



Many Missions. One Solution.™
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SKELDAR V-200

Multi-Purpose Unmanned
VTOL System

System Introduction

KEY FEATURES AND CAPABILITIES

Trusted by Naval Forces Worldwide

For UMS SKELDAR, the ultimate measure of success is knowing that our multiple use Unmanned Aircraft Systems (UAS) support some of the most challenging tactical maritime and overland scenarios for our customers.

Testament to the V-200's capabilities is the fact that it is the platform of choice for multiple NATO naval forces thanks to its superior intelligence-gathering capabilities and performance.

Rugged components designed to operate in adverse weather and harsh saltwater conditions, ship-based Automatic Take-off, and Landing (ATOL), ship-specific Remote Pilot Station (RPS) integration options, multiple payloads carrying capability and a dependable heavy fuel engine are just some of the features to make the V-200 the ultimate NATO-aligned rotary platform.

Ship-based ATOL System

Ship-based Automatic Take-off and Landing (ATOL) enables landings on dynamic surfaces such as pitching and rolling ship helidecks. Independent positioning assistance enables the V-200 to land in twenty-five knot winds (NATO Sea State 3-4) as well as in reduced visibility conditions such as nighttime, fog, and heavy rain.

Efficient Maintenance & Storage

The V-200's compact size allows for a minimum amount of space to be occupied allowing for efficient transportation and storage. Modular design and easily removable access panels allow for efficient routine maintenance and inspections as well as payload reconfigurations.

System Redundancy

From the start, redundancy has been engineered into every aspect of our system. Features such as redundant power and fuel systems, a dual-core FCU and strong datalinks enable the V-200 to remain airborne should an emergency occur.

Payload Flexibility

DEVELOPED FOR LAND AND MARITIME OPERATIONS



Forward Position

- Designed for Optical Sensors



Long Range Data Link

- Range 100 km+

Example high-end EO/IR & SAR sensor combination



Central Position

- **Tactical Multi-Intelligence (Multi-INT) Synthetic Aperture Radar (SAR) including:**
 - SAR Modes
 - Maritime Moving Target Indicator (MMTI)
 - Moving Target Indicator (MTI)
 - Wide-Area Motion Imagery (WAMI)

Industry-leading Heavy Fuel Engine

Designed to operate on kerosene-based Jet A-1, JP-5 and JP-8 fuels, the V-200's Hirth direct-injected parallel-twin two-stroke engine sets the benchmark for efficiency and dependability. High-grade components provide excellent reliability and prolong Times Between Overhauls (TBO).

Training and Simulation

UMS SKELDAR is an approved training organization offering conversion courses such as our multi-day Intelligence, Surveillance and Reconnaissance (ISR) training program led by professionals with years of industry and frontline experience.



Scan the QR code to learn more about our **Training and Simulation**.



Operational Sensors

ENHANCED CAPABILITIES

Payload Options

As an agnostic platform, the V-200 is an open architecture to numerous sensor combinations supporting role change payloads.

Depending on mission needs, Commercial-Off-The-Shelf (COTS) high-resolution Electro-Optical/Infrared (EO/IR), Synthetic Aperture Radar (SAR), Light Detection and Ranging (LiDAR), Electronic Warfare (EW) sensors and other mission-specific payloads are offered.

- ▶ **Sensors:**
 - Night & Day Electro-Optical/Infrared (EO/IR) Sensors
- ▶ **Radar & LiDAR options including:**
 - Synthetic Aperture Radars (SAR)
 - Maritime Radars
 - Bathymetric Light Detection and Ranging (LiDAR)
- ▶ **Electronic Warfare (EW) payloads:**
 - Communication Monitoring and Intelligence (COMINT)
 - Radar Emitting Sensing Equipment (RADINT)

EW and Radar Sensing Payload Benefits

Today's Unmanned Aircraft Systems (UAS) operate in a complex and multifaceted signals environment. Equipping the V-200 with EW or Radar Emitting Sensing payloads enables the interception, locating, detection, disruption and jamming of signals from potential threats. Situational awareness is heightened and response times from air, sea or land-based forces are reduced.



