# MFE Inspection Solutions

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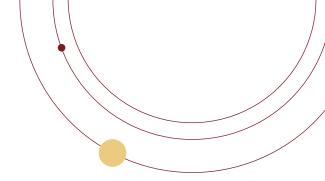
**Equipment Catalog** 



Providing 30 years of equipment rentals, sales, repairs, calibrations & training

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# Valued Customers













# Who is MFE Inspection Solutions?

**Welcome to MFE.** Our story isn't just a list of products and services, it's about a team driven to innovate in non-destructive testing (NDT), remote visual inspection (RVI), environmental monitoring (ENV), and the use of unmanned robotic systems. We're the combination of MFE Enterprises, MFE Inspection Solutions, and NDT Electronics—a blend that's pushing the industry forward.

#### **Starting Point: MFE Enterprises**

(Founded in 1994)

It all started with MFE Enterprises. Founded by Bill Duke and his family, we hit the ground running with Magnetic Flux Leakage (MFL) technology for inspecting storage tanks and pipelines. With tools like the 65 lb Mark IV Tank Floor Scanner and the 61 lb MFE Edge, we've made inspections faster, more accurate, and cost-effective. This foundation of innovation and quality set the pace for everything that followed.

#### **Expansion: MFE Inspection Solutions**

(Founded in 2009)

Building on MFE Enterprises' legacy, we launched MFE Inspection Solutions in 2009. Starting in a modest office in Texas, our ambition was global. MFE's focus has been on delivering the best tools and technology, supported by dependable customer service. With 14 offices in five countries, we ensure we're always where our customers need us

#### **Broadening Our Scope: NDT Electronics**

(Founded in 1981, Joined in 2016)

The acquisition of NDT Electronics in 2016 expanded our capabilities. Founded in 1981 by William Ganch, Jr., NDT Electronics brought decades of expertise in calibration and repair services, as well as a catalog of NDT equipment and supplies. This addition has allowed us to offer a broader range of services and maintain our commitment to quality and value.

#### **Forward Together**

Today, MFE stands as a unified force in the inspection industry, dedicated to innovation, excellence, and serving our customers. Our combined experience and expertise mean we offer a comprehensive range of products and services designed to meet your needs.

We're committed to your success and pride ourselves on offering solutions that enhance your projects with precision and safety. If you have questions or need support, our team is ready to help.

Thank you for choosing MFE. We're excited to continue this journey with you, providing the reliable, professional service you expect and deserve.









# Dock 2

#### Overview:

The DJI Dock 2 is an innovative autonomous drone docking station designed to simplify and enhance aerial operations. With rapid deployment, automated charging, and mission scheduling, the Dock 2 is the ultimate solution for industries requiring remote monitoring and inspection. Its weather-resistant design and robust features make it ideal for critical operations in diverse environments, reducing manual intervention and operational downtime.

#### **Features**

- Rapid Deployment: Enables drones to be airborne in just 45 seconds with precise pre-flight checks.
- Automated Mission Scheduling: Streamlines workflows with programmed flight paths and schedules.
- All-Weather Resilience: Operates reliably in extreme temperatures and harsh conditions, with IP54 and IP56 ingress protection.
- Enhanced Landing Precision: Advanced image recognition ensures safe and accurate landings on the slide-ramp centering pad.
- Seamless Integration: Pairs with DJI FlightHub 2 for real-time monitoring, fleet management, and mission planning.
- Built-in Backup Battery: Ensures uninterrupted operations for over five hours during power outages.
- Extended Maintenance Intervals: Requires maintenance only every six months, reducing costs and effort.



### DJ

# Matrice 300 RTK

#### Overview:

The DJI Matrice 300 RTK is a cutting-edge commercial drone platform inspired by modern aviation systems. It delivers superior flight performance, reliability, and intelligent features, making it an ideal solution for various industrial applications, including inspection, mapping, and surveillance.

#### **Features**

- Enhanced Flight Performance: Up to 55 minutes of flight time, with a maximum speed of 23 m/s and wind resistance of 15 m/s. It also features a maximum service ceiling of 7000 meters and a descent speed of 7 m/s.
- Improved Transmission System: OcuSync Enterprise technology supports a 15 km transmission range with triple-channel 1080p video and real-time auto-switching between 2.4 GHz and 5.8 GHz for reliable data transmission in high-interference environments.
- Advanced AI Functions: AI Spot Check automates routine missions by replicating position, angle, and framing for future flights. Pinpoint function allows for precise location sharing with ground teams via DJI Flight Hub.
- Comprehensive Sensor Suite: Dual vision and ToF sensors on all six sides provide ultimate
  obstacle avoidance and situational awareness.
- Multiple Payload Configurations: Supports up to three payloads simultaneously with a maximum
  payload capacity of 2.7 kg. Configurations include single downward gimbal, single upward gimbal
  with a single downward gimbal, and single upward gimbal with dual downward gimbals.
- Intelligent Features: Includes advanced mission planning and management, and the ability to capture detailed imagery through high-res grid photos with a single tap.



