




GENTEX[®]

TOTAL HEADBORNE SYSTEM SOLUTIONS

GROUND PRODUCT CATALOG

GENTEX NORBO

 www.gentexnorbo.com



USA

Coast Guardsmen fast-rope from an Air Force UH-60G Pave Hawk helicopter during a training exercise at Air Station Kodiak, Alaska, Feb. 22, 2019.

Photo By: Coast Guard Chief Petty Officer Charly Hengen

IT'S GO TIME

Gentex Corporation takes pride in our dedication to the mission of providing optimal protection and situational awareness to global defense forces, emergency responders, and industrial personnel operating in high-performance environments.

OUR PROUD HISTORY

Gentex has been at the forefront of innovation for over 125 years, from product development to quality enhancement and performance. Our philosophy of continually reinvesting in our employees, our customers, and our capabilities and technologies shows in the growth of our business and the game-changing innovations our people have created.



CELEBRATING
125 YEARS
OF INNOVATION



OUR PEERLESS QUALITY

Gentex Corporation ensures that our Quality Management Systems consistently provide products to meet our customers' requirements and enables process measurements to support continuous improvements. We comply with an ISO 9001 certified Quality Management System that is supplemented with additional quality system requirements that meet the AS9100D standard, a standard that provides strict requirements established for the aviation, space, and defense industries.



ENGINEERED & TESTED

Whether it's a helmet system, a respiratory protection system, leading-edge optics, or a communication headset, Gentex Corporation takes the same all-in approach to product design and engineering. We aim to achieve the maximum protection, performance, and user comfort possible. Gentex Corporation's design and engineering teams transform customer challenges into solutions that work. Gentex Corporation's design and engineering teams work closely with end users to understand their challenges. Our best-in-class product solutions reflect that.



MISSION CONFIGURABLE

It's all about Open Architecture. Our approach to product integration results in systems with components that work together seamlessly and allow the end user to focus on the mission at hand – not their equipment setup. Our system products are designed and engineered to easily integrate and work with Gentex Corporation and other third-party components. This approach gives end users limitless freedom for customization.

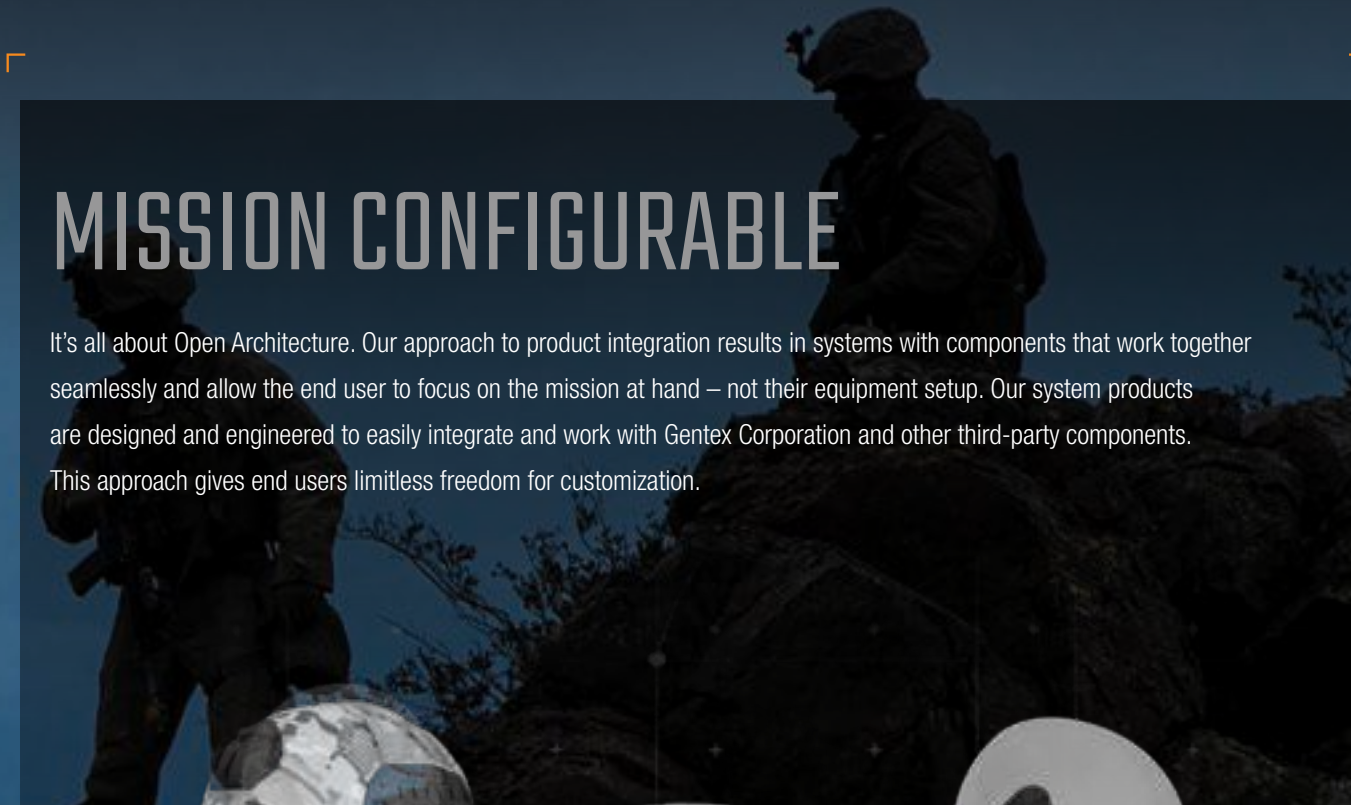


Photo By: Marine Corps Lance Cpl. Ana Madrigal

COMPLETE SYSTEM INTEGRATION

TOTAL HEADBORNE SOLUTIONS

We are your experts for headborne protection, situational awareness, high-performance optics, and respiratory protection. Gear up for mission success.



EYEWEAR

Delivering eye protection from fragmentation threats, blinding glare, or even lasers, our optics enhance vision to increase survivability in high-threat operations.



VISORS

The STEP-IN® visor provides a new level of optical clarity, ballistic performance, and functionality – sealed or vented. It can be used with one hand, ensuring quick and easy use.



MANDIBLES

Built for protection against ballistic threats and blunt impacts. The conforming soft armor allows the user to comfortably obtain a solid cheek weld on their rifle, and the well-ventilated design enhances comfort and reduces lens fogging.



SHROUDS

Designed to be compatible with most NVG mount arms, our shrouds are sturdy, snag resistant, and lightweight.



HELMET SUSPENSION

Available in an array of options, our helmet liners balance fit, comfort, and optimal ventilation with the capability to accommodate headsets. Some feature components are customizable and may be repositioned for optimal comfort.



RETENTION SYSTEMS

These systems deliver the assurance that the helmet, combined with its mission-configured components, is comfortable and remains securely on the head. Our webbing maintains light, straight force lines, while our innovative Head-Loc design enables one-handed tension adjustment.



HELMET COVERS

Tailored helmet covers offer the ability to add camouflage and surface protection without modifying the helmet. They are available in both stretch and mesh options.



COMMUNICATIONS

Our 3D Hear-Through Technology combines world-class audio quality with scalable hearing protection for enhanced situational awareness. Our AMP™ Headset is configurable to meet a variety of operational requirements.



RESPIRATORY

For tactical ground forces, these products offer protection from a wide range of oil and non-oil based particulates. The design offers seamless protection without interfering with the operator's TTP and interfaces with weapons systems for optimal effectiveness.



HEADBORNE PROTECTION

SYSTEM-LEVEL PERFORMANCE

Protection and ongoing optimization

Every day, our expert team of designers and engineers push the limits the limits of what's possible and work closely with end users to meet and exceed system requirements.

Our core innovation is Integrated Modular Design. It offers helmet systems with performance-enhancing components that can be assembled and configured for any mission, quickly and easily. This allows the wearer to concentrate without distraction from the helmet and componentry.

A key feature is Open Architecture. Our products deliver maximum flexibility and forward compatibility and are designed to integrate seamlessly with both Ops-Core and third-party components. This creates the most opportunity for customization to meet each wearer's individual needs.



