Trinity F90+

quantum systems

90 min. flight time

PPK

High power **motors**

ADSB out optional

New **payload** selection

Flexible **landing gear**
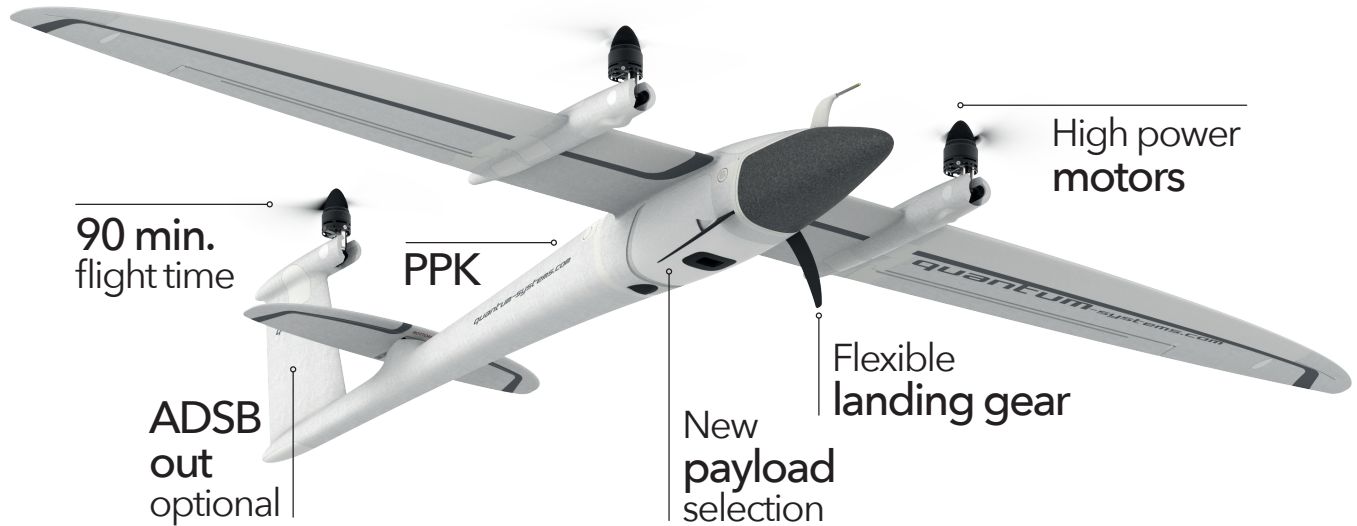
PACKAGE CONTENT

- **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

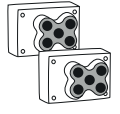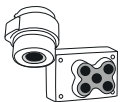|	LOCKED <60 MINUTES	UNLOCKED 90+ MINUTES[1]
Max. Take-off Weight	5.0 kg (11.0 lbs)	5.0 kg (11.0 lbs)
Max. Flight Time	<60 min	90+ min[1]
Max. Range = Area	70 km = 500 ha	100 km = 700 ha
Command and Control Range	5–7.5 km (3.1–4.7 mi)	5–7.5 km (3.1–4.7 mi)
Payload (with compartment)	max. 700 g (1.54 lbs)	max. 700 g (1.54 lbs)
Optimal Cruise Speed	17 m/s (33 kn)	17 m/s (33 kn)
Wind Tolerance (ground)	up to 9 m/s (17.5 kn)	up to 9 m/s (17.5 kn)
Wind Tolerance (cruise)	12 m/s (23.3 kn)	12 m/s (23.3 kn)
Operating temperature range	-12 °C to 50 °C (10.4 °F to 122 °F)	-12 °C to 50 °C (10.4 °F to 122 °F)
Wingspan	2.394 m (7.85 ft)	2.394 m (7.85 ft)
Transport Case Dimension	1002 x 830 x 270 mm (39.4 x 32.7 x 10.6 inch)	1002 x 830 x 270 mm (39.4 x 32.7 x 10.6 inch)
Transport Case Weight (3 batteries)	22.3 kg (49.1 lbs)	22.3 kg (49.1 lbs)

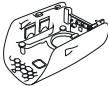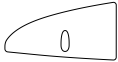1 Subject to export regulation, may require export permission.