**FOR RENT** 

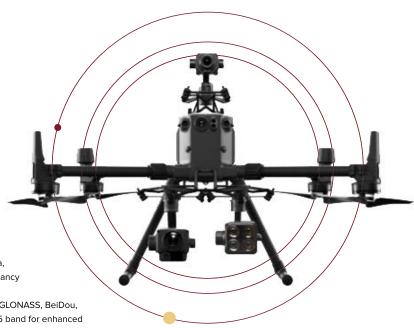
# Matrice 350 RTK

#### Overview:

The DJI Matrice 350 RTK is a next-generation aerial platform designed to deliver exceptional flight performance, advanced features, and unparalleled reliability. Engineered for diverse industrial applications, it excels in demanding environments, providing professionals with the tools needed for accurate and efficient data collection and inspection.

#### **Features**

- Enhanced Flight Performance: Capable of up to 55 minutes of flight time, with a maximum speed of 23 m/s and wind resistance of 15 m/s.
- O3 Enterprise Transmission System: Offers triple-channel 1080p HD live feed with a transmission range of up to 20 km (12.43 miles), ensuring stable and reliable connectivity.
- Advanced Safety Features: Includes an arm lock indicator, night-vision FPV camera, 6-directional sensing and positioning system, CSM Radar, and multi-layered redundancy design for comprehensive obstacle detection and avoidance.
- Powerful GNSS & RTK Module: Supports multiple satellite systems including GPS, GLONASS, BeiDou, and Galileo, with improved signal reception and RTK module supporting the GPS L5 band for enhanced accuracy.
- Upgraded Battery System: Utilizes the TB65 Intelligent Flight Battery and the BS65 Battery Station, allowing for efficient power management and up to 400 charge cycles.
- Versatile Payload Capacity: Supports up to 2.7 kg, accommodating various gimbal configurations and payloads such as Zenmuse H20 Series, P1, L1, and H20N.
- Robust Build: IP55 protection rating, enabling operation in various weather conditions.
- Intuitive Control Experience: Features a 7-inch high-brightness screen, IP54 rating, and compatibility with DJI Pilot 2 app for enhanced situational awareness and control.



# Matrice M30

#### Overview:

The DJI Matrice M30 is a high-performance drone designed for industrial applications, offering advanced features for efficient and reliable inspections, mapping, and surveillance. Its compact design and robust build make it suitable for a wide range of environments and operational needs.

#### **Features**

- Compact and Portable Design: The M30 is lightweight, easy to transport, and quick to deploy, with features like a quick arm-lock mechanism and built-in landing gear.
- High-Resolution Imaging: Equipped with a wide and zoom camera supporting up to 200x maximum zoom, and a thermal camera in the M30T variant for identifying thermal anomalies.
- Obstacle Avoidance: Dual vision and infrared ToF sensors on all six sides of the aircraft provide comprehensive obstacle detection and avoidance.
- Advanced Safety Features: Includes DJI AirSense (ADS-B in), three-prop emergency landing, arm-lock detection, and dual hot-swappable battery locks.
- Long Flight Time: Capable of up to 41 minutes of flight time, with a robust battery system supporting hot-swapping.
- Enhanced Transmission: Features a 9.3-mile transmission range with four antennas for improved signal reception.
- Powerful Remote Control: The DJI Remote Control Plus with an 8-core chip, dual RC capability, and a battery life of up to 6 hours.
- BS30 Battery Station: Offers three different charging modes—Standard, Ready-to-Fly, and Storage—for
  efficient power management.



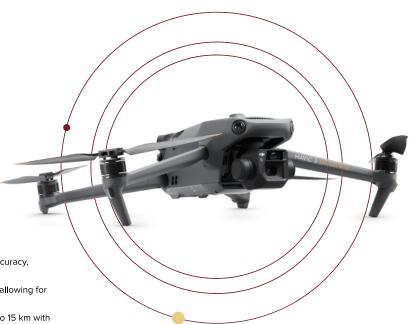
# Mavic 3 Enterprise

#### **Overview:**

The DJI Matrice 350 RTK is a next-generation aerial platform designed to deliver exceptional flight performance, advanced features, and unparalleled reliability. Engineered for diverse industrial applications, it excels in demanding environments, providing professionals with the tools needed for accurate and efficient data collection and inspection.

#### **Features**

- High-Resolution Camera: Equipped with a Hasselblad L2D-20c aerial camera featuring a 4/3 CMOS sensor for capturing high-quality 20 MP images and 4K video.
- Omnidirectional Obstacle Sensing: Multiple wide-angle vision sensors provide comprehensive obstacle avoidance, ensuring safer flight missions.
- Surveying Capabilities: Includes RTK (Real-Time Kinematic) for centimeter-level accuracy, with a mechanical shutter and a 1/2000 shutter speed for precise mapping.
- Long Flight Time: Capable of up to 42 minutes of flight time with the RTK module, allowing for
  extensive coverage and efficient data collection.
- Advanced Transmission System: O3 Enterprise transmission offers a range of up to 15 km with triple-channel 1080p video transmission for reliable connectivity.
- High-Speed Mapping: Achieves a mapping speed of up to 15 m/s at an altitude of 120 meters, covering large areas quickly.
- Quick Charging: The 100W charging hub charges a single battery in 70 minutes, facilitating continuous
  operations with minimal downtime.
- Tele Camera: Features a second camera with 28x hybrid zoom for detailed inspection and planning.



