



baibars

Baibars Mechatronics & Aviation

VH-30 Pro

Specifications



Baibars VH-30 Pro	
Hourly work efficiency	40 - 60 acres
High-precision radar	Obstacle and Ground Defense Radar System
Remote control planning accuracy	GNSS
Pipe air exhaust	One button Air Discharge
Maximum spray flow	2.5L/min (with the ST11001 nozzle)
	6L/min (with the ST11008 optional nozzle)
Battery installation method	Removable batteries
Front-view FPV	√
Coordinated turning function	√
Operation Parameters	
Total weight (without batteries)	26.4 kg
Maximum take-off weight	76.5 kg (near sea level)
Hovering precision (with good GNSS signal)	±0.6m (horizontal) and ±0.3m (vertical) (with the radar function enabled: ±0.1m)
Hovering endurance	20.5min (@22,000 mAh & takeoff weight of 36.5 kg and average wind velocity 6-10 m/s)
	10-13min (@29,000 mAh & takeoff weight of 66.5 kg and average wind velocity 6-10 m/s)
Maximum pitch angle	15°
Maximum operating flight speed	7 m/s
Maximum level speed	10 m/s (with good GNSS signal)
Maximum tolerable wind speed	8 m/s
Maximum flight altitude	5,000m
	*Reduce the pesticide load by 17% for each increase of 1,000 meters in altitude.
Recommended operating ambient humidity	< 85%
Recommended operating ambient temperature	0°C to 45°C
Maximum rotor distance	2,145 mm
Dimensions	2,863 mm × 2,694 mm × 790 mm (with arms and blades unfolded)
	2,018 mm × 1,805 mm × 790 mm (with arms unfolded and blades folded)

	1,110 mm × 670 mm × 840 mm (with arms folded)
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Propulsion system - Motor	
Max. Thrust	19.2kg/Axis (46V, Sea Level)
Recommended Takeoff Weight	7-9.5kg/Axis (46V, Sea Level)
Recommended LiPo Battery	12S (LiPo)
Operating Temperature	-20-55°C
Combo Weight	1400g
Waterproof Rating	IPX7
Propulsion system - Propellers	
Diameter × pitch	34.7×11 inch
Weight (with a single blade)	138 g
Power system - ESC	
Recommended LiPo Battery	6-14S LiPo
PWM Input Signal Level	3.3V/5V(Compatible)
Throttle Signal Frequency	50-500Hz
Operating Pulse Width	1100-1940us(Fixed or cannot be Programmed)
Max. Input Voltage	52.2V
Max. Input Current (Cont.)	120A(w/ Good Heat Dissipation)
Max. Peak Current (10s)	150A(w/ Good Heat Dissipation)
BEC	No
Mounting Holes for Nozzle	φ28.4mm-2*M3
FPV Camera	
View angle (FOV)	120°
Resolution	1080×720 10-20 fps
Led light power	6W
Spraying system - Pesticide Tank	
Operation tank volume	31.5L at full load
Operating load	31.5 kg at full load

Spraying system - Nozzle	
Nozzle quantity	8
Maximum spray flow	2.5L/min (with the ST11001 nozzle)
	6L/min (with the ST11008 optional nozzle)
	(depending on the actual operating environment, spray flow, and other factors)
Maximum spray flow	ST11001 nozzle : 170 - 290 μ m
	ST11008 optional nozzle : 190 - 315 μ m
Spraying system - Pump	
Working Voltage	12-14S (DC44-60.9V)
Rated Power	120W
Working Pressure	0.8-1.2Mpa
Working Current	$\leq 2.5A$
Data of opening	8L/min
Protection Grade	IP67
Weight	698g
Size	139*95*70mm
Inlet Pipe	Outer diameter 14mm
Outlet Pipe	Outer diameter 14mm
Fixed PWM throttle range	1100-1940us
Obstacle avoidance Radar	
Model	BAIBARS TR24DCA100
Operating frequency	FMCW / 24.125 GHz
Operating power consumption	1.2W @ 25°C
Height maintenance and terrain adaptation	Height measurement range: 2-30 m
	Height-maintenance range: 3-10 m
	Maximum slope in mountain mode: 20°
Water-resistance rating	IP67
Ground Defense Radar	
Model	BAIBARS TR24DA100

Operating frequency	FMCW / 24.125 GHz
Operating power consumption	1.2W @ 25°C
Perceivable distance	1.5-10 m
Water-resistance rating	IP67

Battery

Model	BAIBARS226S25C / BAIBARS5414S25C
Weight	~5.24 KG / 6.3 KG
Discharge rate	25C
Water-resistance rating	IP54 with board-level potting protection
Capacity	22.000 mAh / 28.000 mAh
Voltage	50.2 V / 51.8 V

Remote Control

Model	BAIBARS YAVER™
Operating frequency of the Ocusync Industry Edition	2.4000 - 2.4835 GHz
Effective signal range at the Ocusync Industry Edition operating frequency (without interference and blockage)	4 KM
	(measured when the operating height of the drone is 2.5 m)
Wi-Fi protocols	Wi-Fi Direct, Wireless Display, and 802.11a/g/n/ac
Wi-Fi operating frequency	2.4000 - 2.4835 GHz
Bluetooth protocol	Bluetooth 4.2
Charging port	TYPE-C
Operating ambient temperature	-10°C to 40°C
Built-in batteries of the remote control	
Built-in batteries	10000 mAh battery
Power supply current/voltage of the remote control USB-A port	9V / 3A
Battery life	15 hours

Baibars Smart Charging Manager™	
Input Voltage	100-240V
Output Power	1080W (540W x 2)
Discharge Power	100W (50W x 2)
Charge Current	1.0-20.0A x 2
Balance Current	1.2A
Battery Type	LiPo/LiHV
Battery Cell Count	6S-14S
Working Mode	Balance Charge Mode
	Storage Mode
	Charge Mode
Net Weight	4.88kg
Size	272x202x118.6mm