OPTION

Trinity F90+
Art.: 4260574661427

Trinity F90+ DLS II
Art.: 4260574661434
Mandatory to buy the DLS II

Trinity F90+ ADS-B
Art.: 4260574661748
Mandatory to buy the Mode S ADS-B out Transponder

Trinity F90+ ADS-B + DLS II
Art.: 4260574661755
Mandatory to buy the Mode S ADS-B out Transponder
and the DLS II

DLS II for enhanced light calibration
Art.: 4260574662066
Mandatory for MicaSense camera to achieve optimal results

Calibrated Reflectance Panel (CRP)
Art.: 4260574660758
Mandatory for MicaSense camera to achieve optimal results

**Ping5S MODE S ADS-B out
Transponder** *Art.: 4260574662059*

**Ping5S MODE S ADS-B out
Transponder** *Art.: 4260574662059*
(subsequent upgrade)

COMPARTMENTS

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

Sony UMC *Art.: 4260574661571*
Sony UMC-R10C 20.1 MP Sensor with 16 mm fixed focal length.

Sony RX1R II *Art.: 4260574661588*
CMOS full format sensor and fixed focal length lens.
42.4 MP resolution

MicaSense RedEdge-MX
Art.: 4260574661595
Captures five narrow spectral bands;
Excl. DLS II and Calibrated Reflectance Panel (CRP).

MicaSense Dual Camera Kit
Art.: 4260574662073
MicaSense RedEdge-MX + RedEdge-MX Blue
Synchronized capture of all 10 bands for pixel aligned imagery.
Excl. DLS II and CRP.

MicaSense RedEdge-MX Blue Ready
Art.: 4260574662103
Ready for MicaSense RedEdge-MX camera.
New coastal blue band, a new green band and three new
bands in the red to red-edge region of the spectrum.
Excl. DLS II and CRP. Incl. RedEdge-MX Blue. Excl. RedEdge-MX

**Double Payload Sony UMC +
MicaSense RedEdge-MX**
Art.: 4260574661601
Excl. DLS II and CRP.

**Sony UMC +
MicaSense RedEdge-MX Ready**
Art.: 4260574662080
Ready for MicaSense RedEdge-MX camera.
Incl. Sony UMC. Excl. Red-Edge-MX.

MicaSense Altum *Art.: 4260574661977*
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. Excl. DLS II and CRP.

ACCESSORIES

Payload Compartment
3D Print payload (90 g) including multi-payload
interface board to integrate pre-defined cameras.
Excl. cameras.

Sony RX1RII Ready *Art.: 4260574662134*

MicaSense RedEdge-MX Dual Ready *Art.: 4260574662127*

MicaSense RedEdge-MX Ready *Art.: 4260574662141*

MicaSense Altum Ready *Art.: 4260574662097*

Signal Stickers *Art.: 4260574661960*
4 pieces of signal stickers. 2x green (top & bottom)
for left wing, 2x red (top & bottom) for right wing).

Additional Training *Art.: 1-60-7*
Training for two persons. Improve your mission
planning and / or learn how to operate your
Quantum product properly.

Post-Processing Basic *Art.: 1-60-8*
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

SPARE PARTS

Elevator* *Art.: 4260574661410*

Battery Pack* *Art.: 4260574661335*
Capacity 12.000 mAh

**QS Battery Charging Station + Power Supply incl.
12V Clamp Power Cords**
Easily Charge / Discharge your Trinity F90+ Battery packs.
EU (Type F) *Art.: 4260574660666*
US (Type B) *Art.: 4260574660673*
UK (Type I) *Art.:4260574660680*

Outside wing*
(left *Art.: 4260574661397* or right *Art.: 4260574661380*)

Strobe Lights* *Art.: 4260574661052*
RED, GREEN and WHITE, incl. charger, excl. micro-USB cable

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