

Hardware

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| Drone type | Tailsitter VTOL (Vertical take-off and landing) |
| Max. take-off weight | 4.5 kg (9.9 lb) |
| Weight (empty) | 3.7 kg (8.1 lb) |
| Max. payload weight | 800 g (1.8 lb) |
| Wingspan | 125 cm (4.1 ft) |
| Dimensions of WingtraOne | 125 × 68 × 12 cm (without middlestand) |
| Dimensions of Pilot Box | 57 × 37 × 20 cm, 8.6 kg (19 lb) |
| Battery capacity | 98 Wh (a pair of batteries required) |
| Battery type | Li-ion, Smart battery technology, UN compliant |
| Radio link | 8 km (5 mi), bi-directional antennas for optimal range |
| Onboard GPS | Double redundancy, using GPS, Glonass and ready for Galileo and Beidou |
| Dimensions of Travel Hardcase (optional) | 143 × 80 × 20 cm, 16 kg (35 lb) |

Software & Tablet

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| Flight planning & mission control Software | WingtraPilot |
| Tablet (supplied) | Android tablet; pre-installed; ready-to-fly. Interfaces to Telemetry module (data link for automated drone control) and manual back-up controller |
| Updates | free |

Operation

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| Operational cruise speed | 16 m/s (35.8 mph) |
| Climb speed cruise | 6.0 m/s (13.4 mph) |
| Wind resistance | Up to 45 km/h (12 m/s, 28 mph) in cruise, up to 30 km/h (8 m/s, 18 mph) for landing |
| Maximum flight time | 55 minutes |
| Min. space for take-off and landing | 2 m × 2 m (6.6 ft × 6.6 ft) |
| Designed Temperature Range * | -20° C to 50° C (-4° F to 122° F) |
| Max. altitude (a.m.s.l.) | 3000 m (9800 ft) |
| Weather | No precipitation, resists light rain |
| Ground Control Points required | No (with PPK option) |
| Descent speed cruise | 4.0 m/s (8.9 mph) |
| Climb speed hover | 6.0 m/s (13.4 mph) |
| Descent speed hover | 1.0 m/s (2.2 mph) |
| Auto-Landing accuracy | < 5 m (< 16 ft) |

Results

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| Coverage at 120m (400ft) ** | 320 Ha (790 ac) |
| Max. coverage *** | 45 km ² (17 mi ²) |
| Minimal ground sampling distance **** | Down to 0.7 cm / pixel (0.3 inch/pixel) |
| Mapping accuracy with PPK (w/o GCPs) | Absolute accuracy (RMS): Horizontal: down to 1 cm (0.4 in); vertical: down to 2 cm (0.8 in) Relative accuracy: down to 0.003 % (horizontal) |
| Mapping accuracy w/o PPK (w/o GCPs) | Absolute accuracy (RMS): 3 - 5 m (9.8 - 16.4 ft) Relative accuracy: 0.15 % (horizontal) |

Payloads

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| Payload flexibility | Yes, with a single USB-C connector |
| Power supply | by flight batteries (12 W) |
| Payload protection | Yes, fully integrated into WingtraOne and smooth vertical landing feature |
| Available Cameras | Sony RXIRII / 35 mm lens, full-frame sensor, 42 MP, RGB Sony QX1 20mm (optional 15 mm Voigtlander lens), APS-C sensor, 20 MP, RGB Micasense Rededge, 5.5 mm, 5 × 1.2 MP, Multi-spectral camera FLIR Duo Pro R640, 13 mm, 0.32 MP (thermal), 12 MP (visible), Thermal camera |

* tested and warranted temperature range -10° C to 40° C (14° F to 104° F)

