

|| The Trinity has the potential to blow any conventional fixed-wing UAV out of the market. ||

Christopher Clark, Rocketmine

quantum
systems



TRINITY F90+

PACKAGE CONTENT

- **Trinity F90+ UAV**
- **PPK**
Allows you to reduce typical GNSS geotagging errors of several meters down to 2-5 cm via auxiliary GNSS data collection in flight. Better accuracy with dramatically reduced additional costs!
- **Anti-Collision-Lights**
Our Trinity F90+ UAV has integrated flashing anti-collision strobe and position lights.
- **Live-Air-Traffic**
Now it is possible to automatically integrate the Live-Air-Traffic-Info into QBase when pingUSB is connected. pingUSB is the world's smallest, lightest and most affordable USB dual-band ADS-B receiver. pingUSB provides high-quality tracking data for use with software such as Virtual Radar Server and services including ADS-B Exchange.
- **iBase**
iBase is a reference GNSS station, it allows for the relative (and at externally georeferenced points absolute) geotagging precision of aforementioned PPK quality via logging the GNSS reference measurements on the ground to later use them in QBase flight data post-processing.
- **QBase - Ground Control Station**
Mission planning software, runs on any Windows PC/Laptop
 - Corridor Planning, Live-Air-Traffic, Resume Mission
- **Remote Controller (RC)**
- **Battery Pack + Battery Charger**
- **Lightweight Transport Case**
- **Warranty (1 year)**
- **Technical Support**

TECHNICAL DATA

Max. Take-off Weight	5.0 kg (11.0lbs)
Max. Flight Time	90 min*
Max. Range = Area	100 km = 700 ha (62 mi = 1730 ac)
Command and Control Range	5 - 7.5 km** (3.1 - 4.7 mi)
Payload (with compartment)	max. 700 g (1.54 lbs)
Optimal Cruise Speed	17 m/s (33 kn)
Wind Tolerance (ground wind)	up to 9 m/s (17.5 kn)
Wind Tolerance (in cruise flight)	up to 12 m/s (23.3 kn)
Operating Temperatures (UAV)	-12 °C to 50 °C (10.4 °F to 122 °F)
Wingspan	2.394 m (7.48 ft)
Transport Case Dimension	1002x830x270 mm (39.4x32.7x10.6 inch)

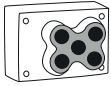
* export permission required
** under optimal conditions.

COMPARTMENTS

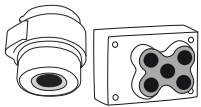
All sensors are delivered integrated in the 3D Print Payload Compartment including the multifunctional interface board.



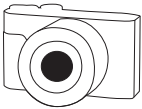
Sony UMC
Sony UMC-R10C 20.1 MP Sensor with 16 mm fixed focal length



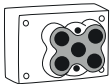
Micasense RedEdge-MX
New metal case for extreme durability; New DLS 2 for enhanced light calibration; Captures five narrow spectral bands; Generates plant health indexes and RGB (color) images. Including Calibrated Reflectance Panel (CRP).



Double Payload
Sony UMC +
Micasense RedEdge-MX



Sony RX1R II
CMOS full format sensor and fixed focal length lens
42.4 megapixel resolution



Micasense Altum
Altum integrates a radiometric thermal camera with five high-resolution narrow bands, producing advanced thermal, multispectral and high-resolution imagery in one flight for advanced analytics. Including DLS2 and Calibrated Reflectance Panel (CRP).

OPTION



ADS-B ModeS out Transponder



ADS-B ModeS out Transponder
(subsequent upgrade)

SPARE PARTS

Elevator*

Battery Pack*
Capacity 12.000 mAh

QS Battery Charging Station + Power Supply

Easily Charge / Discharge your Trinity F90+ Battery packs.

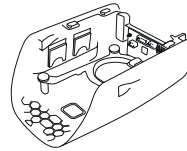
Outside wing* (left or right)

Strobe Lights*
RED, GREEN and WHITE, incl. charger, Excluding micro-USB cable

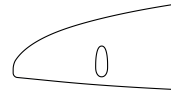
*Can be replaced by the customer. Modifications and 3rd party products will void warranty.

ACCESSORIES

Payload Compartment



3D Print payload (90 g) including Multipayload interface board to control the sensors (30 g).



Signal Stickers
4 pieces of signal stickers. 2x green (top & bottom) for left wing, 2x red (top & bottom) for right wing).



Additional Training
Training for two persons. Improve your mission planning and / or learn how to operate your Quantum product properly.



Post-Processing Basic
Improve your photogrammetric analysis and learn how to make the necessary adjustments for the expected accuracy.



Spare Parts & Service
Please get in touch with us directly. Our support team will create an individual repair or service solution for you depending on your request.
Please contact support@quantum-systems.com