1

BALLISTIC PROTECTION

We offer helmets in different ballistic materials and designs, giving end users more options in the level of threat protection, weight, and price. Our labs are on the forefront of handgun, frag, and rifle protection testing, pushing the limits of what's possible.



2

COMPLETE INTEGRATION

Our end users operate in the most challenging environments and conditions. We provide them with full headborne systems that integrate communications, situational awareness technology and eye and respiratory protection.



3

SCALABLE ACCESSORIES

A ballistic applique can be added for a transformative level of protection. Eye protection and vision enhancement can be added with our eyewear and ballistic visors. By having a variety of mandible configurations to choose from, wearers get the peace of mind of added face protection.



SITUATIONAL AWARENESS

3D HEAR-THROUGH TECHNOLOGY

Enhanced audio with scalable hearing protection

Always have a competitive advantage confronting threats. The AMP® Communication Headset features 3D Hear-Through Technology (3DHT) and advanced, scalable hearing protection. Its modular design allows easy configuration to meet a wide range of mission needs. Ops-Core helmet shells are designed to better accommodate communication headsets, and the geometry of the headset earcups is designed to accommodate a wide variety of helmet profiles. The AMP Communication Headset is Berry Amendment compliant and CE approved EN352. Our situational awareness products are proudly assembled in Gentex's US factories.

AMP OVERVIEW



WATCH THE VIDEO



1

HEARING ENHANCEMENT

World-class 3D Hear-Through Technology (3DHT) provides unprecedented audio quality, hearing restoration and enhancement, and allows the operator to boost their "natural hearing" by up to +12dB.



2

ADAPTIVE MISSION PLATFORM

The AMP Communication Headset was developed to quickly convert between an ergonomic headband and helmet mounted configuration. The AMP Helmet Rail Mount Kit provides better comfort, a consistent earseal and greater helmet stabilization with streamlined stowage capability.



3

SCALABLE HEARING PROTECTION

High-performance earseals with ergonomic fit provide a better seal and improved noise attenuation. The addition of optional wireless NFMI earplugs provide increased noise reduction that rivals active noise reduction (ANR), while maintaining clear communications and hear-through audio.



HIGH-PERFORMANCE OPTICS

OPTIMAL THREAT VISIBILITY



From performance eyewear to ballistic visors

Gentex has a history of excellence in optics as a designer and manufacturer of precision polycarbonate lenses for both defense and commercial applications.

These advanced products – from eyewear with interchangeable lenses to ballistic and non-ballistic visors – offer enhanced visual acuity and protection to support any mission, optimizing and maintaining operational performance for elite defense, law enforcement, and security forces.

1

ADVANCED OPTICS

Gentex-manufactured lenses offer the highest quality and levels of protection. Lenses are available in Clear, Tint, Laser Dazzle, and High Contrast. Future lens options include advanced laser eye protection (ALEP) and photochromic.



2

MISSION CONFIGURABLE

Our optics options – ranging from eyewear to visors to shields – are easily configurable to specific threats or conditions faced.



3

SCALABLE PROTECTION

Visors deliver eye or full-face protection from fragmentation to handgun threats. They feature anti-fog interior coatings and anti-scratch exteriors, with one-handed operation.



RESPIRATORY PROTECTION FOR TACTICAL OPERATIONS

50+ years of respiratory technology innovation

Gentex has decades of experience, supplying air crews with leading-edge respiratory systems. We've put it to work on the ground; in threatening environments with oil, lead, asbestos, or ammo residue, and in situations our customers face on a regular basis, like exiting a chopper that's kicking up debris, respiratory protection is essential. Ops-Core's signature respiratory products have a filtration effectiveness rating of P100, the highest particulate filtration rating attainable for mitigating exposure. Due to our unique, streamlined design, the wearer gets the highest level of protection and zero interference with mission-critical weapons and equipment.

99.97%
FILTRATION
EFFICIENCY

1

FILTRATION EFFICACY

Delivers at minimum 99.97% filtration efficiency against airborne particulates. Field tested and proven to mitigate airborne lead, asbestos, lubricant mist, narcotics, and explosive gunfire residue.



2

SEAMLESS COMPATIBILITY

The low-profile design offers protection without interfering with operator's tactics, techniques, and procedures. Our systems seamlessly integrate with weapons systems for optimal effectiveness, including an option that interfaces with communications headsets.



USA

British Royal Marine Commandos with Alpha Company, 40 Commando Battle Group, prepare to breach a building during Integrated Training Exercise 1-20 at Marine Corps Air Ground Combat Center (MCAGCC).

Photo By: Lance Cpl. Cedar Barnes



OUR EXPERTS BREAK IT DOWN

Choosing the Best Helmet Platform for Your Needs

FAST

The FAST® family of helmets is our most advanced. FAST SF, our newest, lightest ballistic helmet, comes with the latest in accessories and is super high-cut and comfortably accommodates comms headsets. FAST XP and FAST LE both offer high-cut trim, but they differ in ballistics protection. When a wearer moves from the FAST SF to XP, they'll experience slightly more weight but will gain more coverage and ballistic protection. FAST LE is built to the NIJ ballistic standard for handgun threats and is a popular choice for law enforcement.



SENTRY

Based on the FAST helmet geometry, the Sentry™ helmet platforms provide the same ballistic protection as an ACH helmet at a lighter weight with more coverage. With Ops-Core ARC™ Rails and a Skeleton Shroud, the helmet can be tailored to individual missions and is available with XP and LE ballistic protection levels.



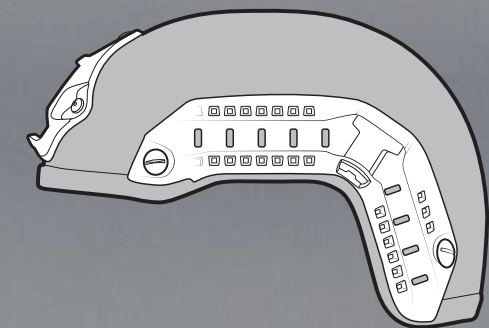
TBH

TBH helmets are built on the ACH geometry and are available in high-cut, mid-cut, and low-cut trim options. They can be slick or mission configured with NVG shroud, VELCRO® Brand fasteners and Ops-Core ARC Rails. The TBH-III A meets NIJ standards for handgun protection and the TBH-R1 meets new NIJ levels for handgun and some rifle protection.



Balancing Your Decision in Helmet Selection

There are three main factors to consider while selecting a helmet.



PROTECTION

Protection (ballistics and/or coverage) of the operator is the primary goal of the helmet.

Balance: Cost and Weight

WEIGHT

Lighter helmets are more comfortable and facilitate better physical performance.

Balance: Protection and Cost

COST

Differing costs can affect the acquisition and fielding of the helmet.

Balance: Weight and Protection




HELMETS

PROVEN HEADBORNE SYSTEM PLATFORMS



Helmet Colors

Please call Customer Service at 888.894.1755 to find out lead time on your helmet cut, color, and configuration.

-  Tan 499
-  Foliage Green
-  Ranger Green
-  MultiCam®
-  Black
-  MultiCam® Black
-  Urban Gray

Suspension/Retention

Available in multiple options. Please call 888.894.1755 to find out your helmet retention options.

Ballistic FAST SF

The lightest, most advanced ballistic helmet. The edge trim has been optimized for use with communications headsets while still providing critical coverage. It delivers total modularity. Skeleton Ops-Core ARC Rails™ and Ops-Core ARC Shims offer increased functionality, and a lightweight, Modular Bungee Shroud reduces snagging with integrated NVG retention. The Vented Lux™ Liner enables stability and comfort while fully loaded and is available with two suspension retention options.

