design of Jacket shall comply with following aspects:- • Maximum protected cover area. • Weight distribution to reduce fatigue and comfort to wearer. • High quality adjustable straps providing good body fitting • In addition to the Velcro, Quick release Buckle of good quality shall be provided at where required. • Right shoulder joint should be fixed and a leather patch should be provided for rifle Butt. • Left Shoulder strap should have sufficient length to relax the neck. Provided buckle (in addition to the Velcro) can be disconnected from the ring so that left shoulder can be fully disconnected. • Strap for Hand Held Torch should be provided in centre. • Additional utility strap should be provided at ammo pouches and Hard Armour pouch. • Hand Grip at back side of Bullet Proof Jacket. 				
Material	<ul style="list-style-type: none"> • Soft Armour Panels (SAPs). SAPs shall comply with following:- • 02 SAPs with integrated neck and groin protection inserts. • Made with adequate layers of spectra or spider silk or nano-based armour of gold flex or Dyneema or Kevlar or equivalent. • Packing cloth / material of SAPs shall be fire resistant and Water proof. • All soft body armour made of Dyneema shall be immune to water humidity exposure. • SAPs shall have minimum shelf life of at least 05 years. • Hard Armour Plates (HAPs). HAPs shall comply with following:- • Single or double curve with swimmer cut. • Size should be 9.5 x 12.5 Inches (±0.5 Inches) • Multi hit capability. • Made of Composite or Polyethylene or Ceramic (Aluminum Oxide, Boron Carbide or Silicon Carbide), backed by light weight spectra or spider silk or nano-based armour or gold flax of Dyneema of Kevlar or equivalent. • Outer Cover. Carrier shall comply with following:- • Made of high quality 1000 denier polyester. • Flame retardant. • Water proof. • Camouflage color and pattern <i>(However, final colour scheme will be provided by Dte of security at time of finalization of advance sample).</i> 				

TECHNICAL SPECIFICATION OF THERMAL CAMERA

THERMAL CAMERA	
Image sensor	VO x UFPA
Effective pixels	640(H)x512(V) <i>or more</i>
Pixel size	17um
Thermal sensitivity (NETO)	<40mk@f/1.0
Spectral range	8~14um
Image setting	Brightness/sharpness/ROI/AGC/FFC/3D DNR
Color Palettes	14 (white hot/black hot/iron row/ice fire/Fusion/Rainbow/Glow etc)
THERMAL LENS	
Lens type	Motorized
Focus Control	Auto / Manual
Focal Length	30 mm ~ 150 mm or more
Angle of view	H :20.6° ~ 4.2° v : 15.5° ~ 3.1°
Effective distance Man (1.8m * 0.5m)	Detection : 4500m or more Recognition : 1150m or more Identification: 570m or more
Effective distance Vehicle (2.3m*2.3m)	Detection : 13200 m Recognition : 3500 m Identification: 1800 m
IR (Optical Defog)	500 mtr or more
FPS	50 Fps or more
VISIBLE CAMERA	
Image Sensor	1/1.9" CMOS
Effective Pixels	1944(H)x1092(V) or more
Electronic shutter speed	1.1 ~ 1/30,000s
Minimum illumination	0.0005 Lux@F1.5 (colour) , 0.0001 Lux@F1.5 (B/W)
S/N Ratio	More than 55dB
VISIBLE LENS	
Focal Length	12.5~775 mm or more
Max Aperture	F3.8
Angle of view	H :28.8° ~ 0.5°
Optical zoom	62x
Focus control	Auto / Manual
Close Focus Distance	100mm ~ 1000mm (0.33ft ~ 3.28 ft) or more
PTZ	
Pan / Tilt Range	Pan: 0 ~ 360° endless Tilt: -45° ~ 60° (-60° ~ 60° optional)
Manual Control speed	Pan: 0.01° ~ 12° /s, Tilt -0.01° ~ 9° /s
Preset speed	Pan: 0.01° ~ 12° /s, Tilt -0.01° ~ 9° /s
Preset	300
PTZ Mode	5 Auto scan, 8 Tour, 5 Pattern, Auto Pan
Speed Setup	Human-oriented focal length / speed adaptation
Power up action	Auto restore to PTZ and lens status after power failure
Idle Motion	Activate Preset/Scan/Tour/Pattern if there is no command in the specified Period)
Protocol	DH-SD, Pelco-PD (Auto Recognition)