Connectivity, Control & Integration

INTEGRATION OPTIONS AND AUTOMATIC ASSISTANCE FEATURES



Ship Integration

Alongside an extensive range of vehicle-mounted and land-based RPS options, ship-specific RPS integration options are offered, making the V-200 the perfect platform for ship-based operations. UMS SKELDAR can facilitate RPS integration into existing customer-specific operational infrastructure, including ships such as Frigates, Carriers, and Patrol Ships.



C4ISR and BMS Integration

UMS SKELDAR supports state-of-the-art Battle Management Systems (BMS) as well as Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems integration, enabling the V-200 to provide unmatched levels of aerial situational awareness, shortening sensing and response times.



NATO Compliant & Certified

UMS SKELDAR is fully AQAP-2110 certified – a critical requirement for organizations bidding for MOD or NATO contracts. Our UA's also meet multiple NATO STANAG agreement specifications and requirements allowing for interoperability, coordination, and integration with existing or future platforms and Command, Control, and Intelligence systems.



Mission Automation

Mission automation features such as Point-and-Fly, Point-and-See and Vectoring allow operators to maintain focus where it is needed most, on vital mission objectives.



Reliable Data Link

State of the art high bandwidth phased array antennas allow for a strong data link to be maintained with the V-200. Connection reliability is guaranteed thanks to the elimination of moving parts.



Modular and Intuitive RPS Solutions

Our Remote Pilot Station (RPS) has been designed to reduce fatigue by providing the highest level of operator comfort. An ergonomic design and an intuitive operator terminal provide excellent mission situational awareness, operational efficiency, and the highest levels of flight safety.

Alongside an extensive range of vehicle-mounted and land-based RPS options, ship-specific RPS integration options are offered, making the V-200 the perfect platform for ship-based operations. UMS Skeldar can facilitate RPS integrations into existing specific operational infrastructure (e.g. vehicles, ships).

Aerial Support in Challenging Scenarios

MARITIME AND OVERLAND APPLICATIONS



Synthetic Aperture Radar (SAR)

Featuring an under-belly mounted steerable beam antenna and a high-performance Ground Moving Target Indicator (GMTI), Active Electronically Scanned Array (AESA) Synthetic Aperture Radar (SAR) provides reliable high-resolution all-weather day or night intelligence gathering, ground mapping and surveillance capabilities. High reliability and operational availability are achieved by using numerous solid states Transmit/ Receive Modules within a fixed array.

The system's low power consumption, low weight and compact size make SAR installations in combination with Electro-Optical/ Infra-Red (EO/IR) sensors and other payloads possible.

Key SAR features:

- ▶ Moving Target Indicator (MTI)
- ▶ Wide Area Coverage



Improving Ship Detection Range in Real-time

Capable of simultaneously tracking multiple targets in real-time when equipped with an EO/IR and SAR sensor combination, the V-200 greatly improves ship detectability range and surveillance capabilities, enabling for the dynamic detection of illegal activities such as piracy, narco-trafficking and illegal migration, increasing maritime asset safety and security.



Border Protection

Remote and difficult to access borders present authorities with challenging surveillance scenarios. Six-hour flight times and numerous payload combination options make the V-200 an invaluable asset for coastal and overland border monitoring operations.



Naval Surveillance

Class-leading endurance enables the V-200 to maintain an Over the Horizon (OTH) vantage point for extensive periods, providing the host ship crew with the necessary information to stay one step ahead of evolving seaborne threats. Equipped with the appropriate Signals Intelligence (SIGINT) gathering payload, the V-200 can be used to intercept signals and provide geodetic positioning information of seaborne threats in high-risk scenarios.



Anti Submarine Warfare (ASW)

Capable of supporting wide-area ASW and countermine operations, the V-200 becomes an excellent extended endurance airborne tool for classifying, locating, and tracking submersible threats when equipped with suitable maritime sensors. An ASW equipped V-200 allows an operation to take place at a safer stand-off range, reducing the risk to personnel and the host vessel itself.