# Mavic 3 Multispectral

#### Overview:

The DJI Mavic 3 Multispectral is an advanced drone designed for precision agriculture, environmental monitoring, and land management. This drone integrates a powerful imaging system that includes both an RGB camera and multispectral sensors, making it ideal for analyzing plant health, crop monitoring, and environmental surveys.

#### **Features**

- Dual Camera System: Combines a 20MP RGB camera with four 5MP multispectral cameras (green, red, red edge, and near-infrared) for comprehensive imaging capabilities.
- RTK Module: Provides centimeter-level positioning accuracy, enhancing the
  precision of aerial surveys and mapping tasks.
- Extended Flight Time: Offers up to 43 minutes of flight time, enabling extensive area coverage and efficient data collection.
- Sunlight Sensor: Captures solar irradiance for accurate light compensation in multispectral data, ensuring consistency and accuracy.
- Omnidirectional Obstacle Sensing: Equipped with multiple wide-FOV vision sensors for 360-degree obstacle detection, ensuring safe operation.
- High-Resolution Imaging: The 20MP RGB camera with a 4/3 inch CMOS sensor delivers high-quality images for detailed analysis.
- Advanced Transmission System: Features O3 transmission for reliable video feed and control
  over distances up to 15 km.
- User-Friendly Design: Compact and foldable, making it easy to transport and deploy in various field conditions.
- Integration with Third-Party Platforms: Compatible with third-party cloud platforms via DJI Cloud
   API and Mobile SDK 5 for flexible data management and application development.



### DJ

# Mavic 3 Thermal

#### Overview:

The DJI Mavic 3 Thermal (M3T) is a versatile drone designed for a wide range of applications, including infrastructure inspections, environmental monitoring, and emergency response. Its integrated thermal imaging capabilities, combined with high-resolution visual cameras, allow for detailed and precise data collection.

#### **Features**

- Thermal Imaging Camera: Equipped with a thermal sensor capable of spot and surface temperature measurements, high-temperature alerts, color palettes, and isotherms.
- Dual Camera System: Includes a 48MP wide camera with a 1/2 inch CMOS sensor and a 12MP tele camera with 56x hybrid zoom.
- Simultaneous Split-Screen Zoom: Supports continuous 28x side-by-side zoom for easy comparison between thermal and visual data.
- Enhanced Flight Safety: Features multiple wide-angle vision sensors for omnidirectional obstacle sensing.
- Extended Flight Time: Offers up to 45 minutes of flight time.
- Advanced Transmission System: Utilizes O3 Enterprise transmission for a range of up to 15 km with triple-channel 1080p video transmission.
- Compact and Portable: Foldable and easy to carry, designed for guick deployment.



# Power 1000

#### Overview:

The DJI Power 1000 is a robust portable power station engineered to meet the energy needs of industrial applications, remote projects, and emergencies. With its versatile 1024Wh capacity and multiple recharging options, this device ensures reliable power in any situation. Whether supporting drone operations, powering mobile field offices, or facilitating outdoor adventures, the DJI Power 1000 is a dependable energy solution designed for seamless productivity and flexibility.

#### **Features**

- High Power Capacity: 1024Wh capacity with stable output (2200W), 30-second surge output (2600W), and peak output (4400W).
- Multiple Output Ports: Includes 2 AC outlets, 2 USB-A ports, 2 USB-C ports, a carport, and DC outputs to power a wide range of devices.
- Versatile Recharging Options: Supports grid power, solar panels, and car power for maximum convenience in any environment.
- Reinforced Safety Features: Built with flame-retardant materials, temperature sensors, and circuit protection for secure operation.
- Durable Design: High-strength structure supports weights up to 220 lbs (100 kg) for rugged industrial use.
- Temperature Tolerance: Operates efficiently in temperatures up to 113°F (45°C).



# Zenmuse L1

#### Overview:

The DJI Zenmuse L1 is an advanced aerial surveying solution that integrates a Livox LiDAR module, a high-accuracy IMU, and a 1-inch CMOS camera on a 3-axis stabilized gimbal. Designed for use with the DJI Matrice 300 RTK drone and DJI Terra software, the Zenmuse L1 offers real-time 3D data capture, making it ideal for detailed mapping and inspection tasks.

#### **Features**

- Integrated LiDAR and RGB Camera: Combines a Livox LiDAR module and a 1-inch CMOS camera for simultaneous data capture.
- High-Accuracy IMU: Ensures centimeter-level accuracy with the integration of GNSS data and a vision sensor.
- Real-Time 3D Data: Capable of generating true-color point cloud models in real-time.
- Operational Flexibility: Can acquire up to 2 km² of point cloud data in a single flight and operates in various environmental conditions, including rain and fog (IP44 rating).
- Night Operation: The active scanning method of the LiDAR module allows for nighttime flights.
- Wide Field of View: Features a 70° FOV for extensive coverage.
- Seamless Integration: Works with DJI Terra for streamlined post-processing and accurate 3D model creation.



