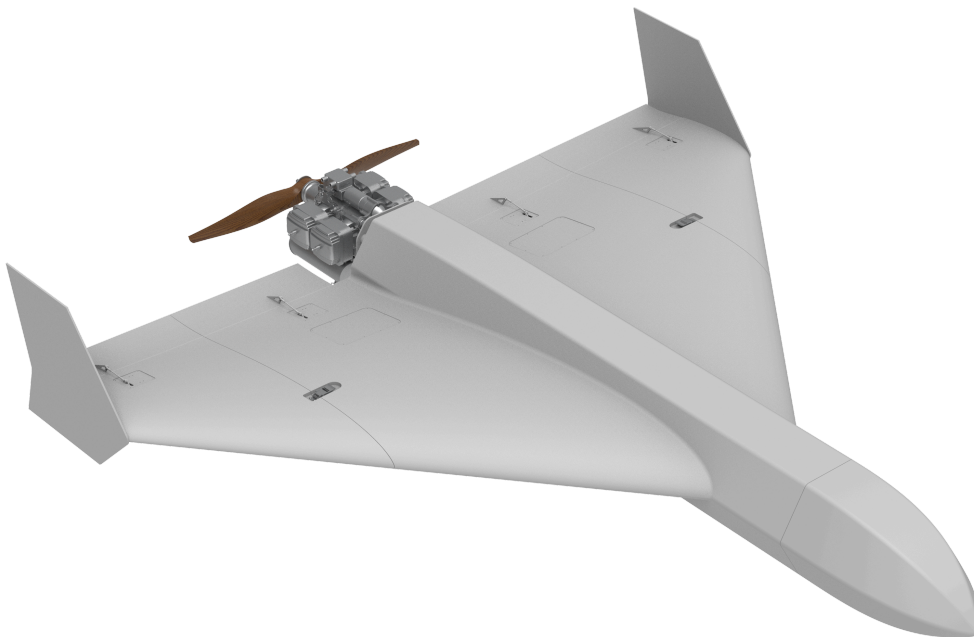


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≡ Doc	mx150
🌐 Visibility	public
≡ Title	TH-MX150 — Long-Endurance Industrial Fixed-Wing UAV
≡ Description	For Large-Area Inspection & Mapping



## TH-MX150 — Long-Endurance Industrial Fixed-Wing UAV

One-Pager (English Version)

## TH-MX150 — Heavy-Duty Fixed-Wing UAV for Large-Area Inspection & Mapping

**4–8 hr Endurance · 15–25 kg Payload · 200+ km Range · Designed for Desert & High-Heat Missions**

TH-MX150 is a **large-scale industrial fixed-wing UAV** designed for **nation-level mapping, oil & gas pipeline inspection, long-range patrol, power corridor monitoring, and environmental surveillance.**

Engineered for **desert heat, wind, sand, and large-area missions**, it is ideal for Middle East applications.

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### CORE HIGHLIGHTS

- **Ultra-long endurance (4–8 hours)** depending on payload configuration
  - **Large payload bay** supporting *EO/IR gimbals, Lidar, SAR radar, multispectral sensors, gas-detection modules*
  - **Long-range command link (100–200 km)**, optional SATCOM
  - **High wind & heat resistance** — optimized for desert operations
  - **Autonomous takeoff/landing, route planning, terrain following**
  - **Supports BVLOS operations**, compliant with industrial & government projects
  - **Modular design** for rapid field assembly and maintenance
- 

### KEY APPLICATION SCENARIOS

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#### 1. Oil & Gas Pipeline Inspection (ARAMCO / ADNOC / KPC)

- Detect leaks, temperature anomalies, third-party intrusion
- Fly *hundreds of kilometers* in a single sortie

- Supports methane, VOC sensors, and high-resolution mapping

**Customer Benefit:** Replace helicopter patrol with 90% cost savings.

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## 2. Long-Distance Transmission Line Inspection

- HV/MV grid corridors (50–200 km per mission)
- Detect hotspots, structural damage, vegetation encroachment
- Compatible with Lidar + EO/IR combo package

**Benefit:** One aircraft covers what normally requires multiple teams.

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## 3. National-Level Photogrammetry & Mapping

- DEM/DOM/Orthomap generation
- Lidar scanning for cities, desert roads, coastline
- 5–25 kg mapping-grade payloads

**Benefit:** Survey-grade accuracy for government terrain projects.

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## 4. Border, Coastline & Desert Patrol (Civil Use)

- Coastline monitoring
- Desert vehicle tracking
- Illegal dumping / environmental damage detection

**Benefit:** Perfect for Middle East vast terrain & harsh climates.

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## 5. Forest Fire Early Detection & Environmental Monitoring

- Long-endurance thermal scanning
- Hotspot recognition
- Air quality / pollution monitoring