- Ballistic shell made of a hybrid composite of the most advanced carbon, unidirectional polyethylene, and woven aramid
- High-performance evolution of the Ops-Core® FAST MT Helmet, with an 8% weight reduction, while improving comfort and increasing stability
- Skeleton Ops-Core ARC Rails and Ops-Core ARC Shims increase functionality and increase accessory attachment points while maintaining compatibility with legacy FAST headborne accessories



Ballistic FAST XP

A platform that delivers value, effective coverage, and ballistic protection. This ballistic shell provides more coverage and increased protection than our FAST SF helmet, at a slightly higher weight. An Ops-Core Skeleton Shroud delivers universal compatibility with NVG mounts. Ops-Core ARC Rails and external VELCRO® Brand fastener provide additional attachment locations for other accessories such as visors, mandibles, handgun face shields, and ballistic appliques. It's available with four suspension/retention options.

- High-cut ballistic shell made of a hybrid composite of carbon, uni-directional polyethylene, and woven aramid
- Features an Ops-Core Skeleton Shroud for universal capability with most NVG mounts, Ops-Core ARC Rails with hook bungees, and external VELCRO® Brand fastener
- Available with EPP and Vented Lux Liner Suspension systems
- Available with Worm-Dial and Occ-Dial retention systems



Ballistic FAST LE

Optimized for law enforcement applications, it's a lower-cost alternative to our FAST XP High Cut, and has mission-configurable capabilities. The LE features an Ops-Core Skeleton Shroud for universal capability with NVG mounts, Ops-Core ARC Rails with hook bungees and external VELCRO® Brand fastener. It's compatible with Ops-Core visors, mandibles, handgun face shields, and ballistic appliques. It's available with two suspension/retention options.

- High-cut, medium weight, ballistic shell made of monolithic aramid
- Features an Ops-Core Skeleton Shroud for universal capability with most NVG mounts, Ops-Core ARC Rails with Hook Bungees, and external VELCRO® Brand fastener





Ballistic

Sentry XP

Its mid-cut, lightweight ballistic shell provides similar ballistic protection and slightly more head coverage than ACH helmets. Delivers great modularity with an Ops-Core Skeleton Shroud for universal compatibility with NVG mounts, Ops-Core ARC Rails, and external VELCRO® Brand fastener. It's compatible with communication headsets. Available with the EPP liner system with Worm-Dial.

- Mid-cut, lightweight, ballistic shell made of a hybrid composite of carbon, uni-directional polyethylene, and woven aramid
- Provides slightly more head coverage in mid-cut design than US Army ACH helmet
- Features an Ops-Core Skeleton Shroud for universal capability with most NVG mounts, Ops-Core ARC Rails with hook bungees, and external VELCRO® Brand fastener



GENTEX

Ballistic

TBH-III A

With an efficient balance of coverage and weight, it delivers protection against handgun, fragmentation, and blunt impact. The TBH-III A comes equipped with an Ops-Core Skeleton Shroud for universal compatibility with NVG mounts, Ops-Core ARC Rails with carabiner bungees, and external VELCRO® Brand fastener.

- Offered in low-, mid-, or high-cut design with three suspension/retention options
- Ballistic shell made of a monolithic composite of woven aramid
- Features an Ops-Core 3-Hole Skeleton Shroud, compatible with most NVG mounts, Ops-Core ARC Rails with carabiner bungees, and external VELCRO® Brand fastener



TBH-III A Mission Configured High Cut



Ballistic

Sentry LE

Optimized for law enforcement applications, its medium weight ballistic shell provides mid-cut head coverage, slightly more than an ACH helmet. Featured is an Ops-Core Skeleton Shroud for universal compatibility with NVG mounts, Ops-Core ARC Rails with hook bungees, and external VELCRO® Brand fastener. It's compatible with in-ear communication headsets. Available with the EPP Liner system with Worm-Dial.

- Mid-cut, lightweight, ballistic shell made of monolithic aramid
- Provides slightly more head coverage in mid-cut design than US Army ACH helmet
- Features an Ops-Core Skeleton Shroud for universal capability with most NVG mounts, Ops-Core ARC Rails with hook bungees, and external VELCRO® Brand fastener



TRIM DESIGN OFFERINGS



Low Cut



Mid Cut



High Cut

GENTEX

Ballistic

TBH-R1

The TBH-R1 is the helmet for the highest threats an operator might face. Designed to stop rifle rounds and most handgun and frag threats, TBH-R1 is available in three cuts and features key Ops-Core components like the new Modular Bungee Shroud (MBS), ARC Rails, and Lux Pux™.

- Best-in-class protection: rifle, handgun, fragmentation, and blunt impact
- Weight equivalent to traditional ACH – hybrid construction of aramid, carbon, and ultra-high molecular weight polyethylene (UHMWPE)
- Features an Ops-Core MBS Modular Bungee Shroud, compatible with most NVG mounts, optional Ops-Core ARC Rails with hook bungees, and external VELCRO® Brand fastener
- Scalable design allows for compatibility with Ops-Core visors, mandibles, and handgun face shields



GENTEX

Ballistic

Combat Vehicle Crewman (CVC)

This integrated helmet system features improvements in shell design, inner liner, and communications equipment, and integrates Bose® Product Improved Combat Vehicle Crewman (PICVC) Communication Headset. The helmet shell is designed for land and sea mounted missions that require ballistic, impact, and noise protection, while allowing communication via intercoms or radios. The CVC is compatible with a wide variety of vehicle intercom systems and/or radio systems.

- Shell available in three different ballistic resistant configurations
- Includes a Gentex improved inner liner
- Features Bose Product Improved Combat Vehicle Crewman (PICVC) Communication Headset with Active Noise Reduction (ANR) and intercom interface cable assembly





Non-Ballistic

FAST SF Carbon Composite

Our most advanced non-ballistic helmet. The vented carbon composite shell is optimized for use with communications headsets and delivers total modularity. Skeleton Ops-Core ARC Rails and Ops-Core ARC Shims offer increased functionality, anti-scratch coating available and a lightweight Modular Bungee Shroud reduces snagging with integrated NVG retention. The Vented Lux Liner enables stability and comfort while fully loaded and is available with three suspension retention options.

- Lightweight, non-ballistic shell made of a hybrid design of unidirectional composite carbon fibers
- High-performance evolution of the Ops-Core FAST Carbon High Cut Helmet System with improved comfort and increased stability
- Skeleton Ops-Core ARC Rails and Ops-Core ARC Shims increase functionality and increase accessory attachment points while maintaining compatibility with legacy FAST headborne accessories
- Vented Lux Liner and shell for increased airflow
- Add ballistic protection with the Low Profile Ballistic Applique (LPBA)



Non-Ballistic

FAST Carbon

The durable carbon construction delivers protection against blunt impact. It's ideal for rugged training, such as water training and fast roping where ballistic threats are less common. Featured is an Ops-Core Skeleton Shroud for universal compatibility with NVG mounts, Ops-Core ARC Rails with hook bungees, and external VELCRO® Brand fastener.

- High-cut, lightweight, non-ballistic shell features a hybrid design of unidirectional and woven composite carbon fibers
- Designed for less extreme environments, the durable carbon construction provides protection against blunt impact, making it ideal for rugged training, recce and water operations, and fast roping
- Vented helmet shell for increased airflow



Non-Ballistic

FAST Bump

Ideal for less extreme environments where only protection from blunt impact is required, and mission-configured components are a primary need. Includes a molded-front NVG mount and Ops-Core ARC Rails with external side VELCRO® Brand fastener. This helmet provides a lower-cost alternative to the FAST Carbon helmet.

- Improved blunt impact performance per ACH CO/PD 05-04: 2007
- The FAST Bump Helmet is designed for less extreme environments where only protection from blunt impact is required, and mission-configured components are a primary need
- Includes a molded front NVG mount and 4-position Ops-Core ARC Rails with external side VELCRO® Brand fastener



Non-Ballistic

Skull Mounting System

The Skull Mounting System with Modular Bungee Shroud (MBS) is an ultra-lightweight, stable platform for attaching mission-configured components when ballistic and bump protection isn't required. Three comfort adjustment dial knobs make it one-size-fits-all. The built-in Ops-Core Skeleton Shroud delivers universal compatibility with NVG mounts and a 4-Point Head-Loc® Chinstrap adds stability. Also includes a wire and cable management system to streamline external wire and cable routing.

