



Fig 1: The LISAD system

LISAD & WISAD -

ENVIRONMENTAL SENSING MODULAR PARACHUTE DISCONNECT

LISAD (Land)

LISAD is a land sensing parachute disconnect system developed and tested by IrvinGQ for use on aerial delivery systems. Unlike traditional parachute disconnects, it releases upon sensing impact with the ground which is inherently more reliable and independent of wind speed.

- LISAD is armed upon deployment of the main parachutes, significantly reducing risk of early release.
- Upon impact with the ground the sensing actuator is triggered, which in turn operates the disconnect body, releasing the risers.
- The LISAD consumable set is comprised primarily of activation cables and a sacrificial land sensing rod, requiring no electronics and no pyrotechnics.
- LISAD requires only one man for rigging and maintenance activities, reducing the operational burden.



Fig 2: LISAD in aircraft



Fig 3: Activated LISAD System



Fig 4: Disconnect linked to parachutes



Fig 5: LISAD triggering upon impact



Fig 6: Disconnect releasing

WISAD (Water)

WISAD is a water sensing parachute disconnect system developed and tested by IrvinGQ for use on maritime aerial delivery systems. Unlike traditional parachute disconnects, it releases upon sensing immersion in water which is inherently more reliable and independent of wind speed.

- WISAD utilises a proprietary water sensing cartridge that triggers the actuator upon immersion, which in turn operates the disconnect body, releasing the risers.
- The WISAD consumable set is comprised primarily of water sensing cartridges and activation cables, requiring no electronics and no pyrotechnics.
- WISAD requires only one man for rigging and maintenance activities, reducing the operational burden.

EQUIPMENT SPECIFICATION

- Single disconnect has an approx. volume of 375mm x 100mm diameter, weighing 5kg
- Compatible with most in-service cargo parachutes, including the G11 G12 and SC15
- Maximum load 26,000 lbs
- Can be retro fitted to in-service airdrop systems
- Universally compatible with aircraft cargo handling systems, including C130, C17, C5, A400M & KC390
- Environmentally tested to Def Stan OO-35 Part 3.
(Shock, Vibration & Impact, Salt Corrosion, Sand & Dust, Hot & Cold)

TECHNICAL SPECIFICATION for WISAD & LISAD

DZ Wind Limits	35 knots
Operation	Land & Water
Activation	Mechanical Ground contact (or water)
Capacity	Up to 42,000 lbs using 4 disconnects
Maintenance	Unit level No special tools No test equipment
Gross Weight	18lbs per unit 72lbs per Sys

Commercial manual and part numbers available upon request



Fig 7: WISAD boat equipment set



Fig 8: Parachute disconnect upon splashdown



Fig 9: RCAD Disconnect



Fig 10: Webbing adaptor