

# MV-20

There is an urgent DoD operational need for low cost, government owned, open architecture, and agile unmanned surface vehicle (USV) platforms. These unmanned platforms must be capable, yet affordable, with autonomous capabilities to transit into contested waters, loiter, provide surveillance, reconnaissance, and deploy effectors as necessary.

**Accelint's MV-20 platform** is a game-changing USV founded with a thorough understanding of DoD mission requirements and aligned with the DoD's priorities for affordability, scalability, lethality and resilience. The MV-20 provides rapid and enhanced multi-mission capabilities, operational flexibility, and long-term value for the warfighter.



## KEY INNOVATIONS

- **Best-in-class Range:** Diesel efficiency enables over 1,300 nmi
- **Flexibility:** Below-deck payloads are drop-in, while low placement ensures stability
- **Robustness:** Designed for extreme sea state tolerance, including self-righting ability
- **Readiness:** Always-on ultra-low-power standby mode for remote start and diagnostic capability
- **Upgradability:** Modular autonomy hardware for future upgrades and low-cost maintenance
- **Open Framework:** Simple integration of open-standards items and future industry offerings

# MV-20

## Platform Characteristics & Capabilities

### SPEED/RANGE/CAPACITY

- **Top speed:** >30 kt (35 mph)
- **Range:** >1,300 nautical miles at sustained speed
- **Loiter endurance:** >190 hours (1/2 fuel)
- **Fuel:** 350 gallons (No. 2 DFO) in two tanks
- **Weight:** 3,200 lb dry, 5,800 lb wet
- **Payload:** >1,500 lb

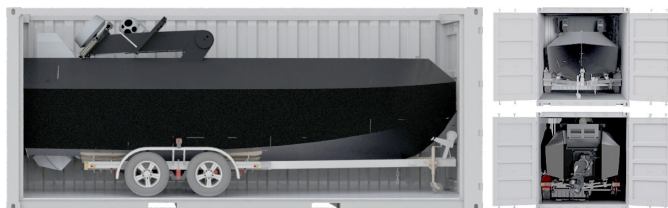
### CHARACTERISTICS

- **LOA:** 19'4" (5.9 m)
- **Beam:** 7'4" (2.2 m)
- **Draft:** 3' (1 m)
- Self-righting
- Meets 46 CFR Subchapter S for single compartment damaged stability
- LPV (Low Profile Vehicle) for reduced radar detection



### PAYLOADS

- Primary and secondary payload bays
- Payloads can be weaponized as various effectors
- Additional fuel capability is available for extended range



### DEPLOYMENT

- Deployable from air/sea/land assets
- Transportable in 20' ISO container
- Rapid manufacturing capability allows mass production volume
- Kit production capable to allow construction in partner nations/remote sites
- Minimal maintenance and total ownership cost due to commercial build plan/COTS systems

### POWERTRAIN

- **Engine:** Mercruiser 3.0L diesel, rated at 270 HP
- **Outdrive:** Mercury Bravo 3 outdrive with contra-rotating propellers
- **Power:** Dual isolated battery banks with 12 V, 110 A alternator producing >1.4 kW (2nd alternator available)



### CONSTRUCTION

- Rugged 5086/5083 marine grade aluminum
- Operate in sea states 3–4, Survive 5+
- Multiple payload configurations possible
- Completely watertight hull will not sink unless intentionally scuttled
- Self-scuttling capability

### SENSORS & ELECTRONICS SUITE

- Full health and status reporting
- UMAA-compliant platform mission management system
- Power conditioning and management system
- 2D radar standard, 3D radar optional
- Vision (EO/IR and 360° coverage)
- LOS/BLOS communications
- Autonomous & remote driver capable

