

NANO-CARR 0.5 Ellipsoid Aerostat

Specification January 2026

Category	Technical Parameter	Descripon / Unit of Measure
1. General Characteriscs	Model / Designation	NANO-CARR 0.5
	Purpose	Micro-Taccal (Ultralight) Aerostat System
	Construction Type	The internal pressure maintains the envelope's rigidity
2. Geometric Dimensions	length	2.8 x 2.8 x 2 m
	Helium Volume	App 9 m3
	Stabilisaon	Polyester mesh (stabilisation sail)
3. Masses and Payload	Gross lift	App 9 kg
	Empty System Weight	App 5 kg
	Maximum Payload Capacity	0.5 kg
4. Operational Performance	Max Operating Altitude	100 m
	Max Wind Speed Limit	10 km/h
	Operating Temp. Range	-10 to 60 °C
	Daily Helium Leakage	Up to 1% per day on total volume
5. Materials & Craftsmanship	Envelope Material	100 microns TPU White
	Seam Technology	Ultrasonic Welding (0.2 mm seam)
	Stabilisation	Stabilisation sail
	Valve System	Scoprega 2 stage valve at the back at the low point
	Safety valve	No
6. Tether & Power System	Tether Line	100m 5 mm Polyester (200 kg BS)
	Tether Power System (TPS)	No
7. Logistics & Preparation	Setup / Inflation Time	Up to 1 hour
	Packaging Dimensions	1 x 1 x 1 m

