DARKWYND SYSTEMS

SYSTEMS CAPABILITY OVERVIEW / SEARCH & RESCUE UAS

PLATFORM ARCHITECTURE

Heavy-lift quadcopter and fixed-wing VTOL configurations.
Mission-configurable modular architecture. Runway-independent VTOL launch and recovery.

FLIGHT AND COMMUNICATIONS

Published endurance: up to 4 hours, with extended loiter capability.
Rapid field deployment; high-wind operational stability; long-range encrypted datalink.

SENSORS AND PAYLOADS

640 x 512 thermal imaging; 4K EO camera; high-zoom stabilized gimbal.
Low-light imaging, laser rangefinder integration, coordinate marking.
Thermal, EO/IR, mapping, rescue delivery, spotlight and loudspeaker payload options.

RECOVERY AND RELIABILITY

Redundant flight systems; encrypted command and video links.
Lost-link autonomous recovery and fail-safe return protocols.
Weather-resistant mission design and high-reliability avionics architecture.

Published capability summary. Final configuration and performance are confirmed for each system.

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SEARCH AND RESCUE

Wide-area and autonomous grid search; persistent aerial overwatch.
Live video to command teams, thermal human detection, GPS-tagged localization.
Night operations, rescue payload delivery, spotlight and loudspeaker integration.

MISSION APPLICATIONS

Search and rescue; disaster and flood response; wildfire reconnaissance.
Mountain and wilderness recovery; coastal and border surveillance.
Long-endurance public safety overwatch.

COMPANY AND DELIVERY

DARKWYND SYSTEMS LLC - US search-and-rescue drone manufacturing.
Designed and manufactured in the USA; secure supply-chain focus.
Government, agency and public-safety mission evaluation.

START A MISSION INQUIRY

Organization and mission profile; operating environment; payload priorities.
Preferred platform, communications needs, deployment and evaluation timeframe.
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