**FOR RENT** 

# Zenmuse L2

#### Overview:

The DJI Zenmuse L2 is a cutting-edge aerial LiDAR solution that sets a new standard for precision and efficiency in surveying. Featuring an advanced LiDAR system, high-accuracy IMU, and a sharp-resolution RGB mapping camera, the Zenmuse L2 is designed to transform DJI flight platforms into powerful geospatial data collection tools.

#### **Features**

- Frame-Based LiDAR Technology: Captures a wide array of data points in a single frame, significantly enhancing efficiency and detail in data collection.
- High-Accuracy IMU: Provides centimeter-level precision with real-time accuracy of 0.2° and post-processing accuracy of 0.05°.
- Enhanced Detection Range: Capable of detecting features up to 450 meters in optimal conditions, ensuring detailed data from a distance.
- Point Cloud Rate: Achieves up to 240,000 points per second for rapid and comprehensive data acquisition.
- Reduced Laser Spot Size: Narrowed to 4x12 cm at 100 meters for finer detail and better penetration through vegetation.
- Two Scanning Modes: Offers repetitive and non-repetitive scanning modes to suit various mapping needs.
- RGB Mapping Camera: Features a 4/3 CMOS sensor with a 20 MP resolution, providing high-quality true-color images.
- Operational Flexibility: Can operate up to 120 meters in altitude, extending its utility across diverse surveying conditions.
- Instant Readiness: The IMU system requires no warm-up time, streamlining field operations.



# Zenmuse P1

#### Overview:

The DJI Zenmuse P1 is a state-of-the-art aerial surveying solution designed for high-precision photogrammetry missions. Integrating a full-frame sensor with interchangeable lenses on a 3-axis stabilized gimbal, the Zenmuse P1 enhances efficiency and accuracy, setting a new standard in aerial data collection.

#### **Features**

- 45MP Full-Frame Sensor: Delivers high-resolution imagery for detailed mapping and analysis.
- Interchangeable Lenses: Supports 24mm, 35mm, and 50mm fixed-focus lenses, providing flexibility for various surveying needs.
- Global Mechanical Shutter: Ensures distortion-free images with a fast shutter speed of up to 1/2000s, ideal for capturing moving objects and reducing motion blur.
- Smart Oblique Capture: Automates oblique photography, increasing efficiency by capturing images at multiple angles with fewer passes.
- TimeSync 2.0: Synchronizes the camera, flight controller, RTK module, and gimbal to within microseconds, ensuring precise data alignment.
- Low-Noise, High-Sensitivity Sensor: Performs well in low-light conditions, capturing more detail in challenging environments.
- Efficient Coverage: Capable of covering up to 3 km<sup>2</sup> in a single flight, significantly improving
  operational efficiency.



**FOR SALE & RENT** 

# Elios 3

#### Overview:

The Flyability Elios 3 is an advanced indoor inspection drone designed for navigating confined spaces and challenging environments. It integrates cutting-edge LiDAR technology and a modular payload system, providing unparalleled stability, precision, and versatility for a wide range of inspection applications.

#### **Features**

- LiDAR-Based Navigation: Equipped with FlyAware™ SLAM technology, the Elios 3
  generates real-time 3D maps, allowing pilots to navigate with centimeter-level accuracy
  in complex environments.
- High-Resolution Imaging: Features a 180° field-of-view 4K camera, thermal camera, and distance sensor for detailed visual inspections.
- Modular Payload Bay: Supports future sensor integrations and current configurations, including LiDAR and other auxiliary payloads.
- Enhanced Stability: Utilizes SLAM-based stabilization to maintain steady flight, even in turbulent
  conditions, ensuring high-quality data collection.
- Return-To-Signal Feature: Automatically returns to its original path when signal interruptions occur, enhancing flight safety and operational reliability.
- Extended Flight Time: Offers up to 12 minutes of flight time with the base platform and 9 minutes with the LiDAR payload.
- Rugged Construction: Built with carbon fiber, Kevlar composites, and aeronautical-grade aluminum, ensuring durability in harsh conditions.
- Powerful Lighting System: Provides 16,000 lumens of adaptive lighting, reducing reflections and improving visibility in dark environments.
- User-Friendly Software: Comes with Inspector 4.0 software for intuitive reporting and visualizing inspection data on a high-resolution 3D map.



# Elios 3 Gas Sensor

#### Overview:

The Flyability Elios 3 Flammable Gas Sensor revolutionizes confined space inspections by enabling remote detection of flammable gases in hazardous industrial environments. Designed to pair seamlessly with the Elios 3 drone, this advanced sensor ensures atmospheric safety and operational efficiency, reducing risks to personnel and enabling precise decision-making.

Equipped with NevadaNano's cutting-edge MPS<sup>™</sup> technology, the sensor provides real-time monitoring of over 14 combustible gases, including hydrogen, with unmatched accuracy. Its factory calibration and zero need for field recalibration make it an essential tool for industries such as oil & gas, chemical processing, and infrastructure maintenance.