** 2.8 cm/pixel (1.1 in/pixel), WingtraOne QX1 +15 mm

*** max. reconstructable area, 2500 m (8200 ft) flight altitude, WingtraOne QX1 +15 mm

**** For WingtraOne RXIRII. For WingtraOne QX1 1.4 cm/px (0.6 in/px)

WingtraOne with RGB Cameras

| | WingtraOne QX1 20mm | WingtraOne QX1 15mm | WingtraOne RX1 |
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| Description and optimal usecase | Professional entry bundle for mapping and hands-on surveyors | Sophisticated bundle for 3D reconstruction specialists | Best quality bundle for the high-resolution aficionado. For low GSD, ultra high precision, forest and mountain mapping |
| Overview | | | |
| Technical specifications | Sony QX1 / 20 mm lens, APS-C sensor, 20 MP, RGB | Sony QX1 / 15 mm Voigtländer lens, APS-C sensor, 20 MP, RGB | Sony RX1RII / 35 mm lens, Full-frame sensor, 42 MP, RGB |
| Main quality features | High image quality, flexible lens options | Ultra-high quality, Largest coverage at limited flight altitude, flexible lens options | Ultra-high quality, best coverage to GSD ratio, sub-cm GSD |
| Camera weight (incl. mount) | 330 g (0.73 lb) | 600 g (1.32 lb) | 575 g (1.27 lb) |
| GSD range | 1.4-53 cm/px 0.55-21.0 in/px | 1.4-70 cm/px 0.55-28.0 in/px | 0.7-31 cm/px 0.28-12.3 in/px |
| Coverage at lowest GSD* | 150 ha (at 1.4 cm/px) at 66m flight altitude 370 acres (at 0.55 in/px) at 218 ft flight altitude | 130 ha (at 1.4 cm/px) at 50 m flight altitude 320 acres (at 0.55 in/px) at 164 ft flight altitude | 100 ha (at 0.7 cm/px) at 57 m flight altitude 247 acres (at 1.18 in/px) at 188 ft flight altitude |
| Coverage at 120 m / 394 feet* | 270 ha (at 2.6 cm/px) 667 acres (at 1.0 in/px) | 320 ha (at 3.4 cm/px) 790 acres (at 1.3 in/px) | 210 ha (at 1.5 cm/px) 520 acres (at 0.6 in/px) |

WingtraOne with Specialty Cameras

| | WingtraOne Rededge | WingtraOne FLIR |
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| Description and optimal usecase | Advanced bundle for precision farmers and plant analysis | Advanced bundle for thermal mapping and monitoring |
| Overview | | |
| Technical specifications | Micasense RedEdge M / 5.5 mm lens, 5 individual custom sensors, multispectral | FLIR Duo Pro R 640 / 13 mm, thermal (7.5 – 13.5 μm) and visible spectrum |
| Main quality features | High quality multispectral images | High precision thermal images and high resolution visible mapping |
| Camera weight (incl. mount) | 325 g (0.72 lb) | 425 g (0.94 lb) |
| GSD range | 6.7-170 cm/px 2.6-67.0 in/px | 6.5-320 cm/px (thermal) 1.3-66.0 cm/px (visible) 2.5-127.0 in/px (thermal) 0.5-26 in/px (visible) |
| Coverage at lowest GSD* | 160 ha (at 6.8 cm/px) at 98 m flight altitude 395 acres (at 2.62 in/px) at 321 ft flight altitude | 80 ha (at 6.5 cm/px thermal) at 50 m flight altitude 200 acres (at 2.55 in/px) at 164 ft flight altitude |
| Coverage at 120 m / 394 feet* | 150 ha (at 8.2 cm/px) 370 acres (at 3.2 in/px) | 190 ha (at 15.5 cm/px thermal) 469 acres (at 6.1 in/px thermal) |

Telemetry / Remote Control

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| Frequency range Telemetry | Country Specific: EU 868 - 869 MHz, US 902 - 928 MHz, AUS 915 - 928 MHz, CN 915 - 928 MHz |
| Frequency range Remote Control | All countries 2.404 - 2.479 GHz |
| Transmission power (Remote Control) | < 27dBm, (< 20 dBm) |
| Specified max. range | 40 km (25 mi) |
| Tested max. range | 8 km (5 mi) |