



Hylio ARES (HYL-150) Spec Sheet - Metric

Aircraft	
Total Weight (without battery, without payload application equipment)	33.6 kg
Maximum Recommended Takeoff Weight	104 kg
Maximum Thrust	200 kg
Maximum Operating Speed	64 kph
Flight Time	Full Payload: approx. 8 min Mixed: approx. 12-15 min @ 11 kg/min payload application rate No Payload: approx. 20 min <i>Flight times are affected by numerous conditions such as weather conditions, altitude relative to MSL, temperature, battery age/health, and other factors.</i>
Maximum Flight Altitude	4500 m MSL <i>Reduce payload by 12% for each increase of 1,000 m in density altitude</i>
Wheelbase	2.2 m
Material	Carbon Fiber, Aluminum, Plastic
Dimensions	1.7 x 1.7 x 1.1 m (arms unfolded, no propellers)
	1.15 x 1.15 x 1.1 m (arms folded, no propellers)
Spray System	
Maximum Payload (Weight)	50 kg (near sea level)
Maximum Payload (Volume)	50 L
Total Rotary Atomizer Equipment Weight (incl. tank, pumps, plumbing, nozzles, mounting, etc.)	8 kg
Total Hydraulic Nozzle Equipment Weight (incl. tank, pumps, plumbing, nozzles, mounting, etc.)	6.5 kg
Liquid Payload Smart Tank Assembly Weight (50 L – not incl. payload application equipment)	5.71 kg
Nozzle Types	8 TeeJet style hydraulic nozzle tips; configurable (1 pair mounted under each rotor) 4 x Rotary Atomizers (1 atomizer mounted under each rotor)
Pump System	2 x 14L/min (28 L/min total) Diaphragm Pumps, 448 kPa
Flow Rate (no nozzle)	Hydraulic Nozzle Configuration: 3 – 19 L/min Rotary Atomizer Configuration: 0 – 26.5 L/min
Flow Rate (with 8 x XR11006 nozzle tips)	14 L/min
Flow Rate (with 4 x rotary atomizers)	22.7 L/min
Effective Swath Width	Up to 12 m
Productivity Rate	Up to 28 ha/hr at 19 L/ha



Spreader System	
Maximum Payload (Weight)	50 kg (near sea level)
Maximum Payload (Volume)	76 L
Total Granular Spreader Equipment Weight (incl. tank, spreader device, mounting, etc.)	6 kg
Solid Payload Smart Tank Assembly Weight (76 L – not incl. granular spreader device)	4.4 kg
Optimal Particle Size	0.5 – 10 mm
RPM Range	Up to 1600 RPM
Aperture Control	3 channels, allowing 0 – 174 deg total opening
Effective Swath	Up to 12 m
Maximum Flow Rate	Up to 36 kg/min (dependent on material type)
Device Dimensions	20 x 15 x 19 cm
Productivity Rate	Up to 49 ha/hr at 22 kg/ha
Particle Type	Hard materials such as silica can cause structural damage to the UAS itself and its components (such as the propellers). Use of hard materials will alter warranty terms; use at your discretion. See Operations Manual for more details.
Propulsion	
Motor KV	45 rpm/V
Foldable Propeller	142 x 51 cm
Configuration	Quadcopter
Operating Voltage	18S (66.6 V)
Battery	
Battery System	1 x 18S 30 Ah (66.6 V) Intelligent LiPo Battery
Battery Weight	14 kg
Charger	
Type	Dual Channel
Input Voltage	100 – 240 V
Output Power	9000W
Compatibility	LiPo/LiHV: 12S - 18S
Dimensions	40 x 23 x 31 cm
Weight	14 kg
Charging Current	Up to 120A single channel; Up to 60A per channel with two-channels running simultaneously
Weather	
Ingress Protection Rating	IP55
Maximum True Airspeed of UAS	72 kph <i>True airspeed is the UAS's speed relative to the surrounding air mass, incorporating the effects of altitude, temperature, pressure, and other atmospheric conditions on air density</i>



Maximum Ground Speed of UAS	64 kph <i>Speed relative to ground taking a blend of GPS speed and IMU data. Monitored and controlled by AgroSol GCS</i>
Communication & Control (Hylío GroundLink)	
Standard Control Device	Hylío GroundLink Controller
Ground Station Control Software	Hylío AgroSol GCS; GroundLink Operating System: Windows 11
Available Flight Modes	Swarm up to 3 units, fully autonomous, position hold manual, fully manual
Operating Frequencies	2400 to 2480 MHz
Wireless Transmission Range	Max Unobstructed: 30 km Typical Rural Operation Setting: 5 km With 4G SIM: Unlimited (wherever cellular coverage is available)
Display	33.8 cm. Sunlit Readable 1000 nits, 10-Point Touch Display
Environment	IP67
Battery	6-8 hours, Rechargeable Li-ion Battery <i>Battery life dependent on factors such as screen brightness and level of activity</i>
Camera System	
Camera Platform	E-Con RouteCAM CU25
Camera Sensor	AR0234CS from onsemi®
Camera Video Output	1920x1080 60FPS
Camera Field of View	158°(D), 134°(H), 73°(V)
Camera Shutter	Global Shutter
Camera Mount	3-axis, remote-controllable Hylío HYL GS-3 brushless motor gimbal
Ingress Protection	IP67
Regulatory	
Regulatory Compliance	FY2019 NDAA Sec. 889 Compliant; FY2020 NDAA Section 848 Compliant; FCC Part 15 Compliant, DCMA Blue UAS Cleared List