#### **Features**

- Revolutionary MPS™ Technology: Detects over 14 flammable gases, including hydrogen, with exceptional accuracy, leveraging molecular-level analysis for robust performance.
- Factory-Calibrated for Precision: Eliminates the need for recalibration, ensuring consistent, reliable operation even in challenging environments.
- Independent Power System: Keeps the sensor active during drone battery swaps, reducing downtime and improving inspection efficiency.
- Seamless Payload Compatibility: Works in conjunction with other Elios 3 payloads, such as
  ultrasonic testing tools, enabling versatile, multi-tasking inspection capabilities.
- Customizable LEL Thresholds: Set specific alert levels to adapt to unique inspection scenarios, ensuring both safety and operational flexibility.
- Real-Time In-Flight Readings: Provides continuous gas concentration data directly on the pilot's screen for quick and informed decision-making.
- Splash and Dust Resistant Design: Built to withstand the rigors of industrial environments, ensuring reliable
  performance in harsh conditions.



# Elios 3 Rad Payload

#### **Overview:**

The Flyability Elios 3 RAD Payload is a specialized drone attachment designed for remote radiation detection and localization. Integrated with Mirion Technologies' advanced sensors, it enables precise radiation surveying in challenging and confined environments, ensuring safety and efficiency.

#### **Features**

- Real-Time Radiation Mapping: Provides in-flight radiation readings and creates
   3D maps with precise source localization.
- Mirion Technologies Sensors: Equipped with swappable RDS-32 WR sensors for seamless integration and continuous operation.
- Instant Dose Rate Measurements: Delivers real-time dose rate measurements, enhancing situational awareness and decision-making.
- Durable and Reliable: Built to operate in harsh conditions, ensuring robust performance during critical radiation surveying tasks.
- Comprehensive Data Collection: Allows for detailed radiation data collection, essential for compliance and safety in nuclear and industrial applications.



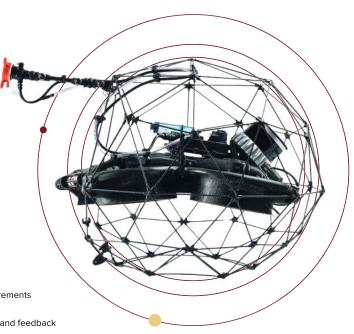
# Elios 3 UT Payload

#### Overview:

The Flyability Elios 3 UT Payload is a sophisticated drone-based ultrasonic testing (UT) system designed for detailed inspections in confined spaces. This system combines advanced UT technology with the maneuverability and robustness of the Elios 3 drone, making it ideal for inspecting tanks, vessels, and other hard-to-reach structures without the need for human entry.

#### **Features**

- Location-Tagged UT Measurements: Provides precise data collection by tagging ultrasonic thickness measurements with their exact location.
- Smart Couplant Dispenser: Ensures consistent coupling for accurate readings, enhancing the quality of ultrasonic inspections.
- Modular Probe Heads: Supports a variety of interchangeable twin crystal piezo-composite probes (2MHz, 5MHz, 7.5MHz) to suit different inspection needs and materials.
- Smart Probe Arm: Flexible mounting options for the probe arm (top, front, or beneath the
  drone) allow for customized inspection setups and improved contact with surfaces.
- Cleaning Module: Prepares surfaces by removing light deposits, ensuring accurate measurements and reducing the need for manual cleaning.
- Live A-Scan Analysis: Real-time ultrasonic waveform display allows for immediate analysis and feedback during inspections.
- Enhanced Live Map: Provides a real-time visual representation of the inspection area with location-tagged measurements, ensuring comprehensive coverage and efficient navigation.
- Advanced Data Post-Processing: Enables verification and refinement of measurements post-flight, ensuring data accuracy and reliability.
- Rugged and Adaptable Design: Built with durable materials and designed to navigate complex environments safely and efficiently.



# Inspector 5

#### Overview:

The Flyability Inspector 5 software is a game-changer in industrial asset inspections, designed to work seamlessly with Flyability's Elios 3 drone. It transforms drone-captured data into actionable insights, streamlining your workflow while enhancing precision and efficiency. Perfect for industries such as oil & gas, power generation, and infrastructure, Inspector 5 enables defect localization, digital twin integration, and structured data organization for optimal asset integrity management.

#### **Features**

- Confined Space Inspections: Inspector 5 is built to support inspections in tight, hard-to-reach spaces, enabling safe and efficient data collection.
- Real-Time Mapping & Defect Localization: Advanced tools help you pinpoint defects and understand their exact locations in your infrastructure.
- Digital Twin Integration: Synchronize inspection data with digital twins for enhanced asset tracking and targeted maintenance planning.
- Automatic Data Structuring: Organize captured data by asset for intuitive navigation and streamlined workflows.
- Advanced Analysis Tools: Select and adjust video frames for points of interest, measure defect dimensions
  with precision, and classify findings by criticality using custom tags.
- Comprehensive Reporting: Compile inspection-wide reports from flight data, add annotations, and export
  professional, branded PDFs.
- User-Friendly Interface: Simplifies data management and allows efficient decision-making with tools designed for industrial needs.



