

**FVR-90 THE FUTURE OF VERTICAL LIFT.
NO LAUNCHERS.
NO RUNWAYS. NO NETS.**



Long endurance. Reduced manpower and logistics. Lower cost.

L3 has solved the enduring paradox of point takeoff & landing with fixed wing endurance using patented Hybrid Quadrotor™ Technology. L3's FVR-90 provides vertical takeoff and landing (VTOL) of a quadrotor with the efficiency, speed and range of a fixed-wing aircraft. FVR-90 is a highly capable Group 3 UAS, with the footprint and logistics tail of a Group 2 system. Its robust and flexible design meets the demands of the Forcible Entry (JFE) Operations to include Detect and Assess Challenges in JFE Operations, and can takeoff and land in winds of up to 30 knots. Combine all that with our 20 years of systems integration expertise, and you'll see why L3's end-to-end solutions are second to none. From hardware to software, logistics to service, when it matters most, we deliver the future of UAS. Only from L3.

Accelerating the pace of change.



Technologies

L3T.COM



Don't Compromise. It's an ethos we all live by, yet many have accepted less with no better solution available. To break this paradigm, L3 Advanced Systems and Technologies has demonstrated dominance through FVR, an uncompromising Fixed-Wing VTOL Rotator Unmanned Aerial System (UAS). FVR is a superior solution to our customers' hardest problems, delivering runway independence, unprecedented endurance and innovative modularity for missions in austere, maritime and confined environments. With FVR, operators can be confident that dynamic mission requirements will drive platform capabilities, not the inverse. Don't compromise for anything less.

KEY FEATURES

- Hybrid Quadrotor™ (HQ) Technology
- Fully runway independent. Point takeoff and landing.
- No launch or recovery equipment required.
- Up to 15 hour endurance depending on payload installed
- Supports up to 22 lb payloads
- Land or sea VTOL capability from within a confined area
- Service ceiling of 20,500 ft DA
- Maximum speed of 65 knots
- Universal mounting interface accommodates various customer payloads
- 2 person operations team – pilot and maintainer / pilot
- 1 hour time to deploy from box to launch
- Small Mobile Ground Control Station (Windows Tablet or Laptop with Datalink)

FUNCTIONAL

- Endurance: up to 15 hrs (depending on payload)
- Maximum Loiter Speed: 65 KIAS
- Launch and Recovery: VTOL capable from land or boat in <20 ft x 20 ft area
- Acoustic Detection Range: 3 km
- Datalink: Bridged IP and RS-232
- Primary Data Link Range: 4 Mbps at 60 km / 1 Mbps at 100 km

FIXED WING VTOL ROTATOR - FVR-90



- Primary Data Link Latency: <500 ms
- Data Link Security: AES 256
- Primary and Secondary Data Links
- Payload modularity via front bulkhead Universal interface
- Payload capacity: up to 22 lbs
- Main payload voltage: 28 VDC
- Payload power: 200 W
- Mechanical provision for dedicated payload GPS antenna
- Fuel Consumption Monitoring: within 5% accuracy
- No critical data stored onboard aircraft
- Loss-of-Link Capability: Autonomous return to base, loiter, and landing
- Total number of personnel to operate: 2
- Time to deploy (shipment to launch): 1 hour
- Pre-flight / post-flight: 30 minutes



ENVIRONMENTAL

- Altitude: 5,000 feet
- Maximum wind speed for VTOL: 25 kts

PHYSICAL

- Size: 15' 10" W X 8' 2" L
- Maximum Gross Take-Off Weight: 117 lbs

OPTIONAL ACCESSORIES

- M-Code receiver for GPS-Denied operation
- Iridium for SATCOM operations

OPTIONAL WESCAM MX-8

- Sensors EO, IR, LRF, LP
- MWIR 640 X 480, 2.75° to 28.4° FOV
- CMOS 1280 X 780, 1.53° to 30.0° FOV
- Laser Rangefinder Class 1
- Laser Illuminator Class 3b Wavelength 852 nm 150 mW
- 4-axis gimbal with 6-axis internal passive isolator
- Digital / Analog Video HD-SDI, NTSC, PAL RS- 232/422, Ethernet
- Power 16-32 VDC 65W avg 180W max
- Weight 15 lbs

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Preliminary Specification - Subject to Change

FVR is controlled under the Export Administration Regulations (EAR), and may not be exported without proper authorization by the U.S. Department of Commerce (ECCN 9A012.a). The MX-8 is controlled under the International Traffic in Arms Regulations (ITAR), and may not be exported without proper authorization by the U.S. Department of State. Data, including, specifications, contained within this document are summary in nature and subject to change at any time without notice at L3 Technologies discretion. Call for the latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders