Technical Specifications

V40 Agricultural RPA
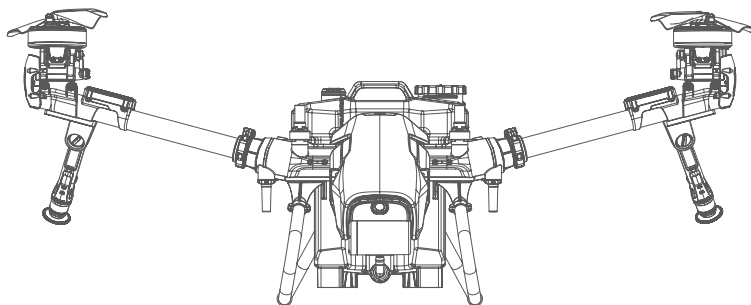
V40 Agricultural RPA	
Product Model	3WWDZ-15.2AH
Flight Control System	SuperX4
IP Rating	IP67
Airframe	
Max Diagonal Wheelbase	1600mm
Arm Material	Carbon glass fibre
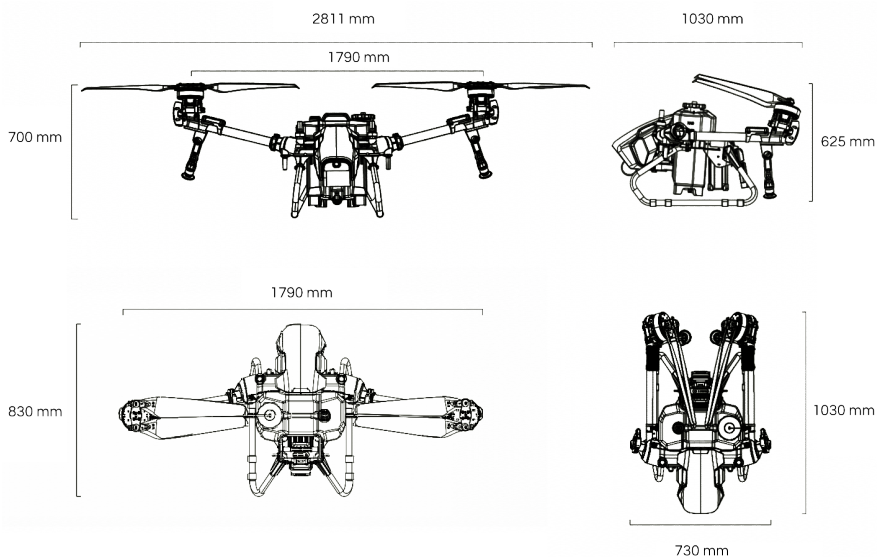
Propulsion System

Motors	
Model	A40
Stator Size	136mm x 24mm
Max Power	3000W / Motor
Max Tension	42KG / Motor
KV Value	75RPM / V
ESCs	
Model	VC13180
Max Working Current (Continuous)	180A
Max Operating Voltage	56.6V
Foldable Propellers	
Model	P4718
Diameter x Pitch	47 x 18 inch
Weight	280g per Blade
Gross Weight	760g
Tilt Servo	
Rate Voltage	DC50V
Operating Voltage	DC25V – 55V
Rate Torque	150KG CM@50V
Rated Current	0.5A@50V
No Load Speed	400° / Second

RevoSpray System

Liquid Tank	
Volume	16L
Sensor	Liquid Level Sensor
Nozzle	
Quantity	2
Rotational speed of spray disc	1000~16000RPM
Atomizing Size	60-400μm
Spray Width	5~10m
Peristaltic Pump	
Quantity	2
Voltage	50V
Maximum System Flow Rate	10L/min

XAG RealTerra™ System

Image Sensor	1 / 2.3inch 12M CMOS Sensor
Lens	FOV112O 2.7mm / 16.8mm (35 Equivalent)
Mechanical Shuttle	1/200 – 1/2000s
Image Format	JPG
Power	10W
Optimal Operating Temperature	10° C to 40° C

Obstacle Sensor & Avoidance System

Front Dynamic Radar [1]		
Model	RD2426	
Operating Frequency	24 GHz	
Voltage	24V – 60V	
Power Consumption	6W	
Sensing Range	1.5m ~ 40m	
Sensing Mode	Millimetre-wave Imaging, MIMO	
Sensing Parameters	Obstacle's Position, Distance	
Field of View (FOV)	Horizontal:	±40°
	Vertical:	45°
Safety Limit Distance	2.5m (Distance between the propeller tip and the obstacles after braking and hover)	
Working Conditions	Relative Height:	≥1.5m
	Relative Speed:	≤6m/s
Terrain Sensor		
Model	TR24S100	
Voltage	5.8V	
Power	1.5W	
Sensing Mode	Millimeter-wave	
Operating Frequency	24GHz	
Altitude detection range	0.5~100m	
Max. Gradient	45° (Flight Speed ≤ 2m/s)	
IP Rating	IP67	

PSL Camera

Dimensions	50mm x 36.7mm x 29mm
Resolutions	720P / 1080P
Frame Rate	30fps
Coding Format	H.264
Focal Length	2.75mm
Image Sensor	1/2.95inch 2M CMOS Sensor

Flight Parameters

Total Weight (Empty Container)	29.80 Kg
Max Take-off Weight	48.00 Kg
Max. Thrust-Weight Ratio	1.8
Load Ratio	0.4
Hovering Accuracy Range (With Strong GNSS Signal)	RTK Enabled: ±10cm (Horizontal) ±10cm (Vertical) RTK Disabled: ±0.6m (Horizontal) ±0.3m (Vertical) (Radar Enabled±0.1m)
RTK/GNSS Operating Frequency	2.4000GHz – 2.4835GHz
Continuous Navigation without Signal	≤600s
Hovering Time [2]	13.5min (Take-0ff weight of 29.8kg @20000mAh) 6.8min (Take-0ff weight of 45.8kg @20000mAh)
Max. Operating Speed	8m/s (With Good GNSS Signal)
Max. Flying Height	30m
Max. Flying Distance	2000m
Max Service Ceiling Above See Level [3]	4000m
Recommended Operating Temperature	-10° C to 40° C
Wind Force Recommended	≤ 3.4~5.4m/s

[1] Effectiveness of the Obstacle radar is dependent on the obstacle's material, location, distance, shape, size, relative velocity, etc.

[2] Hovering time acquired at sea level with wind speeds lower than 3m/s

[3] Maximum load needs to be reduced by 12% for each additional 1,000 m in altitude

Local Network Terminal
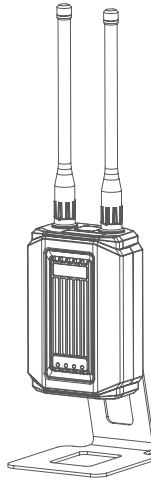
Local Network Terminal

Model	13LNT-1
Dimensions	93mm x 54mm x 332mm
Weight	Approx. 760g
Power Input	DC 12V/3A
Operating Temperature	0° C to 50° C
IP Rating	IP54
Communication Protocol	Wi-Fi
Operating Frequency	2400 – 2483.5 MHz
Antenna	TNC Port, 2dBi
Warranty Details	12 Months

Power Adapter

Dimensions	101mm x 86mm x 37mm
Weight	Approx. 335g
Power Input	DC 40 ~ 54V (B13960S Battery Adaptor)
Power Output	DC 12V/3A
Power	36W
Operating Temperature	0° C to 50° C
IP Rating	IP54

Remote Controller
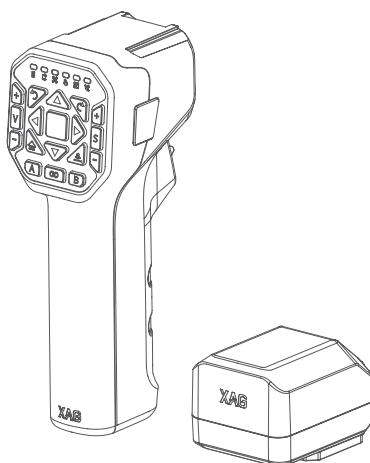
Model	ACS2G	
Dimensions	76mm x 60mm x 177mm	
IP Rating	IP54	
Operating Frequency	2.4GHz / 5.8GHz	
Transmitting Power (EIRP)	2.4GHz 5.8GHz	SRRC ≤ 20dBm; SRRC ≤ 26dBm;
Supported Operating System	Android, IOS	
Build-in Battery	5000mAh / 37Wh	
Charging Temperature	0° C to 45° C	
Operating Temperature	-20° C to 55° C	
Storage Temperature	-20° C to 20° C -20° C to 45° C -20° C to 55° C	< 1 Month 1 – 3 Months 3 – 12 Months
Max Transmission Distance (Unobstructed, free of interference)	800 Meters	
Charging Voltage / Current	05V / 2A 09V / 1.5A 12V / 1.5A	
Mesh Network	Supported	
Voice Broadcast	Supported	
RTK Operating Frequency	GPS: GLONASS: BDS: Galileo:	L1/L2 L1/L2 B1/B2 E1/E5b
Positioning Accuracy (With strong RTK Signal)	Vertical: Horizontal:	< 5.0cm + 1ppm (RMS) < 7.5cm + 1ppm (RMS)
Warranty Details	12 Months	

Smart Battery
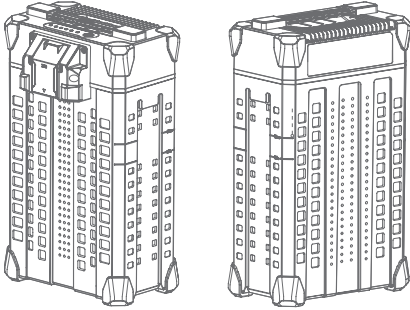
Model	B13960S
Dimensions	189mm x 139mm x 317mm
Weight	Approx. 6.7 kg
Battery Type	Lithium Polymer
Capacity	20000 m/Ah
Energy	962 Wh
Rated Output	48.1V / 120A
Operating Temperature	10° C to 45° C
Charging Temperature	10° C to 40° C
Storage Temperature	10° C to 30° C
IP Rating	IP65
Compatible Aircraft	XAG V40 2021 XAG P40 2021 XAG P100 2022
Compatible Chargers	CM12500P GC4000+
Charging Voltage	56.55V
Battery Charging Time	
Warranty Details	6 Months

# Battery Charger
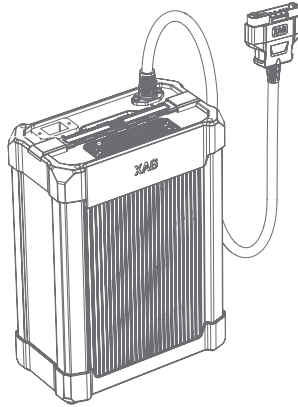
Model	CM12500P
Compatible Battery	B13960S B13860S (With Plug A1 Adapter)
Dimensions	242mm x 137mm x 337mm
Weight	Approx. 9.0 kg
Operating Temperature	-10° C to 45° C
Storage Temperature	-20° C to 55° C
Cooling Mode	Outer Air Cooling
Operating Altitude	≤ 3000m
Input	AC 90-165V ~ 50/60Hz 23A (Max) AC 180-260V ~ 50/60Hz 23A (Max)
Output	DC 50-60V/25A (Max) / 1250W (AC 90-165V ~ 50/60Hz) DC 50-60V/50A (Max) / 2550W (AC 180-260V ~ 50/60Hz)
Warranty Details	12 Months

GNSS XRTK4 Mobile Station
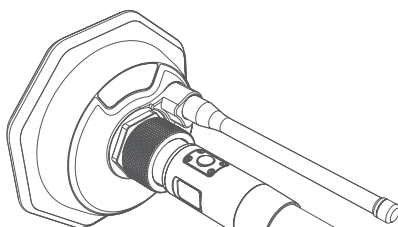
RTK Positioning Module for Agricultural Use	
Model	XRTK4
Dimensions (Diameter x Height)	154mm x 83.6mm (RTK Module) 154mm x 1230mm (RTK Module + Rod)
Weight	1.5 Kg (RTK Module)
Port/Panel	Button × 3, Positioning Indicator × 1 Networking Indicator × 1, Power Indicator × 1
IP Rating	IP65
Operating Temperature	-20° C to 60° C
Storage Temperature	-20° C to 60° C
Relative Humidity	100%, condensation
Warranty Details	12 Months
GNSS Performance & Specifications	
Compatible motherboard	K726
GNSS Frequency BDS GPS GLONASS Galileo QZSS	 B1I / B2I / B3I / B1C / B2a L1 / L2 / L5 L1, L2, L2C, E1 / E5a / E5b L1 / L2 / L5
RTK Positioning Accuracy	
Horizontal	±10mm+1ppm (RMS)
Vertical	±15mm+1ppm (RMS)
Initialization time	Typical <10 seconds
Initialization Reliability	>99.9%
Data update rate	Maximum 20 Hz (Raw data) Maximum 20 Hz (Positioning data)

Communication Interface

1 CAN port;

3 mobile communication modules (2G/3G/4G);

1 dedicated 2.4GHz/5.8GHz WLAN.

Communication

Mobile communication network	
Communication modules	2G/3G/4G
Protocols	GSM, CDMA2000/EVDO, WCDMA, TD- SCDMA, LTE-FDD, LTE-TDD
Dedicated 2.4GHz/5.8GHz WLAN	
Protocol supported	Xlink Communication Protocol
Transmission performance Frequency range	2.400-2.4835GHz/5.735-5.835GHz
Channel spacing	20 MHz
Frequency error/ frequency stability	±10 ppm
Communication mode	Full duplex
Communication protocol	Transparent
Forward error correction	FEC
Data rate	6Mbps
Modulation	OFDM
Emission performance RF output power	Less than 1W Subject to regional SRRC/FCC/CE standards
Reception performance Decoding sensitivity	-90dbm

External Hardware Interface

Battery terminal × 1

SIM card slot × 3

Battery Extension Rod

Model	B4100
Dimensions (Diameter x Height)	45mm x 1166mm
Capacity	7500mAh 99Wh
Input	12.0 V/1 A (Type-C port)
Output	14.4V/1A
Operating temperature	-10° C to 45° C
Port/Panel	Power Button × 1, Type-C Port × 1, Battery Level/Status Display Panel × 1
Warranty Details	6 Months