- Made of a composite of nylon and mesh fabric, an ultra-lightweight stable platform for attaching helmet accessories where ballistic and bump protection are not required
- One size fits all; three adjustment dial knobs allow for comfort adjustments to any head size or shape
- Features an Ops-Core Modular Bungee Shroud for universal compatibility with most NVG mounts, a 4-Point Head-Loc® Chinstrap, and straight Ops-Core ARC Rails



Non-Ballistic

ARGUS 017T

The Argus 017T Public Order/Riot Helmet is a robust, safe, and reliable helmet specifically designed for the rigorous operational requirements of public order and security duties. It is high-impact resistant 2mm or 3mm polycarbonate visors, with anti-mist and anti-scratching available and accommodates a range of full-face respirators.

- Approved to Technical Specification based on BS PAS017:1995 (Amendment 1)
- Manufactured in high-impact, self-colored acrylonitrile butadiene styrene (ABS) thermoplastic
- High-impact resistant 2mm or 3mm polycarbonate visors, with anti-mist and anti-scratch coatings available



Non-Ballistic

ARGUS APH05T

Tested and approved to meet UK Home Office Standard PSDB21/04, protective headwear standard for UK police. This helmet is offered in a polycarbonate (PC) and polybutylene terephthalate (PBT) thermoplastic shell. It can accommodate a range of full-face respirators.

- Fully approved to the UK Home Office PSDB Protective Headwear standard 21/04 for Police Public Order Helmets 2004
- Manufactured in PC and PBT thermoplastic shells
- High-impact resistant 3mm polycarbonate visors, with anti-mist and anti-scratch coating available





USA

U.S. Army Rangers of the 75th Ranger Regiment conduct field training for a unit TFT (Task Force Training) operation on Joint Base Lewis - McChord, Wa., Aug. 20, 2019

Photo By: Spc. Garrett Shreffler

SYSTEM COMPONENTS

YOUR MISSION, CONFIGURED



Helmet Cover

FAST SF

A lightweight accessory for shell protection and signature management. This helmet cover is easy to apply and is compatible with FAST SF Ballistic, FAST SF Carbon Composite, and FAST MT Super High Cut helmets. Features paracord attachment points for natural foliage, camouflage material, or cable management.

- Easy to don and doff using VELCRO® Brand fastener tabs
- Compatible with Ops-Core FAST SF Ballistic, MT, and SF Carbon Composite helmets
- Mesh areas allow for venting when used with non-ballistic helmets
- Paracord attachment points for natural foliage, camouflage material, or cable management
- Available in MultiCam®, Foliage Green, Black, Urban Gray, Tan 499, Coyote Brown, and White

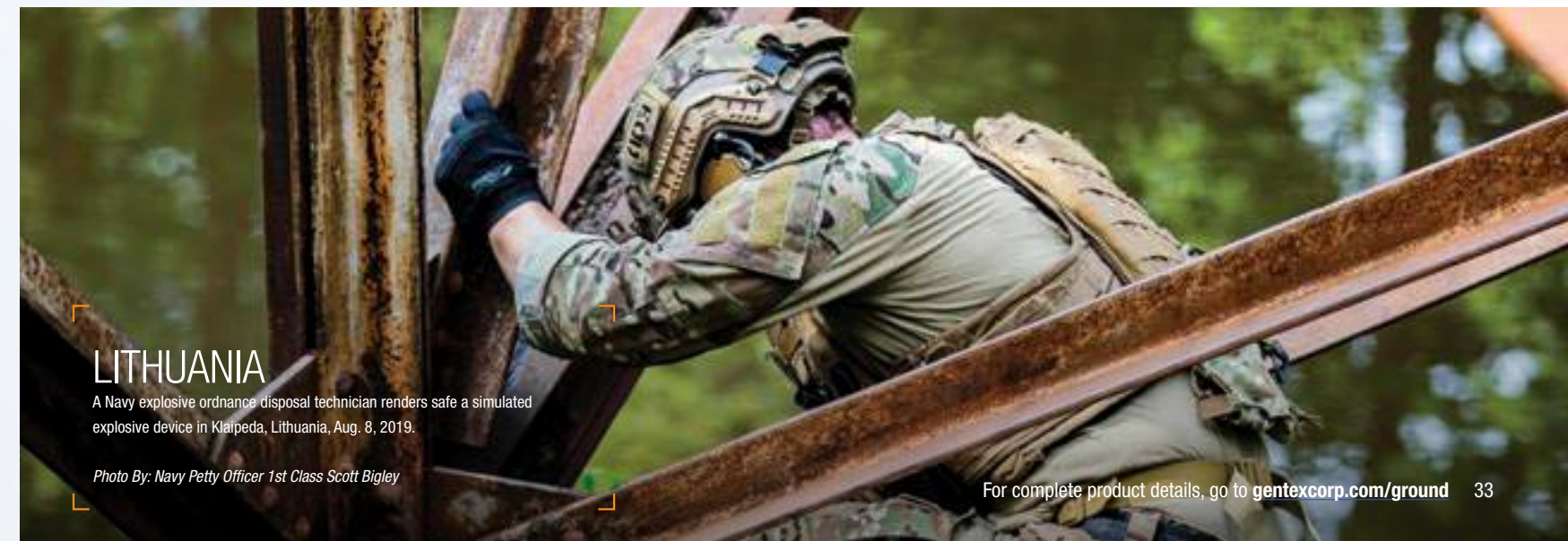


Helmet Cover

FAST Mesh

The original helmet cover for FAST helmets. This cover attaches underneath the shroud, providing shell protection that doesn't impede full FAST helmet functionality. It is compatible with Ops-Core FAST MT Super High Cut and XP High Cut helmets. The FAST Mesh features paracord attachment points for natural foliage, camouflage material, or cable management.

- Compatible with Ops-Core FAST MT Super High Cut and XP/LE High Cut helmets
- Lightweight mesh construction with Hypalon® reinforced Cordura® nylon in the shroud area
- Paracord attachment points for natural foliage, camouflage material, or cable management



LITHUANIA

A Navy explosive ordnance disposal technician renders safe a simulated explosive device in Klaipeda, Lithuania, Aug. 8, 2019.

Photo By: Navy Petty Officer 1st Class Scott Bigley

For complete product details, go to [gentexcorp.com/ground](https://www.gentexcorp.com/ground)



MCHC

The Ops-Core Mission Configurable Helmet Cover (MCHC) is a cost-effective solution equipped with mission-configured components including the Ops-Core Skeleton One-Hole Shroud, ACH Skeleton ARC Rails with bungees, and exterior VELCRO® Brand fastener. Components such as visors, mandibles, NVGs, lights, cameras, O2 masks, communication devices, and IFF strobes can be attached.

- A simple, cost-effective way to allow mission-specific capabilities to be quickly and easily added without permanent modification of the helmet
- Equipped with mission-configured components including the Ops-Core Skeleton One-Hole Shroud, ACH Skeleton Ops-Core ARC Rails with bungees, and exterior VELCRO® Brand fasteners
- MCHC is secured to the helmet with a combination of a close-tolerance cover design per individual helmet size; integrated straps with VELCRO® Brand fastener; and a ballistic bolt securing shroud to the helmet through existing drilled hole in standard U.S. Army ACH helmets
- Installed bungee cords reduce rattle/vibration of NVGs when mounted
- Fits four standard sizes (SM, MD, LG, XL) of U.S. Army ACH, USMC MICH Type II, and Gentex Low Cut Tactical Ballistic Helmet Systems
- Available in Operational Enduring Freedom Camouflage Pattern (OCP) (MultiCam®); other camouflage and solid colors available upon request



Rear Flap



VELCRO® Brand Fastener Attachment Tabs



Universal Loop Kit

The pattern is one-size-fits-all and is compatible with all new and legacy Ops-Core and Gentex helmets. Its irregular shape provides more attachment points while reducing NIR signature by breaking up the shapes. VELCRO® Brand fasteners allow for quick and easy on/off attachments with headborne accessories.

