



Hercules

Air Vehicle Launchers

The QinetiQ Target Systems Hercules pneumatic launcher can launch Unmanned Air Vehicles with an all-up-weight of up to 250kg and can achieve a maximum launch speed of 55m/s. The Hercules uses a low pressure pneumatic system operating at up to 10 bar. The design of the launcher provides a smooth acceleration along the entire length of the 16-metre launch rail which, for ease of transportation, can be folded. The launcher shuttle accepts a range of custom adapters for different Unmanned Air Vehicle types and is arrested at the end of the launch rail by a water brake system.

The Hercules launcher can be deployed rapidly and the dual compressors ensure that the Banshee launch pressure is reached in as little as five minutes. A differential hydraulic drive system is provided for manoeuvring the launcher at the launch site and independently-controlled hydraulic support legs provide a kneeling facility to allow a degree of levelling.

The launcher is operated by one person from a remote control panel to ensure safety is maintained. Turn-around time is kept to a minimum as the launcher can be pressurised while the shuttle is being reset.

The launcher is mounted on a single-axle trailer with pneumatic suspension and brakes. The trailer, which is equipped with a NATO tow hitch, has UK Individual Vehicle Approval (IVA).

Key features

- Launch speeds to 55 metres/second
- Air vehicles to 250kg mass
- Low pressure system
- Simple design and operation
- Easy maintenance and repair
- Low acquisition cost
- Rapid deployment
- Fast turnaround time

Specifications

Physical

Length	11.06 m (36ft 5in) towing configuration with launch rail folded and tow hitch extended. 16.28 m (53ft 5in) with rail extended
Width	2.26m (7ft 5in)
Height	2.9m (9ft 6in) in launch configuration 2.65m (8ft 8in) in towing configuration
Weight	7,500 kg (7.38 imperial tons)

Performance

Max launch velocity	55 metres/second (107 knots)
Max air vehicle mass	250 kg (551 lbs.)
Max launch pressure	10 bar (145 pounds/inch ²)
Rate of pressurisation	1 bar per minute

Other features

Dual compressors

Winch-assisted shuttle return

Water brake shuttle arrest system

Hydraulic drive for launcher manoeuvring and elevation

Remote launcher operation

Pneumatic take-off for air tools

Single axle trailer has UK Individual Vehicle Approval (IVA)



Launcher and Banshee all ready for trials.

Note: Due to continuous process improvement, specifications are subject to change without notice.

Collaborating with QinetiQ

At QinetiQ we bring organisations and people together to provide innovative solutions to real world problems, creating customer advantage.

Working with our partners and customers, we collaborate widely, working in partnership, listening hard and thinking through what customers need. Building trusted partnerships, we are helping customers anticipate and shape future requirements, adding value and future advantage.

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QINETIQ/CF/CM/DS1700099

For further information please contact:

Cody Technology Park
Ively Road, Farnborough
Hampshire, GU14 0LX
United Kingdom

+44 (0)1252 392000
customercontact@QinetiQ.com
www.QinetiQ.com