### **MFE Inspection Solutions**

# MFE Detect LW

#### Overview:

The MFE Detect LW is a groundbreaking long-wave infrared (LWIR) optical gas imaging (OGI) camera designed for DJI Matrice 300 and 350 drones. With real-time methane gas leak visualization, it ensures fast and precise aerial inspections.

Fully compliant with EPA regulations OOOOa, b, c, and Appendix K, the lightweight and durable MFE Detect LW is ideal for emissions monitoring, environmental safety, and large-scale industrial inspections, integrating seamlessly with DJI's ecosystem for efficient operations.

#### **Features**

- Advanced Image Processing: Features Gas Enhancement Mode (GEM), Contrast Limited Adaptive Histogram Equalization (CLAHE), and Local Area Processing (LAP) for enhanced visualization of gas plumes.
- High-Performance Detector: Uncooled, high-responsivity focal plane array delivers 640 x 480 VGA resolution for superior image quality and operational efficiency.
- Real-Time Leak Detection: Instantly visualizes methane gas plumes for efficient emissions monitoring and safety assurance.
- Compact & Lightweight Design: Optimized for aerial inspections, enabling multi-sensor payload configurations and improved flight efficiency.
- Manual Focus Lens: OGI-optimized, manually adjustable 24mm lens with 25° horizontal field of view (HFOV) for precise image adjustments.
- Durable Build: Designed for 24/7 operation with over 10 years of lifecycle performance in rugged industrial environments.
- Seamless Integration: Compatible with DJI Pilot 2 software for intuitive operation, dual video output, & onboard digital storage via micro SD.
- Environmental Safety Inspections: Ideal for applications such as landfill monitoring, pipeline inspections, and industrial emissions assessments.
- Efficiency-Driven Workflow: Reduces operational costs by allowing faster identification of leaks and covering larger areas with fewer resources.
- Regulatory Compliance: Fully compliant with OOOOa, b, c, and Appendix K standards, ensuring reliable detection of methane emissions.



### **MFE Inspection Solutions**

# **GPC Cases**

#### Overview:

GPC (Go Professional Cases) Custom Cases provide superior protection and organization for a variety of drone systems, including the DJI Matrice 300 Series and Flyability Elios Series. These custom-designed cases ensure that your valuable equipment is secure, well-organized, and protected during transport and storage. Engineered with rugged materials and precise design, GPC Custom Cases are essential for professionals who require dependable and efficient protection for their drone systems.

#### **Features**

- Custom-Fit Design: Specifically tailored for DJI Matrice 300 Series and Flyability Elios Series
  drones, ensuring a secure fit for all components.
- Rugged Construction: Constructed with high-quality, durable materials to withstand harsh conditions and rough handling, providing robust protection for your equipment.
- Weather-Resistant: Designed to protect against dust, moisture, and impacts, ensuring the integrity of your drone system in various environmental conditions.
- Precision-Cut Foam: High-density foam inserts are custom-cut to securely hold drones, controllers, batteries, and accessories, preventing movement and damage during transport.
- Organized Storage: Multiple compartments and slots for organized storage of all essential components, making it
  easy to access and manage your equipment.
- Ergonomic Handles and Wheels: Equipped with comfortable handles and smooth-rolling wheels for easy transport, even with heavy loads.
- Lockable Latches: Features strong, lockable latches to secure your equipment and prevent unauthorized access.
- Compact and Portable: Designed to be compact and easy to carry, maximizing convenience without compromising on protection.
- Modular Inserts: Includes modular inserts that can be adjusted or replaced to accommodate different configurations and additional accessories.
- Lifetime Warranty: Backed by a lifetime warranty, ensuring long-term protection and peace of mind for your investment.



## Skydio

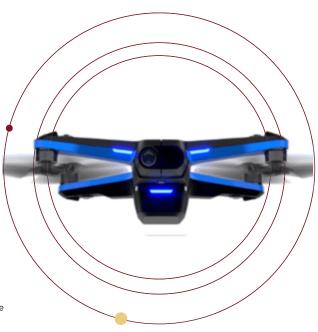
# Skydio 2+

#### Overview:

The MFE GPC cases are specifically designed to provide robust protection and convenient transport for Flyability Elios drones, including the Elios 2 and Elios 3 models. These cases ensure the safety and integrity of your drone and its accessories, making them ideal for field operations and storage.

#### **Features**

- Custom-Fit Design: Tailored compartments securely hold the Flyability Elios drones and all related accessories, preventing movement and potential damage during transport.
- Durable Construction: Made from high-quality, impact-resistant materials, these cases are built to withstand harsh environmental conditions and rigorous handling.
- Waterproof and Dustproof: Features an IP67 rating, ensuring protection against water and dust ingress, which is crucial for maintaining the drone's functionality and longevity.
- Integrated Wheels and Handle: Equipped with smooth-rolling wheels and an ergonomic handle for easy transport, even over long distances.
- Accessory Compartments: Includes dedicated spaces for batteries, controllers, chargers, and other
  essential equipment, keeping everything organized and easily accessible.
- Pressure Equalization Valve: Balances internal pressure while keeping water out, ideal for air travel and changes in altitude.