- One-size-fits-all pattern compatible with all new and legacy Ops-Core and Gentex helmets
- Irregular shape provides more attachment points without increasing NIR signature
- VELCRO® Brand hook and loop fastener allows for the secure, quick, and easy attachment and detachment of headborne accessories
- The Universal Exterior Loop Kit contains 11 VELCRO® fastener pieces and replacement guide



Shown in Tan 499

COLOR OFFERINGS

- Tan 499
- Black
- Foliage Green
- Urban Gray



Top View



Side View



Back View

USA

Army Green Berets prepare to climb aboard a UH-60 Black Hawk helicopter during a training exercise near Nellis Air Force Base, Nev., Aug. 27, 2019.

Photo By: Army Sgt. Steven Lewis



Suspension/Retention

Vented Lux Liner

Designed for comfort during extended use with fully kitted helmets, it employs vents and a more streamlined geometry than the original Lux Liner for increased airflow, comfort, and a better fit. Durable, breathable, lightweight pads come in three different thicknesses to allow for a custom fit. The liners deliver 360 degrees of coverage in the Ops-Core FAST helmet systems. It is also offered with the Worm-Dial retention system, which provides a quick adjustment in a low-profile fit band.

- A suspension system that combines a one-piece, full-coverage impact layer with modular, breathable comfort pads that can be customized and repositioned for comfort and integration of communication headsets
- Available with Worm-Dial, Occ-Dial, and H-Nape retention and suspension options
- Designed for use with FAST SF, XP, and MT helmets



Suspension/Retention

Lux Pux

Leveraging the premium materials that are used in the Vented Lux Liner, Ops-Core Lux Pux provides a one-size-fits-all, configurable pad system for TBH, ACH, and ECH style helmet platforms. The 10-pad kit offers significant weight savings over comparable products without compromising comfort.

- Uses the same premium impact and comfort materials used in the Vented Lux Liner
- One size fits all
- Compatible with X-Nape, H-Nape, and Occ-Dial® retention and suspension options
- Designed for use with TBH, ACH, and ECH style helmets



Lux Pux Pad System



Suspension/Retention

EPP Liner System

Available for use in FAST, Sentry, and TBH helmet platforms. Kit includes front EPP pad, Occ-Dial Fitband, Head-Loc 4-Point Chinstrap, and 15/22mm hardware.

- Replacement kit for Occ-Dial Liners
- Fit all Ops-Core FAST, Sentry, and TBH helmets
- Kit includes (1) front EPP pad, (1) Occ-Dial Fitband, (1) Head-Loc 4-Point Chinstrap, and 15/22mm hardware, pending helmet
- Available in M, L, XL, and XXL sizes



Suspension/Retention

H-Nape Head-Loc Chinstrap

Designed to counter NVG instability due to slippage on the head, this system is ideal for stabilizing heavier, front-mounted NVGs during rigorous activity. It prevents helmet rotation using a fifth adjustment tab on the nape pad. Patented Head-Loc tabs provide instant, one-handed, chinstrap adjustment.

- Designed to resolve the issue of NVG instability caused by helmets slipping on the head
- Features fifth adjustment tab on nape pad to provide extra support and prevent back-and-forth helmet rotation
- Patented Head-Loc tabs provide instant, one-handed, chinstrap adjustment while wearing the helmet



Suspension/Retention

Gas Mask Chinstrap Extender

Adds 3.5" to the chinstrap, allowing it to fasten over the CBRNE mask. Simple to attach and remove with one click of the buckle. Compatible with Head-Loc Chinstraps only.

- Adds 3.5" to the chinstrap, allowing it to fasten over the CBRNE mask
- Simple to attach and remove with one click of the buckle
- Compatible with Head-Loc Chinstraps only
- Available in Tan, Foliage, and Black



Suspension/Retention

Universal Nape Pad

Located on the nape cup of the Occ-Dial or Worm-Dial retention system, the pad can be adjusted vertically to customize fit with any head shape, enhancing stability and comfort.

- Significantly enhances the stability and comfort of the helmet by anchoring the back of the helmet across a large surface area on the occipital bone of the head.
- Large surface of the nape pad permits a broader distribution of weight, resulting in a more comfortable and stable helmet platform
- Compatible with Occ-Dial and Worm-Dial Fitbands





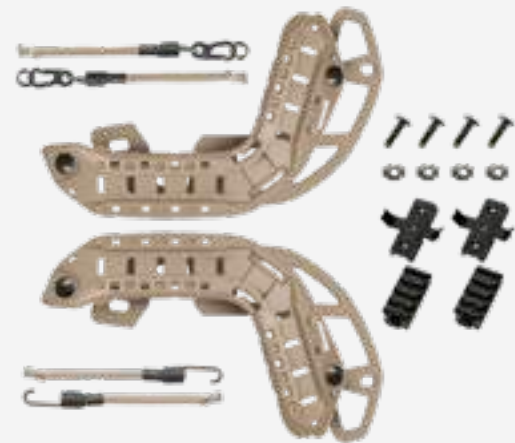
Suspension/Retention

FAST SF Upgrade Kit

The FAST SF Upgrade Kit allows any user with a legacy FAST helmet to upgrade the modularity of their entire helmet system to the level of a FAST SF. Includes the SHC Skeleton ARC™ Rail with Shim Kit, Universal Loop Kit (one size fits all, exterior VELCRO® Brand fastener, and Modular Bungee Shroud.



Modular Bungee Shroud



Skeleton Ops-Core ARC Rail with Shim Kit



Tan 499

Shown on FAST XP High-Cut helmet top



Suspension/Retention

ACH Upgrade Kit

The kit transforms ACH helmets into a platform capable of integrating system components, while enhancing overall comfort, fit, and stability. Includes Skeleton Ops-Core ARC Rails, Skeleton One-Hole Shroud, and the Ops-Core 360 liner and retention system.



Skeleton One-Hole Shroud



Skeleton Ops-Core ARC



360 Liner Kit





Component Mounts

Modular Bungee Shroud

Our lightest, most stable NVG shroud features integrated bungee retention that prevents interference with other accessories and a low-profile design that resists snags. This shroud features a machined removable insert, designed to be changed out without removing the shroud from the helmet, to provide multiple mounting solutions within the same shroud platform.

- The most versatile and lightest night vision shroud available
- Comprised of a molded outer housing and a machined removable insert, designed to be changed out without removing the shroud from the helmet, to provide multiple mounting solutions within the same shroud platform
- Eliminates the need for rail-mounted bungees and serves as retention lanyards to secure NVGs
- The low-profile bungee helps prevent snag hazards while stabilizing NVGs



Component Mounts

Skeleton Shroud

Add the capability of helmet-borne NVG, video cameras, illuminators, and other components with this highly durable Skeleton Shroud. Features multiple bungee and lanyard mounting points.

- Designed for compatibility with most NVG mounts, provides a secure attachment at the front of the helmet for NVGs, video cameras, illuminators, and other components
- Forged aluminum construction for greater strength and durability
- High-tolerance, CNC machined, mount arm interface for precision fit, minimizing movement
- Multiple bungee and lanyard mounting points for compatibility with visors



Component Mounts

MBS Adapter Inserts

The Modular Bungee System (MBS) Adapter Inserts allow the Modular Bungee Shroud to be used with a wide range of mount solutions without compromising weight or standoff from the helmet. Two inserts are available and are compatible with the Wilcox® GSGM and Wilcox® G66/G69.



Wilcox® GSGM with compatible mount



Wilcox® GSGM



Wilcox® G66/G69 with compatible mount



Wilcox® G66/G69



Component Mounts

Skeleton One Hole Shroud

This low-profile, snag-resistant shroud has been optimized for helmets with a single NVG screw hole. A rubber gasket in conjunction with a screw and T-Nut provides superior adhesion to the helmet for NVG stability.

- Features connection points for the carabiner or hook style Skeleton Ops-Core ARC Rail bungees
- A low-profile ballistic screw and T-Nut assembly improves ballistic performance and allows users to more easily install and remove the shroud as required
- Hardware works in conjunction with a rubber gasket that creates excellent adhesion to the shell for a solid, positive connection that provides superior NVG stability



ICELAND

Marines wait to board a KC-130J Super Hercules aircraft at Vaernes Air Station, Norway, 10/31/18, during Trident Juncture, a NATO training exercise.