SPECIFICATIONS OF ALLIED ACCESSORIES OF THERMAL CAMERA

NVR	<p>Intel Processor 64 IP Camera Input of more 384 Mbps Incoming Bandwidth or more 12MP Resolution for Preview and Playback or more Supports RAID 0/1/5/6/10 Smart Tracking and Intelligent Video</p>
HDD	Surveillance Grade 6 TB HDD or higher
Thermal PTZ Tower / Brackets 40~50 ft	<p>Triangle Pole for PTZ Camera with Guy wire as per requirement complete in all aspects. Foundation Specifications: Earth Pit 18"x18" Concrete Base 36"x36"x48" Iron Base Plate 20"x20" Note: 10 feet each section of PTZ Tower which can extended as per the requirement</p>
40" Full HD LED	Support Full HD 1080p live view, Support HDMI, AV, VGA & network connections sync output (branded new)
Network Control Keyboard for PTZ Camera	<p>Network Keyboard for controlling PTZ camera and central management server 4D Joystick control of PTZ functions Support RS-232, RS485 & Network Connections Support Full HD 1080p live view, Support HDMI & VGA sync output Support snapshot and recording to U-disk Support Video-Wall Display Support bidirectional talk Present Position, Auto Scan, Auto Pan, Auto Tour & Pattern Control Auxiliary Functions, OSD and operation guides Control</p>
Smart Professional Surveillance System (Software Lifetime Licensed)	<p>Configuration of access control supported Advance E-map feature supported Support IPC, PTZ, NVR, EVS, HCVR, NKB, VDP, Access Control and etc. Support 4K cameras Support H.265 streams Support IPv6 devices Support Windows 7,8,9,10 Support smart track Support multiple tours tasks One channel can be split in to different windows Auto fin/import/export supported Easy to manage up to 256 devices or 2000 channels 36 Channels synchronous play back or more Time bar and events play modes available Support joystick to control PTZ Cameras Support Fish eyes cameras virtual PTZ operation by mouse Support E Map, clearly view and manage all devices locations. Alarm can be triggered via different events including IVS PC/NVR enable local storage recording TV wall configuration and Control Support VDP monitoring, talking, announcement and configuration. Account Manage Supported and different users share different privileges Log for Event and User Activities Friendly GUI for any easy operation Support P2P devices Support Fish Eye image correction in both live viewing and playback</p>
POE Switch (4 Port+ 2SFP) for Ring Typology	4 Port Managed POE switch +2SFP GB ports, Support ring network, layer-2 managed, Support private fast ring network, Recovery Time 5 ms, Support IEEE802.3af, IEEE802.3at, Hi-Poe standard, Industrial wide temperature design, POE Management
1.5KVA Online UPS Cabling	Branded UPS with 1.5 hours maintenance free batteries for power backup UTP Cable, Power Cable, Fiber Accessories for connectivity (included)

Pouches	<ul style="list-style-type: none"> • Qty 6 to 8 pouches are required as per following specifications. • Made of 1000 denier cloth. • Flame retardant. • Water proof. • Camouflage colour. • Four (04) Magazine pouches to accommodate SMG / G-3 or compatible magazines. • Two double Magazine pouch to accommodate 9mm Pistol (Removable). • One (01) Pouch for Hand Held Radio Set. • Ammo pouches should be cover with the cloth to secure the Magazine. Pouches cover should have Velcro and button for the sack of tie.
Soft Carrying Case	<ul style="list-style-type: none"> • A soft carrying case of water proof material should be provided with each Bullet Proof Jacket.
Notes:	<ul style="list-style-type: none"> • Each Supplier shall fill in the column "Specs Offered by Supplier" in respect of each of its offered Bullet Proof Jacket. No row / column shall be left blank. • The pouches can all be fixed or removable or a combination of the two.

BULLET PROOF HELMET

Protection Level	<ul style="list-style-type: none"> • Bullet Resistance as per NIJ-III A Standard 0106.01. • Fragmentation as per Stanag 2920 V50 @ 600m/s @ 17 Grain Steel fragment
Weight	<ul style="list-style-type: none"> • Weight (Maximum) : 1.400 Kg weight
Sizes & Qty	<ul style="list-style-type: none"> • Medium Qty-800 (head sizes 53 – 59 cm) • Large Qty-430 (head sizes 59 – 64 cm)
Design Features	<ul style="list-style-type: none"> • Ultra comfortable webbing / harness which provide balance and stress fatigue. • Laser cut edges with rubber coated finishing strip. • Water, Oil and fire resistant. • Multi-hot protection tested on all sides. • It should not restrict the eye sight and hearing • It should allow easy use of communication equipment, goggles and binoculars. • It should not interfere with weapons sight, gas mask, hearing protection devices and it should ensure convenient movement of head. • Internal surface should not cause any skin reaction. • Helmet should be robust and paint should not peel off for 03 years.
Harness Features	<ul style="list-style-type: none"> • Mesh suspension system with leather crown support. • Air gap between harness and shell provides sufficient ventilation and improved sweat management. • Chin strap and neck strap (4-Point with neck pad) should be provided which avoid extra movement of helmet when wear by troops. • Harness should be shock absorption. • Mass distribution should reduce lag during head movement. • Multiple point adjustable harness. • Quick release buckle.
Colour	<ul style="list-style-type: none"> • Colour of helmet will be subject to purchaser's choice.

Note : Equivalent / latest specification available in the market

**TERM & CONDITION FOR PROCUREMENT OF THERMAL CAMERA
ALONG WITH ALLIED ACCESSORIES & SECURITY EQUIPMENT**

1. The technical terms & condition are as per approved & provided specification.
2. Installation, testing, commissioning, configuration charges are must be include in contract.
3. On sight training including operational and maintenance must be included.
4. The newly (under process of Thermal Camera) must be compatible with existing CCTV system.
5. Assurance of after sale service / parts and maintenance.
6. Store must be as per approved / provided specification.
7. Store must be as per approved standard of PACB, Kamra.
8. Store must be factory new and from current lot / production.
9. Store must be in OEM packing.
10. Delivery period should be 04 weeks after signing the contract.
11. OEM warranty is required for at least 03 years.