SONGBIRD FAMILY
VTOL FIXED WING UAV

60
Entry-level

100
Coverage

150
Performance

Songbird	60	100	150
Wingspan [cm]	298	312	312
MTOW [kg]	9.5	10.8	14.0
Maximum Payload [kg]	1.0	2.0	4.4
Body Material	Fiberglass Carbon Composite	Fiberglass/Carbon Composite	Fiberglass/Carbon Composite
Working Speed [m/s]	16-25	16-30	17-32
Max. Flight time [min]			
- camera only	58	90	100
- max. payload	30	45	45
- typical	45	60	90
Range [km]	< 60	120	90
Altitude [m]			
- maximum	2,000	2,000	5,000
- at Takeoff	1,500	1,500	4,000
Wind Tolerance [m/s]			
- Start/Landing auto	6	6	7
- Start/Landing man.	8	10	11
- Fixed Wing Mode	12	14	15
Rain Tolerance	light rain	light rain	normal rain
Propulsion	4 electric motors tilt mechanism	4 electric motors tilt mechanism	4 electric motors tilt mechanism
Radio Control	433 MHz 2.4 GHz LTE / 5G	433 MHz 2.4 GHz LTE / 5G	433 MHz 2.4 GHz LTE / 5G
Telemetry	868-900 MHz 433 MHz LTE / 5G	868-900 MHz 433 MHz LTE / 5G	868-900 MHz 433 MHz LTE / 5G
Safety Features	Return to launch Position hold Land immediately Land at defined places Quadchute	Return to launch Position hold Land immediately Land at defined places Quadchute	Return to launch Position hold Land immediately Land at defined places Quadchute
Video Camera	none only for mapping & surveying	HD EO: 20x zoom Thermal: 640x480, 2x zoom	HD EO: 20x zoom Thermal: 640x480, 2x zoom HD EO: 30x zoom Thermal: 640x480, 4x zoom Laser pointer
Video link	none	LTE / 5G 900 MHz, 2.4 GHz up to 10 km	LTE / 5G 900 MHz, 2.4 GHz up to 10 km / 25 km with directional antenna MESH up to 50 km
Video Features	none	Go to location Point to location Follow target Go to the coordinate	Go to location Point to location Follow target Go to the coordinate
Flight Controller	PixHawk Cube PX4 Stack	PixHawk Cube PX4 Stack	PixHawk Cube PX4 Stack
Ground Control Station	Germandrones, own development	Germandrones, own development	Germandrones, own development