Photo By: Navy Petty Officer 2nd Class Jonathan Nelson



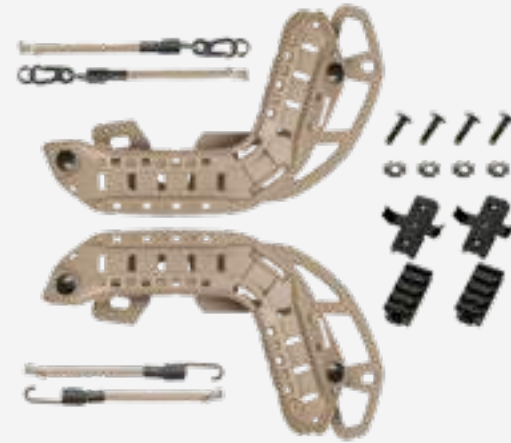
Skeleton Ops-Core ARC™ Rails – FAST

Ops-Core ARC Rails transform any FAST helmet into a streamlined platform capable of integrating mission-enhancing components and accessories such as visors, mandibles, lights, and cameras. The optional Ops-Core ARC Shim provides additional attachment points that do not occupy rail space.

- Upgrade the modularity and scalability of any FAST High Cut or Super High Cut helmet
- One size fits all
- Easily mounts to the sides of the helmet using existing chinstrap holes in the helmet
- Available with optional Ops-Core ARC Shim
- Available in Black, Foliage Green, Tan, and Urban Gray



Compatible with FAST Ballistic and Carbon Composite Mandibles



With Shim Kit



Skeleton Ops-Core ARC Rails – TBH / ACH

Ops-Core ARC Rails transform ACH or TBH style helmets into a streamlined platform capable of integrating mission-enhancing components and accessories such as visors, mandibles, lights, and cameras.

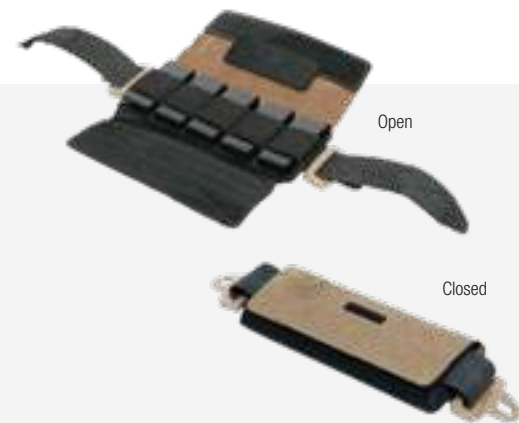
- One size fits all (Fits the bolt pattern of Gentex ACH style helmets, sizes S to XL)
- Based on FAST Ops-Core ARC Rails
- Easily mounts to the sides of the helmet using existing chinstrap holes in the helmet
- Available in Black, Foliage Green, and Tan



Counterweight Kit

A rear-mounted helmet weight management kit for use with NVGs that balances the platform, enhances comfort, and reduces neck strain.

- (5) 70g removable weights and (5) elastic pockets
- Maximum configurable weight is 0.85lbs (385g)
- Elastic pockets can stretch to fit (2) weights or (1) weight and (1) battery (AA, AAA, or 123)
- Mounts to the rear of the helmet with custom anchors using the existing helmet holes with longer ballistic screws (provided)
- Available in Black, Foliage Green, and Tan



Open

Closed





DJIBOUTI

Airmen perform a military free fall jump in Djibouti, April 17, 2018. The airmen are assigned to the 82nd Expeditionary Rescue Squadron, and they are deployed in support of humanitarian aid and contingency operations in the Combined Joint Task Force-Horn of Africa area of responsibility.

Photo By: Staff Sgt. Gustavo Castillo

FACE PROTECTION

SAFETY FRONT AND CENTER



Mandible

FAST Ballistic

Designed for use with any FAST helmet equipped with Super High Cut Skeleton Ops-Core ARC Rails and Ops-Core ARC Shims, this one-size-fits-all mandible provides ballistic and blunt impact protection without occupying any space in the rail. Flexible armor allows for uncompromised weapon sighting.

- Provides blunt impact and ballistic protection from 9mm 124gr at 1,195 fps
- One size fits all with fore-aft adjustment
- Flexible armor provides the ability to obtain a solid cheek weld
- Uninterrupted field of view
- Lightweight design easily attaches to SHC ARC Shim
- Skeleton Ops-Core ARC rails and Ops-Core ARC Shim available as upgrade kit to any Ops-Core FAST Helmet



Mandible

FAST Carbon Composite

Designed for use with any FAST helmet equipped with Super High Cut Skeleton Ops-Core ARC Rails and Ops-Core ARC Shims, this one-size-fits-all mandible provides blunt impact protection without occupying any space in the rail. A pivoting vent plate on the front of the mandible prevents debris from entering while still allowing airflow.

- Increased elemental and blunt impact protection
- One size fits all with fore-aft adjustment
- Uninterrupted field of view
- Pivoting vent plate to reduce fog, enable clear communication, and easy hydration access
- Lightweight design easily attaches to SHC Ops-Core ARC Shim
- Skeleton Ops-Core ARC rails and Ops-Core ARC Shim available as upgrade kit to any Ops-Core FAST Helmet



Mandible

Force-on-Force

Designed for use with any FAST, Sentry, or TBH style helmet equipped with Ops-Core ARC Rails, this one-size-fits-all mandible provides protection from training ammunition to the mouth, nose, ear, and neck areas. Adjustable fore-aft and vertically to enable an optimal fit on various platforms and sizes.

- Compatible with any Ops-Core helmet system or helmet equipped with Ops-Core ARC Rails
- Flexible armor provides the ability to obtain a solid cheek weld
- Breathable soft armor reduces fogging
- Removable neck skirt to scale coverage





Applique

FAST Low Profile Ballistic Applique

Increases the protection of a FAST SF Carbon Composite Helmet. This two-piece applique provides lightweight, scalable helmet protection against 9mm and frag threats. Quick, repeatable, and tool-less attachment using VELCRO® Brand fastener and the Ops-Core ARC Shim.

- Designed for Ops-Core FAST SF Carbon Composite Helmet
- Hybrid design using Carbon and uni-directional polyethylene materials
- Offers lightweight, scalable helmet protection against 9mm and frag threats
- Quick, repeatable, and tool-less attachment



Side Armor

FAST Side Armor

Increases the ballistic coverage and environmental protection, which allows the user to quickly adjust the level of ballistic coverage to match changing threats. Side armor provides lightweight, scalable helmet protection against 9mm and frag threats. Attaches to the Ops-Core ARC Rails. Slim and wide profile versions are available for Super High Cut and High Cut trims FAST Helmets.

- Quickly increase the ballistic coverage of a FAST helmet
- Available in slim and wide configurations
- Available for both Super High Cut and High Cut trims
- Easy tool-less attachment to the Ops-Core FAST ARC Rails





OPTICS

SUPERIOR VISUAL ACUITY



Optics

Mk1 Performance Protective Eyewear

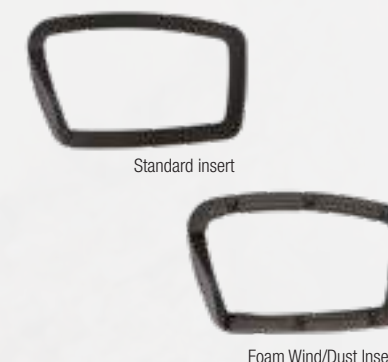
Ops-Core Mk1 PPE was designed to meet the need for more rugged, mission-configurable eyewear for elite forces. More than 50 years of Gentex experience and innovation in high performance optics manufacturing is delivered in every lens we create. Lens protection conforms to an abbreviated and modified ANSI Z87.1 in accordance with Ops-Core Mk1 Performance Specification PS-1310.

