

# Specs

## T10

### Features

Hourly operation efficiency	15 acres
High-precision radar	√Spherical Omnidirectional Radar System
Remote control planning precision	√(RTK/GNSS)
Removing air from pipes	√One button Air Discharge
3D operation planning of the AI engine	√
High-precision flowmeter	√(Dual-channel electromagnetic flowmeter with an error of ±2%)
Level gauge	Single-point level gauge
Maximum spray flow	1.8 L/min (with standard XR11001VS nozzle) 2.4 L/min (with optional XR11001SVS nozzle)
Pesticide tank installation method	Quick plugging pesticide tank
Battery installation method	Quick plug-and-play battery
One remote control for multiple drones	√(one remote control for three drones)
D-RTK technology	√
Up-looking radar module	√
Flight dotting function	√
Smart cruising/return function	√
Intelligent supply-point prediction	x
Coordinated turn function	√
Forward-looking FPV	√
Backward-looking FPV	√
Branch targeting technology	x

### Drone parameters

Total weight (without batteries)	13 kg
Rated take-off weight	24.8 kg (near sea level)
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: ±0.1 m)
RTK/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	3,700 W
Hovering power consumption	3,200 W
Hovering time	17 min (@9,500 mAh & takeoff weight of 16 kg) 9 min (@9,500 mAh & takeoff weight of 24.8 kg)
Maximum pitch angle	15°
Maximum operating flight speed	7 m/s
Maximum level flight speed	10 m/s (with good GNSS signals)
Maximum endurable wind speed	8 m/s
Max Take-off Altitude	4,500m *Reduce the pesticide amount by 12% with each increase of 1,000 meters of altitude.
Recommended operating ambient humidity	< 93%
Recommended operating ambient temperature	0°C to 45°C

### Rack parameters

Maximum rotor distance	1,480 mm
Dimensions	1,958 mm × 1,833 mm × 553 mm (with arms and blades extended) 1,232 mm × 1,112 mm × 553 mm (with arms extended and blades folded) 600 mm × 665 mm × 580 mm (with arms folded)

### Power system - Motor

Stator size	100×10 mm
KV value	84 rpm/V
Maximum pulling force	11.2 kg/rotor
Maximum power	2,500 W/rotor
Weight	527 g

### Power system - Propellers

Diameter × pitch	33×9 inch
Weight (a single blade)	92 g

### Power system - ESC

Maximum operating current (continuous)	32 A
Maximum operating voltage	60.9 V (14S LiPo)

### FPV camera

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

### FPV spotlight

Maximum light intensity	13.2 lux @ 5-meter direct light
-------------------------	---------------------------------

### Spraying system - Operation tank

Operation tank volume	8 L at full load
Operating load	8 kg at full load

### Spraying system - Nozzles

Sprayer model	XR11001VS (standard) XR11001SVS (optional) XR11002VS (optional)
Number of sprayers	4
Maximum spray flow	XR11001VS: 1.8 L/min XR11001SVS: 2.4 L/min XR11002VS: 3 L/min
Diameter of atomized particle	XR11001VS: 130 - 250 μm XR11001SVS: 170 - 265 μm XR11002VS: 190 - 300 μm (depending on the actual operating environment, spraying flow and other factors)
Maximum effective spray width	3 - 5.5m (with 4 sprayers and a distance of 1.5 - 3 meters to crops)

### Spraying system - Water pump

Water pump model	Diaphragm pump
Operating voltage	15 V
Maximum flow	1.5 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 liquid: Tap water, aqueous organic or inorganic pesticides, and the like

### Omnidirectional obstacle avoidance radar

Model	RD2424R
Operating frequency	SRRC/NCC/FCC: 24.05 to 24.25 GHz MIC/KCC/CE: 24.05 to 24.25 GHz
Operating power consumption	12 W
Equivalent isotropic radiated power (EIRP)	SRRC: <13 dBm; NCC/MIC/KCC/CE/ FCC: <20 dBm
Height hold and terrain following	Height measurement range: 1 - 30m Height hold range: 1.5 - 15m Maximum slope in mountain mode: 35°
Obstacle avoidance system	Perceivable distance: 1.5 - 30m FOV: 360° (horizontal), ±15° (vertical) Conditions of use: The relative flight height of the drone is above 1.5m and the speed below 7 m/s Safe distance: 2.5m (the distance between the tip of the blade and the obstacle after the drone is braked and hovering stably) Obstacle avoidance direction: Horizontally omnidirectional obstacle avoidance
Protection class	IP67