### **Skydio**

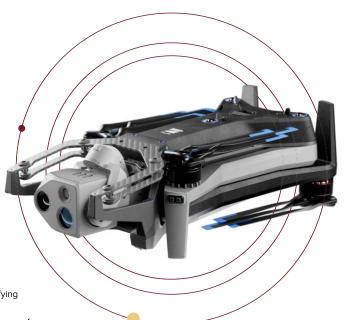
# Skydio X10

#### Overview:

The Skydio X10 is a state-of-the-art drone designed for high-precision industrial inspections, combining advanced Al-driven navigation with superior imaging capabilities. This robust platform is built to perform detailed inspections in various challenging environments, including infrastructure, energy, and public safety sectors. Its autonomous operation and versatile payload options make it an ideal solution for conducting thorough and efficient inspections while minimizing risk to personnel.

#### **Features**

- Autonomous Navigation: Leveraging Skydio's proprietary AI, the X10 provides autonomous flight capabilities, ensuring precise and reliable navigation even in complex environments.
- High-Resolution Imaging: Equipped with a 4K HDR camera, the X10 captures exceptionally
  detailed imagery, essential for identifying minute defects and anomalies.
- Thermal Imaging: The integrated thermal camera allows for efficient thermal inspections, identifying heat anomalies in electrical systems, pipelines, and other critical infrastructure.
- Obstacle Avoidance: Advanced 360-degree obstacle detection and avoidance technology ensures safe
  operation in confined and complex spaces.
- Real-Time Data Transmission: High-speed data transfer capabilities enable real-time video streaming and immediate analysis, facilitating prompt decision-making.
- Versatile Payload Options: Supports a variety of payloads, including LiDAR, thermal sensors, and specialized cameras, to cater to diverse inspection requirements.
- Long Flight Time: Optimized battery life allows for extended flight durations, maximizing inspection coverage per mission.
- Weather Resilient: Built to withstand harsh environmental conditions, ensuring reliable performance in various weather scenarios.
- User-Friendly Interface: Intuitive control interface and flight planning software simplify mission setup and execution, making it
  accessible to users with varying levels of expertise.
- Enhanced Security: Robust data encryption and secure communication protocols protect sensitive inspection data.



## Skydio

# Dock for X10

#### Overview:

The Skydio Dock for X10 is an advanced autonomous drone solution designed to deliver continuous, real-time situational awareness with minimal human intervention. Built for industries requiring reliable remote monitoring and inspection, it offers unmatched efficiency through its beyond visual line of sight (BVLOS) capabilities and Skydio Connect Fusion technology. This ensures seamless connectivity with unlimited range via point-to-point and 5G switching.

#### **Features**

- Autonomous Operations: Enables 24/7 drone missions with minimal manual oversight.
- BVLOS Capabilities: Supports long-distance remote operations with real-time control and monitoring.
- Skydio Connect Fusion: Switches seamlessly between point-to-point and 5G for unlimited connectivity.
- Rapid Deployment: Launches drones in under 20 seconds for quick response times.
- NightSense Technology: Al-powered autonomy for efficient low-light and nighttime operations.
- All-Weather Resilience: Operates in rain, snow, wind, and extreme temperatures, with real-time weather sensors for safe decision-making.
- Enterprise-Grade Security: SOC 2 Type II compliance and customizable safety features for secure and reliable missions.
- Fleet Management: Streamlined control for multiple drones, with automated mission scheduling and performance tracking.



### Starlink Mini

# Portable Internet for Remote Operations

#### Overview:

The Starlink Mini is a compact, portable, and weather-resistant high-speed internet solution designed for remote environments. Perfect for industries such as oil & gas, maritime, and public safety, it provides reliable, low-latency connectivity crucial for operations involving drones, remotely operated vehicles (ROVs), and disaster response teams. With its IP67-rated design, the Starlink Mini ensures seamless data transfer and real-time communication in even the most challenging locations, enabling efficient workflows and critical mission success.

#### **Features**

- Portable Design: Lightweight and compact for easy transportation and deployment in remote environments.
- Weather-Resistant (IP67 Rated): Built to withstand harsh conditions, ensuring consistent performance.
- High-Speed, Low-Latency Connectivity: Delivers reliable internet for real-time operations and seamless communication.
- Broad Coverage: Features a 110° phased array antenna for robust and reliable signal reception.
- Device Support: Connect up to 128 devices simultaneously for extensive operational flexibility.
- Easy Setup: Includes all necessary components for quick and hassle-free installation.
- Compatible with Portable Power Solutions: Ensures uninterrupted operation during critical missions.



### **Teledyne FLIR**

# **OGI 640**

#### Overview:

The Teledyne FLIR OGI 640 Optical Gas Imaging Payload is a specialized drone accessory designed for the detection and visualization of gas leaks. Utilizing advanced infrared technology, this payload is ideal for monitoring and inspecting industrial facilities, including oil and gas, chemical plants, and power generation sites. The OGI 640 enhances safety and efficiency by providing accurate and real-time detection of gas emissions, enabling prompt and effective response to potential hazards.