- Compliant with portions of the ANSI Z87.1 optical standards
- Gentex-manufactured lenses offer the highest quality and levels of protection
- Lenses currently available in Clear, Tint, High Contrast, and Laser Dazzle (Gentex-patented lens technology for maintaining see-through color perception while providing necessary protection from green and blue commercial lasers)
- Future lens options include Advanced Laser Eye Protection (ALEP), Enhanced Ballistic, and Variable Light Transmission

LENS OPTIONS



INSERT OPTIONS



Gray frames w/ Dazzle Lens



Tan frames w/ Tinted Lens



Green frames w/ Tinted Lens



Black frames w/ Tinted Lens



Shield

Handgun Face Shield

This face shield can be added to helmets to defend against multiple impacts from handgun threats for law enforcement and military personnel. Rated to stop the NIJ IIIA handgun threats per NIJ standard 0101.06.

- Face shield assembly fits all sizes of Ops-Core FAST and Sentry helmets, and Gentex ACH/TBH style helmets equipped with Ops-Core ARC Rails
- Ballistic protective lens stops multiple hits of up to .44Mag at 1,400 fps
- Fore/Aft adjustment maintains effective seal with different helmet geometries as well as increases offset to accommodate masks and other equipment when needed
- Rail interface locking system provides solid platform for the face shield
- Locking mechanism secures face shield at any angle





Shield

Riot/Breaching Visor

The Ops-Core Riot/Breaching Visor offers modular, rapidly employed face protection for operators with Ops-Core ARC Rail-equipped helmets. The 3mm thick visor easily pivots up and down to provide full face protection when needed. Particularly useful for riot or breaching operations.

- Compatible with any helmet with an Ops-Core ARC Rail
- Pivots up and down and will remain in set position
- Rubber gasket seals against surface of helmet shell
- Attachment arms fold for smaller storage footprint
- Weighs 1.2 lbs
- Anti-scratch coating on outside of lens and anti-fog coating on inside



Ballistic

Active Shooter Kit

The kit comes pre-configured with the Ops-Core Multi-Hit Handgun Face Shield and is ideal for quick use by law enforcement for active shooter situations. The base shell provides protection in excess of NIJ IIIA levels, while the face shield protects the face from handgun threats. Additional stability, and increased protection and comfort is added by the suspension system and 4-Point Head-Loc H-Nape Chinstrap.

- Gentex low-cut shell featuring ACH Skeleton Ops-Core ARC rails designed to meet the rigorous challenges of law enforcement
- Maximum coverage offers superior protection against handgun, fragmentation, blunt impact, and environmental threats
- Multi-Hit Handgun Face Shield seamlessly incorporates with Gentex TBH helmet system using the ACH Skeleton Ops-Core ARC rails for facial protection against multiple impacts from handgun threats



Shield

NVG Snap Shields

PVS-31

Attaches to PVS-31 Night Vision Goggles (NVGs) to help safeguard the eyes and face from fragments, water spray, and debris with minimal impact to peripheral vision. Easily integrates with all Ops-Core and Gentex helmet systems. Alternative to standard NVG rubber eyecups, which obstruct peripheral vision and can lead to fogging of the NVG ocular lens. Available in clear only.

PVS-15

Attaches to PVS-15 Night Vision Goggles (NVGs). Available in clear or GGO (Green Glow Occlusion) models. The Green Glow Occlusion version is molded with unique light absorbing dyes that limit the phosphorus green glow that reflects off the face from the NVG tubes.

- Developed as an alternative to standard NVG rubber eyecups, which compromise situational awareness (as they obstruct peripheral vision) and can lead to fogging of the NVG ocular lens
- Attaches to PVS-15 or PVS-31 Night Vision Goggles (NVGs) to help safeguard the eyes and face from fragments and debris with minimal impact to peripheral vision
- PVS-15 model available in a Green Glow Occlusion or Clear version
- Snap on and off without the use of tools
- Pass MIL-PRF-32432 5.8 grain at 650fps and 17 grain at 550 fps and are in conformance with an abbreviated and modified ANSI-Z87.1 optics and impact performance



PVS-31 (shown in clear)



PVS-31 mounted (shown in clear)



PVS-15 mounted (shown Green Glow Occluded (GGO))



PVS-15 (shown in clear)



Visor

FAST and Sentry

Delivers a high level of ballistic protection with clear vision, easy on and off, and one-handed operation. Quickly and quietly friction locks into closed, open, or vented positions at 45-degree increments, using field-proven Camlock technology.

- Provides additional face protection from blunt impact and ballistic threats
- Tool-less installation and removal; easy one-handed operation
- Provides ballistic protection from IED fragments, rough terrain landings (airborne) Impacts, and debris encountered during off-road vehicle missions
- Indexes in 45-degree increments for a fully open, vented or fully closed position
- Conforms with abbreviated and modified MIL-PRF-32432 and ANSI Z87.1 optics and impact performance



FAST Visor compatible with Ops-Core FAST Helmets.

Sentry Visor compatible with Ops-Core Sentry Helmets.





Visor

STEP-IN

Designed to seamlessly integrate with Night Vision Goggles (NVGs), the Ops-Core STEP-IN Visor is the ideal solution for users requiring full eye protection in addition to NVG accessibility. Featuring removable gaskets and tool-less interchangeable lenses, the STEP-IN Visor assembly is easily configured for various mission requirements. The STEP-IN Visor is a low-profile, one-size-fits-all system that is fully compatible with Ops-Core and Gentex helmets that use Ops-Core ARC Rails.

- SIV is designed to sit comfortably behind NVGs
- Tool-less installation of various lenses depending on mission requirements
- Includes a clear and a tinted lens
- Lenses available: Clear, Tinted, High Contrast
- Removable rubber side gaskets keep dirt and dust out of eyes when in use
- HC-13 anti-scratch coating on outside of lens and MGAF anti-fog coating on inside



Gaskets can be removed for additional ventilation as needed

COLOR OFFERINGS



LENS OPTIONS



Clear lens



Tinted lens



High contrast lens



GREECE

Marines participate in live-fire training in Volos, Greece, Jan. 7, 2019, during Alexander the Great, a training exercise between U.S. and Greek armed forces.

Photo By: Marine Corps Staff Sgt. Andrew Ochoa



SITUATIONAL AWARENESS

HEARING YOU LOUD AND CLEAR



Situational Awareness

AMP[®] Communication Headset

CONNECTORIZED

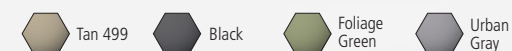
The Ops-Core AMP Communication Headset features 3D Hear-Through Technology (3DHT) and advanced scalable hearing protection. For optimal flexibility and performance, the modular headset can be easily configured to meet a wide range of mission needs.

FIXED DOWNLOAD

All the same features of the Connectorized AMP Communication Headset with a permanently attached, integrated download cable, as opposed to the removable ones of the Connectorized version.

- Available in both Amphenol and U174 versions

COLOR OFFERINGS



- World-class audio quality provides the ability to operate in combat environments
- 3D Hear-Through Technology (3DHT) restores and enhances "natural hearing" of outside environment for improved situational awareness
- Enhanced Hearing allows the operator to boost their hearing up to +12dB
- Mission Configurable Capability enables the headset to be quickly converted back and forth between an ergonomic headband and helmet-mounted configuration
- Quick-Release Download Connections on each earcup allow the operator to quickly configure between single left/right, dual, or no download configurations
- Optional NFMI (Near Field Magnetic Induction) Earplugs provide increased noise reduction, while maintaining clear communications and 3D Hear-Through ability. NFMI Earplugs do not require wires or batteries. NOTE: Compatible with NFMI-enabled headsets only
- Fail-Safe Communications provides confidence that in the event of battery loss, 3DHT will power off, but the headset and earplugs will still be able to transmit and receive communication
- Ambidextrous Noise-Cancelling Microphone mitigates background noise enabling clear communication. Can be mounted to left or right earcup or removed as preferred, without tools
- Mask microphone compatibility via integrated microphone mounting & connection point enables easy integration with any U-173/U standard plug, commonly found on respirator, gas, and oxygen masks
- Ergonomic Earseals designed for optimal comfort and noise reduction utilizing superior materials
- The AMP Communication Headset is Berry Amendment compliant and CE approved EN 352



Connectorized



Fixed Download

CE 2797 EN352



Situational Awareness

AMP Skins

AMP Skins can be added to provide additional signature management.