### Up-looking radar

Model	RD2414U
Operating frequency	SRRC/NCC/FCC: 24.05 to 24.25 GHz MIC/KCC/CE: 24.05 to 24.25 GHz
Overhead obstacle avoidance	Perceivable distance: 1.5 - 10m FOV: 80° Conditions of use: The drone flies for a relative distance over 1.5 m in the mode of take-off, landing and route climb mode Safe distance: 2m (the distance between the obstacle and the highest point on the top of the drone) Obstacle avoidance direction: Above the drone
Protection class	IP67
Equivalent isotropic radiated power (EIRP)	SRRC: <13 dBm; NCC/MIC/KCC/CE/ FCC: <20 dBm
Operating power consumption	4 W

### Battery

Model	BAX501-9500mAh-51.8V
Weight	About 3.8 kg
Discharge rate	11.5C
Protection class	IP54 + board-level embedment protection
Capacity	9,500 mAh
Voltage	51.8 V

### Remote control

Model	RM500-ENT
Operating frequency of OcuSync 2.0	2,4000 to 2,4835 GHz 5,725 to 5,850 GHz
Effective signal distance of OcuSync 2.0 (without interference and blockage)	SRRC: 5 km; MIC/KCC/CE: 4 km; FCC: 7 km (measured at the operating height of 2.5m)
EIRP of OcuSync 2.0	2.4 GHz SRRC/CE/MIC/KCC: 18.5 dBm; FCC: 29.5 dBm; 5.8 GHz SRRC: 28.5 dBm; FCC: 20.5 dBm CE: 12.5 dBm
Wi-Fi Protocols	Wi-Fi Direct, Wireless Display, and 802.11 a/g/n/ac. 2 × 2 MIMO Wi-Fi is supported
Wi-Fi operating frequency	2,4000 to 2,4835 GHz 5,150 to 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 to 2,4835 GHz
Bluetooth EIRP	SRRC/MIC/FCC/CE/KCC: 6.5 dBm
Positioning	GPS + GLONASS
Display	5.5-inch screen with a resolution of 1,920×1,080 and brightness of 1,000 cd/m², and Android OS
Operating memory (RAM)	4GB LPDDR4
Storage space (ROM)	32 GB + scalable storage space, and a microSD card with the capacity up to 128 GB and transfer speed of UHS-I Speed Grade 3 is supported
HDMI	HDMI 1.4
Supported drones	T30 and T10 crop protection drones
Operating power consumption	18 W
Operating ambient temperature	-10°C to 40°C
Storage ambient temperature	-30°C to 60°C (within 1 month) -30°C to 45°C (1 to 3 months) -30°C to 35°C (3 to 6 months) -30°C to 25°C (more than 6 months) (with the capacity of built-in batteries at 40 to 60%)
Charging ambient temperature	5°C to 40°C

### Built-in battery of remote control

Built-in battery	18650 lithium ion battery (5,000 mAh at 7.2V)
Battery life	2 hours
Charging method	Standard 12V/2A USB quick charger
Charging time	2.5 hours (with the standard 12V/2A USB quick charger and the remote control powered off)
Power supply current/voltage of remote control USB-A port	5 V / 1.5 A

### External smart battery of remote control

Model	WB37-4,920mAh-7.6V
Battery type	25 LiPo
Capacity	4,920 mAh
Voltage	7.6 V
Capacity	37.39 Wh
Charging ambient temperature	5°C to 40°C
Battery life	2 hours

### External smart battery charging manager of remote control

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

### Power adapter of external smart battery charging manager

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

### T-Series Spreading System 3.0 (8kg)

Weight of distribution system	3.1kg
Maximum opening area	44.6 cm²
Applicable materials	Dry solid particles with a diameter of 0.5 to 5 mm
Volume of distribution tank	12L
Maximum internal load of distribution tank	10kg
Protection class	IP67
Input voltage	Power: 60V Control: 15V
Maximum power	60W@250W 15W@50W
Recommended operating ambient temperature	0°C to 40°C
Dimensions	405×245×375mm
Maximum rotation speed	1,300 RPM

### T10 smart charging manager

Dimensions	300×280×230 mm
Total weight	8.1 kg
Input voltage	100-264 Vac
Output voltage	40-60 V
Rated power	3,600 W
Charging current	50 A
Charging time	7 to 10 min
Charging voltage precision	±0.1 V
Charging current precision	±1 A
Number of output channels	2
Protection functions	Over-temperature, over-voltage, under-voltage, short-circuit, and fan stall protection
Charging ambient temperature	-20°C to 45°C