Specs

T30

Feature

Hourly work efficiency	40 acres
High-precision radar	√ Spherical Omnidirectional Radar System
Remote control planning accuracy	√ (RTK/GNSS)
Pipe air exhaust	√ One button Air Discharge
3D operation planning by the AI smart engine	√
High-precision flowmeter	√ (Dual-channel electromagnetic flowmeter with an error of ±2%)
Level gauge	Continuous level gauge (with real-time pesticide load detection and intelligent supply-point prediction)
Maximum spray flow	7.2L/min (with the XR11001 nozzle) 8L/min (with the XR110015 optional nozzle)
Pesticide tank installation method	Fixed pesticide tank
Battery installation method	Removable batteries
Single remote control for multiple drones	√ (Single remote control for up to three drones)
D-RTK technology	√
Top-view radar module	√
Flight laser function	√
Intelligent endurance/return function	√
Intelligent supply-point prediction	√
Front-view FPV	√
Rear-view FPV	√
Coordinated turning function	√
Branch targeting technology	√

Drone parameters

Total weight (without batteries)	26.4 kg
Maximum take-off weight	78 kg (near sea level)
Maximum thrust-to-weight ratio	1.70 @ takeoff weight of 66.5 kg
Hovering precision (with good GNSS signal)	With D-RTK enabled: ±10 cm (horizontal) and ±10 cm (vertical)

	With D-RTK disabled: ±0.6m (horizontal) and ±0.3m (vertical) (with the radar function enabled: ±0.1m)
RTK and GNSS frequency bands	RTK: GPS L1/L2, GLONASS F1/F2, BeiDou B1/B2, and Galileo E1/E5 GNSS: GPS L1, GLONASS F1, and Galileo E1
Maximum power consumption	11,000 W
Hovering power consumption	10,000 W (@ takeoff weight of 66.5 kg)
Hovering endurance	20.5min (@29,000 mAh & takeoff weight of 36.5 kg) 7.8min (@29,000 mAh & takeoff weight of 66.5 kg)
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	4,500m *Reduce the pesticide load by 12% for each increase of 1,000 meters in altitude.
Recommended operating ambient humidity	< 93%
Recommended operating ambient temperature	0℃ to 45℃

Chassis parameters

Maximum rotor distance	2,145 mm
Dimensions	2,858 mm × 2,685 mm × 790 mm (with arms and blades unfolded) 2,030 mm × 1,866 mm × 790 mm (with arms unfolded and blades folded) 1,170 mm × 670 mm × 857 mm (with arms folded)

Power system - Motor

Stator size	100×18 mm
KV value	77 rpm/V
Maximum pull	18.7 kg/rotor
Maximum power	3,600 W/rotor
Weight	756 g

Power system - Propellers

Diameter × pitch	38×20 inch
Weight (with a single blade)	106 g

Power system - ESC

Maximum operating current (continuous)	60 A
Maximum operating voltage	60.9 V (14S LiPo)

FPV cameras

View angle (FOV)	Horizontal: 129°, vertical:82°
Resolution	1,280×720 15-30 fps

FPV searchlights

Maximum light intensity	13.2 lux @ 5-meter direct light

Spraying system - Operation tank

Operation tank volume	30L at full load
Operating load	30 kg at full load

Spraying system - Nozzles

Nozzle model	SX11001VS (standard) SX110015VS (optional) Fruit tree drones: TX-VK04 (optional)
Nozzle quantity	16
Maximum spray flow	SX11001VS: 7.2L/min SX110015VS: 8L/min TX-VK4:3.6 L/min
Atomized particle size	SX11001VS : 130 - 250 μm SX110015VS : 170 - 265 μm TX-VK4: 110 - 135 μm (depending on the actual operating environment, spray flow, and other factors)
Maximum effective spray width	4-9 m (with 12 nozzles and a distance of 1.5 to 3 meters to crops)

Spraying system - Water pump

Water pump model	Plunger pump
Operating voltage	60 V
Maximum flow	4 L/min ×1

Spraying system - Flowmeter

Flow measurement range	0.25 - 20 L/min
Flow measurement error	< ±2%
Measurable liquid	Conductivity > 50 μS/cm, typical liquids: Tap water or aqueous organic or inorganic pesticides

Omnidirectional obstacle avoidance radar

Model	RD2424R
Operating frequency	SRRC/NCC/FCC: 24.05 - 24.25 GHz MIC/KCC/CE: 24.05 - 24.25 GHz
Operating power consumption	12 W
Equivalent isotropic radiated power (EIRP)	SRRC: < 13 dBm; NCC/MIC/KCC/CE/FCC:< 20 dBm

Height maintenance and terrain adaptation	Height measurement range: 1-30 m Height-maintenance range: 1.5-15 m Maximum slope in mountain mode:35°
Obstacle avoidance system	Perceivable distance: 1.5-30 m View angle (FOV): Horizontal: 360°, vertical: ±15° Conditions of use: The relative altitude of the drone must be greater than 1.5 m and the speed less than 7 m/s Safety distance: 2.5 m (the distance between the tip of the propeller and the obstacle after the drone decelerates to a hover) Obstacle avoidance direction: Horizontally omnidirectional obstacle avoidance
Water-resistance rating	IP67

