



ATR-1

A TRUE GAME CHANGER.

The 6D ATR-1 off-road motorcycle helmet has changed the industry forever. Introduced in 2013 it was the first motorcycle helmet ever manufactured incorporating technology that reduced angular acceleration and low-threshold impact energy transfer to the brain during crash impact. This was accomplished by 6D's revolutionary Omni-Directional Suspension (ODS) system.

The 6D ATR-1 was the "Game Changer" in 2013, and today is still leading the way for athletes looking for the ultimate in head protection. The ATR-1 is certified to exceed US DOT FMVSS 218 and ASTM F3103 (US), ECE 22.05 147 Countries World-Wide, AS 1698 (Australia) and ACU (UK) standards.

✓ BEST TECHNOLOGY

✓ BEST PERFORMANCE

✓ BEST PROTECTION



FEATURES

- PATENTED ODS (Omni-Directional Suspension) Technology
- SHELL – A proprietary blend of advanced aerospace carbon fiber, composite fiberglass, and Kevlar
- NEW PC HALO – Improves durability of inner EPS liner and overall performance
- Genuine CoolMax™ anti-bacterial fabric comfort liner
- EMERGENCY RELEASE CHEEK PADS
- SHEAR-AWAY VISOR SCREWS
- ROOST GUARD
- CLAVICAL CUT-AWAY
- STERNUM PAD – Provides added protection of the chin, jaw and sternum
- EXCEEDS ECE, DOT, ASTM, AU and AC standards.
- 3-YEAR LIMITED WARRANTY

ONLY 6D HAS OMNI-DIRECTIONAL SUSPENSION

6D's revolutionary patented Omni-Directional Suspension (ODS) technology represents a fully active, in-helmet suspension and kinetic energy management system. Engineered to uncouple the helmet's exterior shell from the inner EPS liner, the system effectively mitigates energy transfer to the head and brain of the rider during any given accident or impact event. The ODS system is comprised of 2 EPS liners separated by an array of elastomeric isolation dampers that allow the system to shear and displace 3-dimensionally when subjected to impact.

Omni-Directional Suspension functions over a much broader range of energy demands, including LOW, MID and HIGH-Velocity impacts for both *Angular* and *Linear* accelerations when compared to other competing helmets, and helmet technologies.

There is simply no other helmet, or helmet technology that can provide the exceptional energy management benefits of Omni-Directional Suspension.

ELASTOMERIC ISOLATION DAMPER

This damper is the heart and soul of 6D's exclusive Omni-Directional Suspension technology. An array of dampers work in unison with the dual EPS liners to isolate impact energy from the brain. The elastic properties of the dampers, combined with their unique 'hourglass' shape provide a progressive spring rate that manages low and mid-velocity accelerations, while simultaneously allowing the inner EPS liner to displace and shear in 3-dimensional space. This omni-directional displacement capability of the EPS liners provides 'six degrees of freedom', which became the inspiration for our company name, '6D Helmets.'



Angular Acceleration

Low Speed Performance

High Speed Performance

Time to Peak

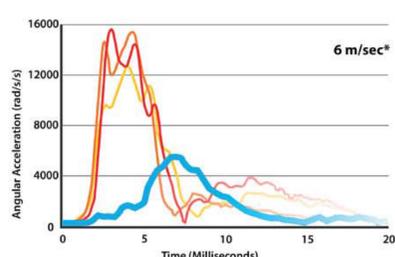
Test Performance

SUPERIOR ANGULAR ACCELERATION MITIGATION

ANGULAR ACCELERATION (ROTATIONAL) is generated from oblique angle impacts to the helmet's surface. The result of this type of impact, and subsequent energy transfer is shearing, tearing, compression, and rotation of the brain within the skull. The medical community has determined that angular acceleration is the primary cause of concussion, mild-traumatic brain injury (MTBI), and traumatic brain injury (TBI).

Tests conducted by Dr. David C. Viano of the Bioengineering Center at Wayne State University concluded that a *helmeted* head sustained the same degree of angular acceleration as the *un-helmeted* head when subjected to identical impacts. So, if angular acceleration is a major cause of concussion (or worse), how is the brain protected by conventional helmet design?

By uncoupling the helmet's inner liner assembly from the outer liner and shell, 6D's revolutionary Omni-Directional Suspension (ODS) system effectively mitigates the transfer of angular acceleration to the head and brain of the rider during any impact event.



6D's proprietary ODS technology dramatically reduces the transfer of angular acceleration to the head form compared to competitors.

"DESIGNED WITH THE SINGULAR GOAL OF BUILDING THE SAFEST, MOST EFFECTIVE OFF-ROAD HELMET POSSIBLE."



SIZING

XS	S	M	L	XL	XXL
53-54cm	55-56cm	57-58cm	58-59cm	60-61cm	62-63cm

Looking for dependable motorcycle helmets? Rely on 6D Helmets for quality and long-lasting products.