

FY-16

3-AXIS EO/IR GIMBAL SYSTEM

TECHNICAL SPECIFICATIONS

90× OPTICAL ZOOM	4× IR ZOOM	3 km LASER RANGE
1280x720 HD THERMAL	3 AXIS STAB.	24/7 OPERATION

OPERATIONAL · ACTIVELY DEPLOYED

CAPABILITIES

- Automatic target tracking
- Image exploitation
- Scene & target tracking
- HD live streaming
- Role-based access
- AI module ready

FY-16 GIMBAL SYSTEM

EO / IR / LRF · 3-axis stabilized

SECTION 02

USE CASES

Operational scenarios enabled by the FY-16 platform

ONE PLATFORM · MANY SCENARIOS

Defense · Civilian · Industrial · Environmental

01



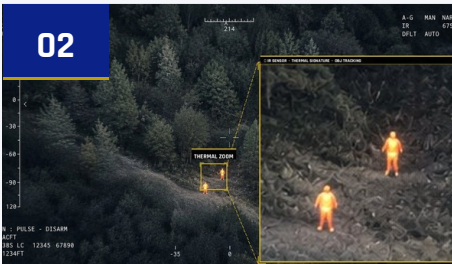
SCENARIO 01

CRITICAL INFRASTRUCTURE

Energy, dam and strategic facility security

Perimeter surveillance of hydroelectric plants, dams and energy facilities. Continuous, secure monitoring from high altitude with automatic target tracking.

02



SEARCH & RESCUE

Night operations with thermal signature

Detection of missing persons in mountainous and dark environments. Critical support in areas inaccessible to conventional methods, enabled by thermal sensing.

03

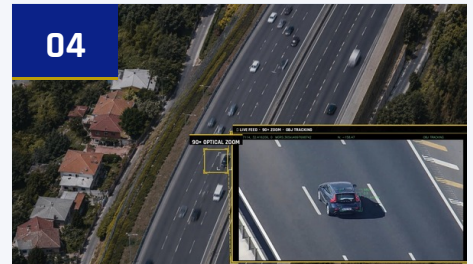


WILDFIRE

Early ignition and spread analysis

Detection of early-stage fire points in pine forests. Real-time coordinate relay to response teams dramatically reduces intervention time.

04



TRAFFIC SURVEILLANCE

Speed measurement and vehicle tracking

Aerial speed measurement, license plate recognition and vehicle tracking on highways and within urban areas. Sharp EO imagery down to plate level with 90x optical zoom.

05



CROWD & EVENT

Event and public order monitoring

Live video coordination at events, demonstrations and crowd gatherings. Command centers make decisions independent of the field.

06



CONVOY & ESCORT

Route reconnaissance and threat scanning

Aerial escort for ground convoys. Threat scanning along the route and aerial perimeter monitoring around bases.

07



COASTAL & MARITIME

Coast guard patrol and inspection

Coastal patrol, illegal fishing control, pollution detection. Critical aerial view for maritime search and rescue coordination.

90×

Optical Zoom

3 km

LRF

3-AXIS

Stabilization

24/7

Operation

< 0.01°

Precision

HD

EO + IR

SECTION 03

INTEGRATION ARCHITECTURE

03

Media server · Role-based access · AI modules

INTEGRATION PILLARS



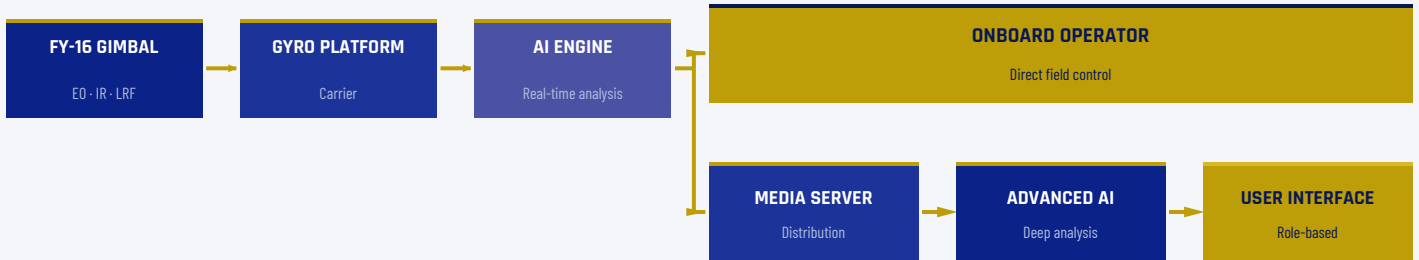
FY-16 AIRFRAME INTEGRATION



FY-16 OPERATIONAL FLEET

DATA FLOW ARCHITECTURE

· Two-tier AI: onboard real-time analysis + server-side advanced processing



01

MEDIA SERVER

INTEGRATION PILLARS

EO/IR video stream is routed to the central media server; distributed simultaneously to multiple screens.

- ▶ Low-latency streaming
- ▶ Multi-screen distribution
- ▶ Multi-protocol support
- ▶ Command-field sync

02

ROLE & PRIVILEGE

INTEGRATION PILLARS

User profiles fully separate image access and control privileges.

- ▶ Operator / Authorized / Viewer
- ▶ Profile-based view
- ▶ Fully auditable access
- ▶ Data leak protection

03

AI ENGINE

INTEGRATION PILLARS

Runs onboard and server-side AI in two tiers; provides scenario-driven operational support.

- ▶ Vehicle & plate detection
- ▶ Pedestrian & object detection
- ▶ Crowd density
- ▶ Thermal anomaly alerts

CONTACT

CONTACT US FOR DEMO AND INTEGRATION

info@lapisteknoloji.com · +90 312 395 33 66 · lapisteknoloji.com