Top-view radar

Model	RD2414U
Operating frequency	SRRC/NCC/FCC:24.05 - 24.25 GHz MIC/KCC/CE:24.05 - 24.25 GHz
Overhead obstacle avoidance	Perceivable distance: 1.5-10 m View angle (FOV): 80° Conditions of use: During take-off, landing, and climbing when the relative distance between the drone and the object above is greater than 1.5 m Safety distance: 2 m (the distance between the highest point on the top of the drone and the obstacle after the drone brakes and hovers stably) Obstacle avoidance direction: Above the drone
Water-resistance rating	IP67
Equivalent isotropic radiated power (EIRP)	SRRC:< 13 dBm; NCC/MIC/KCC/CE/ FCC:< 20 dBm
Operating power consumption	4 W

Battery

Model	BAX501-29,000mAh-51.8V
Weight	Approximately 10.1 kg
Discharge rate	11.5C
Water-resistance rating	IP54 with board-level potting protection
Capacity	29,000 mAh
Voltage	51.8 V

Remote control

Model	RM500-ENT
Operating frequency of the Ocusync Industry Edition	2.4000 - 2.4835 GHz 5.725 - 5.850 GHz
Effective signal range at the Ocusync Industry Edition operating frequency (without interference and blockage)	SRRC: 5 km; MIC/KCC/CE: 4 km; FCC: 7 km (measured when the operating height of the drone is 2.5 m)
EIRP of the operating frequency of the Ocusync Industry Edition	2.4 GHz SRRC/CE/MIC/KCC: 18.5 dBm; FCC: 29.5 dBm; 5.8 GHz SRRC: 20.5 dBm;

	FCC: 28.5 dBm CE:12.5 dBm
Wi-Fi protocols	Wi-Fi Direct, Wireless Display, and 802.11a/g/n/ac Supports 2 × 2 MIMO Wi-Fi
Wi-Fi operating frequency	2.4000 - 2.4835 GHz 5.150 - 5.250 GHz 5.725 - 5.850 GHz
Wi-Fi EIRP	2.4 GHz SRRC/CE: 18.5 dBm; FCC/MIC/KCC:20.5 dBm; 5.2 GHz SRRC/FCC/CE/MIC: 14 dBm; KCC: 10 dBm; 5.8 GHz SRRC/FCC: 18 dBm; CE/KCC: 12 dBm;
Bluetooth protocol	Bluetooth 4.2
Bluetooth operating frequency	2.4000 - 2.4835 GHz
Bluetooth EIRP	SRRC/MIC/FCC/CE/KCC:6.5 dBm
Positioning	GPS+GLONASS dual mode
Display screen	5.5-inch screen with a resolution of 1920×1080, brightness of 1,000 cd/m², and Android OS
Operating memory (RAM)	4GB LPDDR4
Storage space (ROM)	A microSD card with 32 GB and extensible storage space for up to 128 GB, transfer speed rated as UHS-I Speed Grade 3
HDMI	HDMI 1.4
Supported drones	T30 and T10 agricultural drones
Operating power consumption	18 W
Operating ambient temperature	-10℃ to 40℃
Storage ambient temperature	-30℃ to 60℃ (within 1 month) -30℃ to 45℃ (more than 1 month and less than 3 months) -30℃ to 35℃ (more than 3 months and less than 6 months) -30℃ to 25℃ (more than 6 months) (with built-in batteries charged to 40% to 60%)
Charging ambient temperature	5℃ to 40℃

Built-in batteries of the remote control

Built-in batteries	18650 lithium-ion battery (5,000 mAh at 7.2V)
Battery life	2 hours
Charging method	Use a standard 12V/2A USB fast charger
Charging time	2.5 hours (use the 12V/2A USB fast charger when the remote control is powered off)
Power supply current/voltage of the remote control USB-A port	5 V / 1.5 A

External smart battery of the remote control

Model	WB37-4,920mAh-7.6V
Battery type	2S LiPo
Capacity	4,920 mAh

Voltage	7.6 V
Capacity	37.39 Wh
Charging ambient temperature	5℃ to 40℃
Battery life	2 hours

Charging assistant of the remote control external smart battery

Model	WCH2
Input voltage	17.3 - 26.2 V
Output voltage and current	8.7V and 6A
Operating ambient temperature	5℃ to 40℃

Power adapter of the external smart battery charging assistant

Model	A14-057N1A
Input voltage	100 - 240V and 50/60 Hz
Output voltage	17.4 V
Rated power	57 W

T30 Spreading System 3.0

Spreading system weight	3.9kg
Maximum opening area	44.6 cm²
Applicable materials	Solid dry particles with a diameter of 0.5 to 5 mm
Spreading tank volume	40L
Maximum load of the spreading tank	35kg
Water-resistance rating	IP67
Input voltage	Power: 60V Control:15V
Maximum power	60V@250W 15V@50W
Recommended operating ambient temperature	0℃ to 40℃
Dimensions	560×435×320mm
Maximum rotation speed	1,300 RPM

T30 smart charging manager

Dimensions	300×280×230 mm
Total weight	11.5 kg
Input voltage	100-264 Vac
Output voltage	40-60 V

Rated power	7,200
Charging current	120 A
Charging time	Fully charges a battery in 9 to 12 minutes
Charging voltage accuracy	+/-0.1 V
Charging current accuracy	+/-1 A
Output channel quantity	2
Protection functions	Over-temperature, over-voltage, under-voltage, short-circuit, and fan stall protection
Charging ambient temperature	-20℃ to 45℃
Charging safety	AC wire protection, power wire protection, and charge connector protection