Managed Services

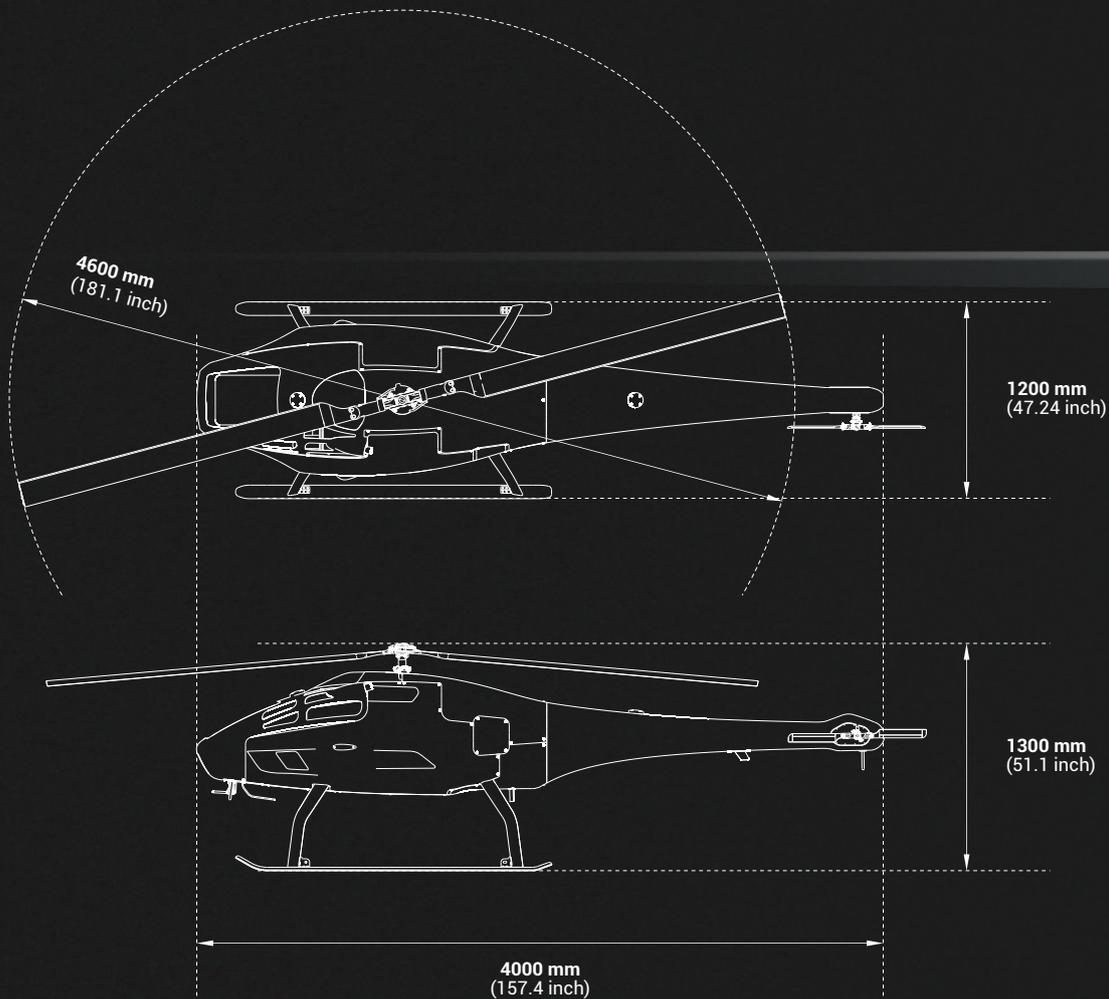
UMS SKELDAR offers an extensive range of managed services including Integrated Logistics Support (ILS), airworthiness approval solutions and operator training. We can also provide complete maintenance back-up and access to dedicated support staff.



Scan the QR code to learn more about our full range of **managed services**.

Technical Specification

& PERFORMANCE DATA



Performance

Payload:	Multiple 40 kg (88 lbs)
MTOW:	245 kg (540 lbs)
Data Link Range:	100 km+ (54 NM)
Service Ceiling:	3000 m (9842 ft)
Max. Airspeed:	140 km/h (75 kts)
Fuel:	Heavy Fuel (Jet A-1, JP5, JP8)
Endurance:	6+ hours*

*Endurance will vary according to payload configuration

Physical

Rotor Diameter:	4.60 m (15 ft)
Airframe Length:	4 m (13 ft)
Height:	1.3 m (4.2 ft)
Width:	1.2 m (4 ft)



For more information please email: info@umsskeldar.aero

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