

SPECTRE
SOLUTIONS



SPECTRE SOLUTIONS

General Purpose Drone Systems

SPECTRE - 1

General purpose drone platform

BASIC INFORMATION

SPECTRE-I is built as VTOL drone – is able to take off and land vertically without any supporting infrastructure. It can fly both as an airplane and a copter - it can stop in the mid-air.

Maximum take-off weight is 25kg (~55lbs) including 3kg (~6lbs) payload. Payload compartment dimensions are: 50x30x30cm (~20x12x12inch), it is also able to drop payload on parachute safely.

Drone can reach speeds of up to 140km/h (~75knots) and it comes in two drive versions – electric and mixed (both electric and combustion).

Maximum operational altitude is 1000m (3280ft). Drone supports RC/GSM/LTE/5G/SAT communication standards and is capable to conduct full automatic mission (i.e. BVLOS) as well as flying under pilot direct control (e.g. VLOS/BVLOS).



ELECTRIC VERSION

parameters of electric version only:

- range up to 40km (~22NM)
- flight time up to 1h

best for short distance inspection flights or light cargo delivery on the short distance.



MIXED VERSION

parameters of mixed (electric and combustion) version only:

- range up to 150km (~81NM)
- flight time up to 2h

best for long distance inspection flights or light cargo delivery on the medium distance.



HOW WE WORK

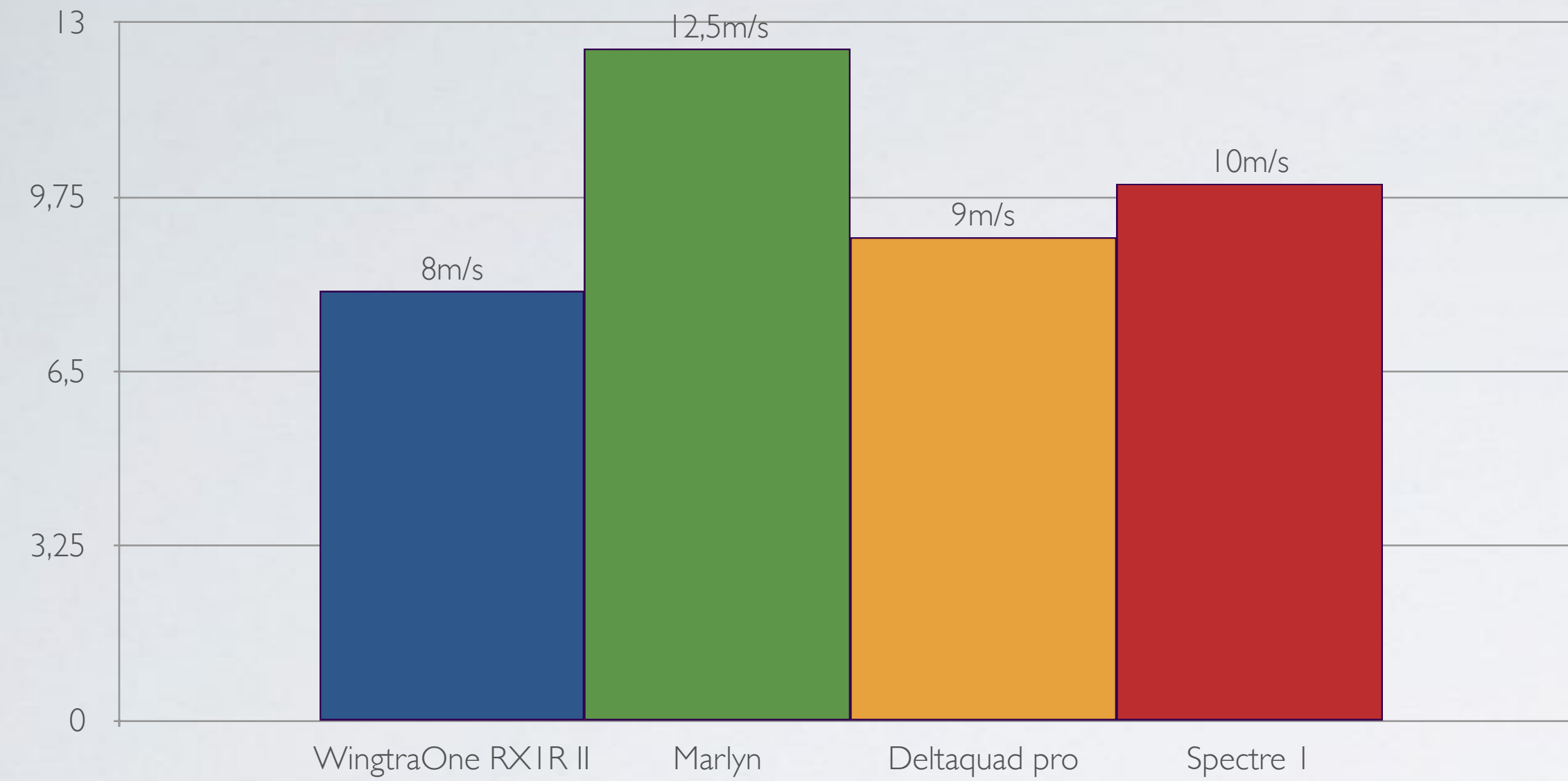
We work basing on proven methodology for final product delivery:

- drone structure (fuselage/empennage) is designed and optimized using numeric modelling
- propellers combined with the engines are examined using specialized dynamometer
- structure is proved by the endurance tests and examined in aerodynamic tunnel
- servo, avionics, navigations and communications are tested before assembling
- dedicated/simplified drone model is built to develop/adjust and test ("in air") of steering algorithms, avionics, navigations and communications
- final product is fully tested and flown in real conditions before release
- necessary documentation and flight instructions are delivered with the final product

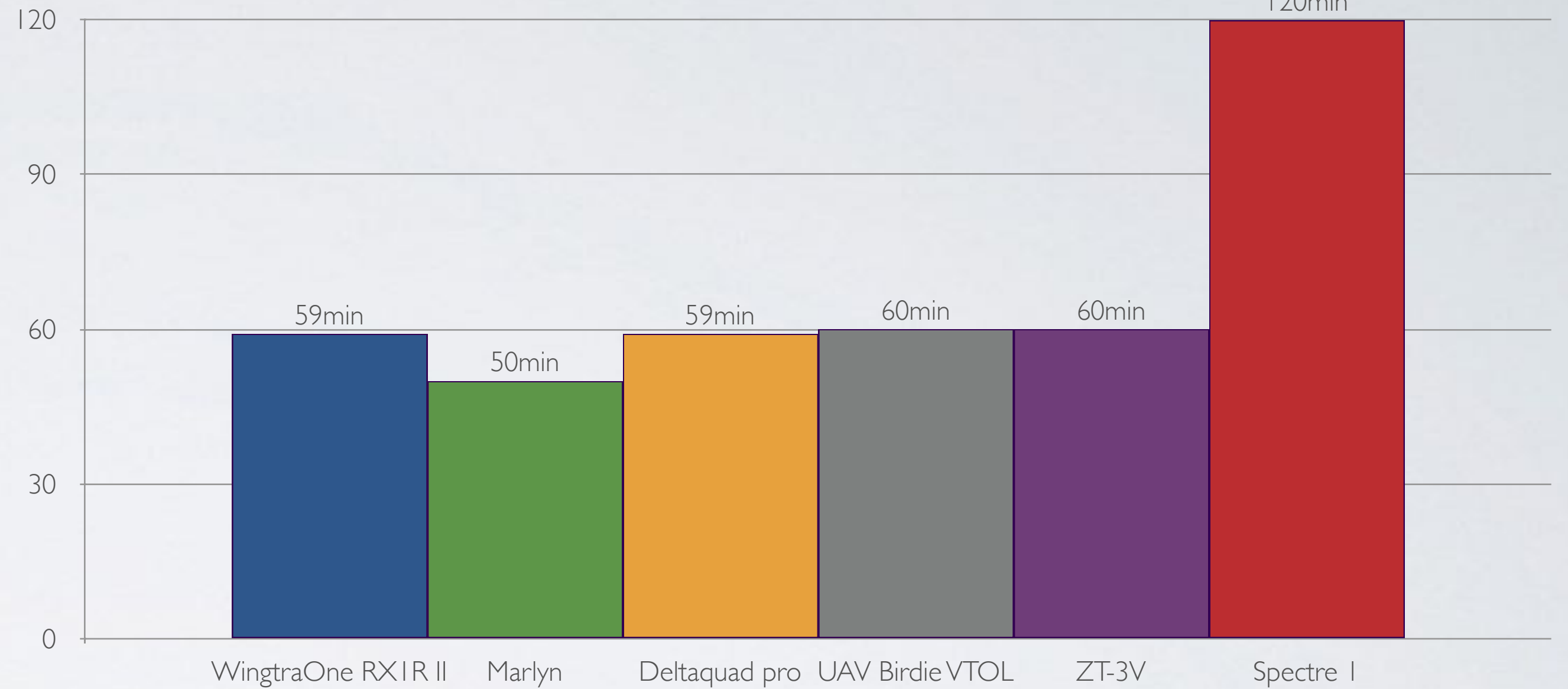


VTOL COMPETITION COMPARE

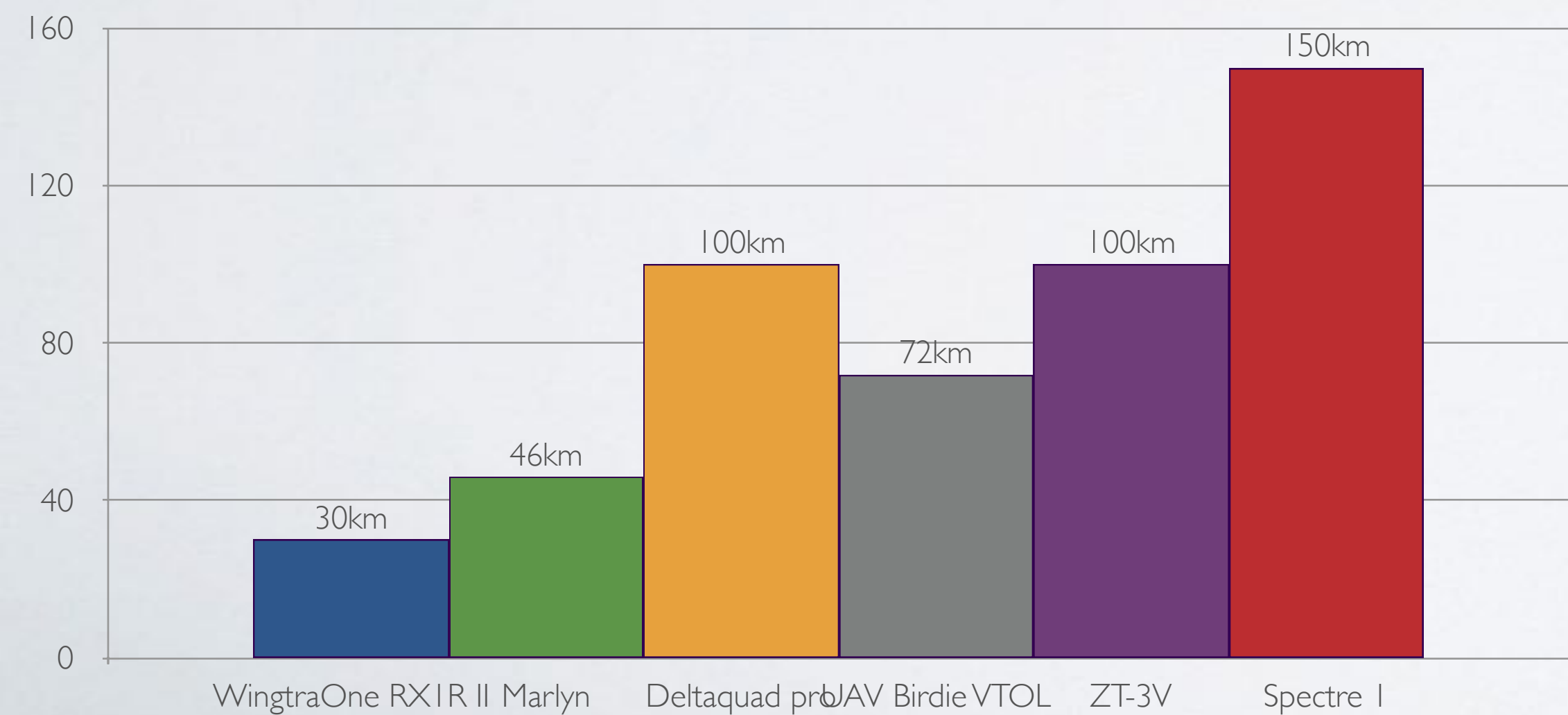
Acceptable Wind speed



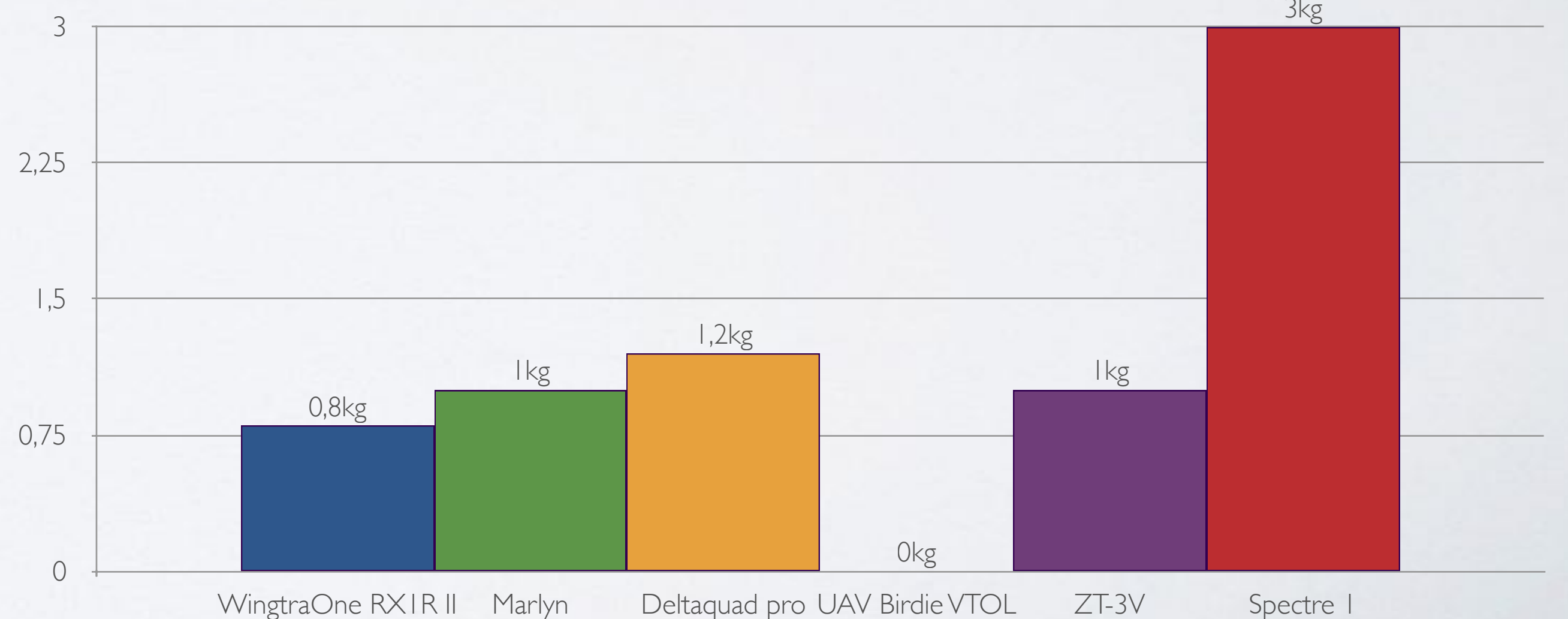
Flight time



Maximum distance



Maximum Payload



DATA SHEET



Parameter	Value
Cruise speed	80/140 km/h
Landing speed	0 km/h
Maximum flight altitude	1000 m
Manual flight mode control range	line of sight
BVLOS flight range	unlimited (using GSM/LTE/5G/SAT)
Maximum flight distance	40/150 km
Maximum flight time	1/2 h
Vertical flight engines	8 (4x2)
Horizontal flight engine	1 (electrical or combustion)
MTOW	24,95 kg
Maximum payload capacity	3 kg
Cargo space	50x30x30 cm
Size	3,55 x 0,71 x 2,11 m
Operational temperature range	-20 +45 C
Runaway	not needed

CONTACT INFORMATION



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