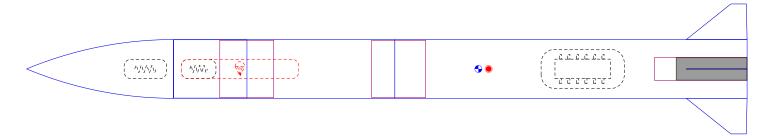
## Rocket Design



Rocket Stages: 1

Mass (with motor): 422 g

Stability: 0.175 cal

CG: 58.6 cm CP: 59.9 cm

## F10-8

Altitude	520 m	Motor	Avg Thrust	Burn Time	Max Thrust	Total Impulse	Thrust to Wt	Motor Wt	Size
Flight Time	62.2 s	F10	10.9 N	7.02 s	28.2 N	76.3 Ns	2.62:1	40.7 g	29/92 mm
Time to Apogee	12.1 s								
Optimum Delay	5 s								
Velocity off Pad	10.5 m/s								
Max Velocity	68.3 m/s								
Velocity at Deployment	5.24 m/s								
Landing Velocity	10.4 m/s								

## **Parts Detail**

Sustainer

	Nose cone	[material:[mate rial:polystyrene PS]] (1 g/cm³)	Ogive	Len: 19 cm	Mass: 92.7 g
	Body tube	Cardboard (0.68 g/cm³)	Diain 7.44 cm Diaout 7.62 cm	Len: 28.7 cm	Mass: 41.6 g
	Tube coupler	Cardboard (0.68 g/cm³)	Diain 7.44 cm Diaout 7.44 cm	Len: 7 cm	Mass: 0 g
$\bigoplus$	Parachute	Ripstop nylon (67 g/m²)	Diaout 30 cm	Len: 15.2 cm	Mass: 7.98 g
	Shroud Lines	Elastic cord (round 2 mm, 1/16 in) (1.8 g/m)	Lines: 6	Len: 30 cm	
NE	Shock cord	Elastic cord (round 2 mm, 1/16 in) (1.8 g/m)		Len: 40 cm	Mass: 0.72 g
	Body tube	Cardboard (0.68 g/cm³)	Diain 7.44 cm Diaout 7.62 cm	Len: 45.7 cm	Mass: 66.2 g
	Tube coupler	Cardboard (0.68 g/cm³)	Diain 7.44 cm Diaout 7.44 cm	Len: 7 cm	Mass: 0 g
kg	Flight Computer		Diaout 5.08 cm		Mass: 96 g
	Inner Tube	Cardboard (0.68 g/cm³)	Diain 2.9 cm Diaout 2.99 cm	Len: 12 cm	Mass: 3.4 g
$\Box$	Trapezoidal fin set (4)	PLA (1.25 g/cm³)	Thick: 0.3 cm		Mass: 29.1 g
M	Shock cord	Elastic cord (round 2 mm, 1/16 in) (1.8 g/m)		Len: 40 cm	Mass: 0.72 g