#### **Features**

- Advanced Infrared Imaging: Uses state-of-the-art infrared technology to detect and visualize a wide range of gases, including methane, sulfur hexafluoride, and other volatile organic compounds.
- High Sensitivity: Capable of detecting even the smallest gas leaks, ensuring comprehensive monitoring and maintenance of industrial facilities.
- Real-Time Visualization: Provides immediate visual feedback on gas leaks, allowing for quick assessment and response to potential hazards.
- High-Resolution Display: Features a high-resolution thermal sensor that delivers clear and detailed imagery for accurate leak detection.
- Wide Detection Range: Capable of detecting gases from a distance, enhancing safety by allowing inspections from safe locations.
- Rugged Design: Built to withstand harsh industrial environments, ensuring reliable performance in various conditions.
- Easy Integration: Compatible with a variety of drones, allowing for flexible and versatile deployment in different inspection scenarios.
- User-Friendly Interface: Intuitive controls and display options make the payload easy to operate, even for users with minimal training.
- Data Logging and Reporting: Capable of recording inspection data for post-flight analysis and reporting, aiding in regulatory compliance and maintenance planning.
- Enhanced Safety: Helps in preventing accidents and ensuring compliance with safety regulations by providing early detection of potentially hazardous gas leaks.



### **Teledyne FLIR**

# MUVE C360

#### Overview:

TThe Teledyne FLIR MUVE C360 is a state-of-the-art drone-mounted multi-gas detector designed for industrial inspection and emergency response. This payload provides real-time detection and monitoring of hazardous gases, making it essential for safety and operational efficiency in industries such as oil and gas, chemical manufacturing, and emergency services. The MUVE C360 enhances situational awareness and helps prevent accidents by offering precise and immediate gas detection capabilities.

#### **Features**

- Multi-Gas Detection: Capable of detecting a wide range of gases, including volatile organic compounds (VOCs), methane, carbon monoxide, and more, ensuring comprehensive monitoring.
- Real-Time Monitoring: Provides instant feedback on gas concentrations, allowing for prompt response to
  potential hazards.
- High Sensitivity: Designed to detect low levels of gases, ensuring accurate and reliable measurements in various industrial environments.
- Rugged and Durable: Built to withstand harsh conditions, the MUVE C360 is suitable for use in demanding industrial settings.
- Easy Integration: Compatible with a variety of drones, facilitating flexible deployment in different inspection and monitoring scenarios.
- User-Friendly Interface: Features an intuitive control system and display, making it accessible for operators with varying levels of
  experience.
- Data Logging and Reporting: Records gas concentration data for post-mission analysis and reporting, aiding in compliance and maintenance planning.
- Enhanced Safety: Helps prevent accidents by providing early detection of hazardous gas levels, ensuring the safety of personnel and the
  environment.
- Compact and Lightweight Design: Easy to mount on drones, ensuring minimal impact on flight performance while maximizing operational
  efficiency.
- Advanced Communication: Equipped with robust communication protocols for reliable data transmission, even in challenging environments.



### Voliro

# Voliro T

#### Overview:

The Voliro T Ultrasonic NDT Drone is a cutting-edge inspection tool designed for performing ultrasonic non-destructive testing (NDT) in hard-to-reach environments. It combines advanced physical interaction capabilities with unprecedented autonomy and omnidirectional functionality, making it ideal for detailed inspections in confined or hazardous spaces.

#### **Features**

- Autonomous Operation: Equipped with advanced pilot assistance and semi-autonomous flight modes, allowing safe and efficient inspections even in GPS-denied environments.
- Omnidirectional Mobility: Capable of tilting up to ±90°, enabling interaction and inspection from any orientation.
- Robust Physical Interaction: Can apply up to 30N of force and various torques, ensuring thorough and stable contact for accurate measurements.
- Modular Payload System: Supports a range of interchangeable payloads up to 1kg, including:
  - Electromagnetic Acoustic Transducer (EMAT): Ideal for corroded and dirty surfaces, compliant with ASTM E1816-18 standards, with a range of 2-150mm and 0.04mm accuracy.
  - Ultrasonic Transducer (UT): Offers Echo-to-Echo and Pulsed Echo test modes with live A-Scan, compliant with EN 12668-1 and ISO 16831:2012, with a range of 4-150mm and 0.06mm resolution at 5900m/s.
  - Dry Film Thickness (DFT) Sensor: Measures protective coating thickness using magnetic induction and eddy current modes, with a range of 0-1500um (or 700um).
- Enhanced Stability: Utilizes thrust-vectoring and 6DoF control to maintain stability during inspections.
- Integrated Sensors: Features two 4K cameras and a depth camera for detailed inspection visuals and data collection.
- Ease of Transport: Comes with a rugged, waterproof, crushproof transportation case, payload box, and accessories box. Batteries are airline-approved for carry-on luggage.



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