**Benefit:** Multi-hour persistent coverage for national parks & reserves.

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## SPECIFICATIONS (Typical Configuration)

Item	Specification
<b>Wingspan</b>	4.5–6.0 m (depending on version)
<b>Takeoff Weight</b>	45–65 kg
<b>Payload Capacity</b>	10–25 kg
<b>Endurance</b>	4–8 hours
<b>Cruise Speed</b>	80–120 km/h
<b>Max Range</b>	200+ km
<b>Ceiling</b>	4500–5500 m
<b>Sensors Supported</b>	EO/IR gimbal, mapping camera, Lidar, SAR, multispectral
<b>Fuel Type</b>	Electric / hybrid / gasoline options (depending on variant)
<b>Takeoff/Landing</b>	Runway / catapult / net landing (variant-specific)
<b>Operating Temp</b>	-20°C to +55°C (desert optimized)

Full datasheet can be delivered if needed.

## PACKAGE CONFIGURATION (Example)

### TH-MX150 Industrial Mapping Kit

- TH-MX150 UAV ×1
- EO/IR gimbal + mapping camera / Lidar module
- 100–200 km long-range command link
- Mission planning software + ground station
- Portable launch & recovery tools
- Optional:
  - SATCOM / LTE hybrid link

- AI pipeline leak detection module
- Desert operation kit (sand filter + heat shielding)
- NESMA local operation & maintenance partnership

[attachment:43db3bce-29d6-4768-a7f7-7433a96db47b:Car\\_top\\_launch\\_1.mp4](#)

## TH-MX150 大型工业固定翼无人机 — 一页纸 (中文正式版)

### TH-MX150 — 大范围巡检 / 测绘的长航时固定翼无人机

**4-8 小时续航 · 10-25 kg 载荷 · 200+ km 巡检半径 · 专为中东高温/风沙环境打造**

TH-MX150 是一款面向 **能源、电力、石油天然气、国土测绘、海岸/边境巡逻、森林防火** 的大型工业级无人机平台。

具备 **超长航时、大载荷、大范围覆盖、强环境适应能力**，特别适用于沙特、阿联酋、卡塔尔等中东地区的大范围任务需求。

### 核心亮点

- **4-8 小时超长航时**（视载荷而定）
- **10-25 kg 大载荷能力**（双光吊舱、激光雷达、SAR、气体检测、测绘相机）
- **100-200 km 图传/指控距离**（可选卫星链路）
- **适应沙漠高温、强风、风沙侵蚀环境**
- **自动起降、航线规划、地形跟随**
- **可执行 BVLOS 超视距任务**
- **模块化设计，便于快速维护与更换载荷**

# 典型应用场景

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## 1. 石油天然气管道巡检（ARAMCO / ADNOC）

- 管道泄漏识别
  - 第三方入侵监测
  - 温度异常检查
  - VOC/甲烷检测
  - \*价值：\*\*替代直升机巡检，成本降低 **90%**。
- 

## 2. 输电线路长距离巡检

- 50-200 km 大范围航线
  - 绝缘子、金具、导线缺陷识别
  - 激光雷达 + EO/IR 组合方案
  - \*价值：\*\*一架飞机覆盖传统 3-5 个班组的工作量。
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## 3. 国家级航测 / DEM / DOM

- 城市规划
  - 沙漠道路、海岸线测绘
  - 林区、山区地形扫描
  - \*价值：\*\*满足政府级测绘精度要求。
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## 4. 边境 / 海岸线 / 荒漠巡逻（民用）

- 海岸线渔业监控
  - 车辆活动与非法倾倒识别
  - 环境破坏预警
  - \*价值：\*\*中东广袤地形的最佳巡逻平台。
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5. 森林防火监测

- 热点检测
- 烟源识别
- 连续长时间巡护
- \*价值：\*\*适合国家公园、自然保护区等场景。

关键参数（典型版）

项目	参数
翼展	4.5–6.0 米（视版本而定）
起飞重量	45–65 kg
载荷能力	10–25 kg
续航时间	4–8 小时
巡航速度	80–120 km/h
航程	200+ km
升限	4500–5500 m
支持载荷	双光吊舱、测绘相机、激光雷达、SAR、多光谱
动力	纯电 / 混动 / 油动（因版本而异）
起降方式	跑道 / 弹射 / 拦网
工作温度	-20°C 至 +55°C（沙漠适配）

典型套装（示例）

TH-MX150 国家级巡检测绘套装

- TH-MX150 主机 ×1
- 双光吊舱 + 测绘相机 / 激光雷达
- 100–200 km 指控链路
- 地面站（含 BVLOS 航线规划工具）
- 可选沙漠适配套件（防尘、散热升级）

- 可选 SATCOM 四网链路
  - NESMA 本地运维合作服务（可选）
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