PATTERN OFFERINGS

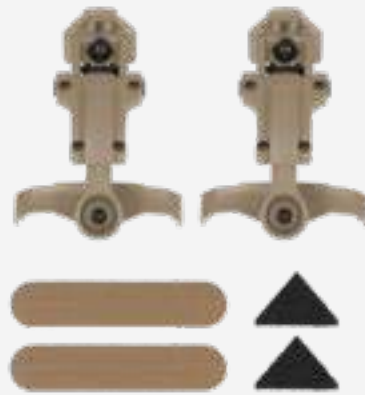


Shown in MultiCam[®]

AMP Helmet Rail Mount Kit

When a helmet-mounted headset is preferred, this kit provides unrivaled performance. Designed specifically for use with Ops-Core ARC Rails by the same company that pioneered them and revolutionized the helmet industry.

- Rail arms can be mounted to the rear of the ARC Rail system, leaving the top portion of the rails free for other accessories, while increasing helmet stabilization and counter-balancing Night Vision Devices
- A single point gimbal attachment to the earcups allows for 360° adjustment
- Better fit and a superior earseal, maintained throughout the range of motion of the user's head
- Earcups rotate to the side or rear of helmet when not in use, creating a very low profile



Fixed Download (shown mounted on rail)

NFMI Earplugs

The addition of optional wireless NFMI earplugs provides increased noise reduction, while maintaining clear communications and hear-through audio. When engaged, the NFMI earplug will seamlessly integrate, providing unrivaled hearing protection capability.

- Do not need batteries, recharging, or any wired connection
- The kit ships with standard, slim, and large Comply™ foam tips to accommodate a wide variety of users



Earplug case



Earplug sizes

AMP Communication Headset Download Cables

Multiple quick-release download cable options are available for the connectorized versions of the AMP Communication Headset. These allow the operator to quickly configure between single left/right, dual, or no download configurations. This also provides flexibility when connecting to systems with different wiring and connector requirements.

- Provides high-quality, environmentally sealed connection points



U174 Version



Amphenol Version



Fischer to U174

Push-To-Talks (PTTs)

Used to connect the AMP Communication Headset to various radios.

- Rugged over-molded construction
- Feature a reversible alligator clip
- Recessed activator prevents accidental keying, while still accommodating gloved hand use
- Available with straight wired radio connections, or modular which allows for interchangeable radio downloads
- Available with Amphenol input connectors or U94 (for use with U174 downloads)



Single Modular PPT Radio Cable



Dual Modular PPT Radio Cable



U94 PTT



Situational Awareness

LVIS® m5i

The Gentex LVIS® m5i is a compact and lightweight intercom system designed for crew communications and radio access in tactical vessels and vehicles. The system is designed to be adjustable and configurable to meet a crew's mission needs. The basic system accommodates up to five crew members and three long-range radios.

- Delivers full duplex intercommunications among crewmembers with a single crew volume control knob for a 28dB range of listening volume adjustment
- Compatible with military and commercial radios
- Compatible with the Ops-Core AMP Communication Headset
- Meets military specifications and standards including MIL-Std-461 and MIL-Std-810



Crew connection point



Radio switch box



Situational Awareness

LVIS Digital

The Gentex LVIS Digital is a fully integrated modular intercom system designed to support crew communications and radio access in combatant, patrol, rescue vessels, and ground combat vehicles. The system is configurable and adaptable for all mission profiles. It is lightweight, rugged, marine grade, water resistant, and offers a complete hardwired and wireless communications solution.

- Intuitive crew connection point allows full control of intercom and radio functions
- Wireless option allows full, untethered access to intercom and radios
- Compatible with the Ops-Core AMP Communication Headset
- Meets military specifications and standards including MIL-Std-461 and MIL-Std-810



Portable transceiver



Radio interface intercom control





USA

Armor crewmen assigned to Task Force Raider load Sabot rounds onto a M1 Abram Tank during a pre-deployment training exercise at Fort Hood, Texas, August 18.

Photo By: Army Sarah Kirby

RESPIRATORY

BREATHE EASY



Respiratory SOTR

Half-mask Special Operations Tactical Respirator (SOTR) is designed to provide protection against a wide range of oil-and non-oil-based particulate contaminants encountered by Special Operations forces during training and in operational environments. The low-profile design offers protection without interfering with operator's tactics, techniques, and procedures (TTP) and seamlessly interfaces with weapon systems for optimal effectiveness.

- Offers P100 (99.97%) efficiency against airborne particulates including lead, asbestos, fentanyl, lubricant mist, and explosive gunfire residue
- Central mounted filter to allow ambidextrous weapon sighting
- Two exhalation valves for easier breathing under extreme use
- Non-microphone and microphone versions available, compatible with standard ground communications headsets to enable radio communications



SOTR O2 Strap Harness Accessory
Allows the user to quickly attach the SOTR to their helmet using the O2 clip receiver on the ARC Rail. The standard strap can be quickly unstrapped and replaced with the O2 version. Sold separately.



SOTR Replacement Filters
Easy to change out, keep a supply of these fresh, highly efficient, filters at hand.

Respiratory 150 ohm Mask Mic

A noise-canceling, dynamic, respiratory mask microphone designed for the Ops-Core SOTR.

- Optimal design, seamlessly integrates into the respiratory mask for maximum performance



In mask (detail)



Shown with cable connection



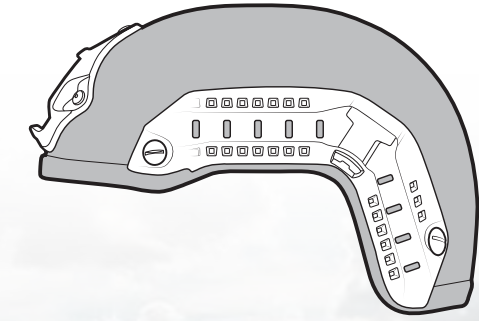


PERFORMANCE DATA

BALLISTIC

Ballistic specs have primarily been derived from government contracts and law enforcement requirements for handgun, rifle, and fragmentation. From our beginnings, we've designed and tested to exceed the minimum standard being requested. Our goal is to give the wearer confidence that their helmet is going to perform even in the most demanding conditions.

One of the standard threats is the 9mm 124gr FMJ round. Helmets are test shot in multiple locations, at different orientations and under different environmental conditions at 1,200 f/s and 1,400 f/s. For law enforcement, tests may also be performed using .357 mag and .44 mag rounds.



FAST SF HEADBORNE SYSTEM



MINIMUM V50

MINIMUM RTP

HELMET	FAST SF	FAST XP	FAST LE	SENTRY XP	SENTRY LE	TBH-R1	TBH-III A
2 grain RCC	4,200 f/s (1,280 m/s)	4,200 f/s (1,280 m/s)	N/A	4,200 f/s (1,280 m/s)	N/A	6,090 f/s (1,856 m/s)	4,200 f/s (1,280 m/s)
4 grain RCC	3,475 f/s (1,059 m/s)	3,475 f/s (1,059 m/s)	N/A	3,475 f/s (1,059 m/s)	N/A	5,040 f/s (1,536 m/s)	3,475 f/s (1,059 m/s)
16 grain RCC	2,475 f/s (754 m/s)	2,475 f/s (754 m/s)	N/A	2,475 f/s (754 m/s)	N/A	3,590 f/s (1,094 m/s)	2,475 f/s (754 m/s)
64 grain RCC	1,750 f/s (533 m/s)	1,750 f/s (533 m/s)	N/A	1,750 f/s (533 m/s)	N/A	2,540 f/s (774 m/s)	1,750 f/s (533 m/s)
17 grain RCC	2,297 f/s (700 m/s)	2,378 f/s (725 m/s)	2,200 f/s (671 m/s)	2,378 f/s (725 m/s)	2,200 f/s (671 m/s)	3,250 f/s (991 m/s)	2,200 f/s (671 m/s)
7.62 x 51 NATO M80 Ball, 150gr	N/A	N/A	N/A	N/A	N/A	2,600 f/s (792 m/s)	N/A
9mm FMJ RN, 124 grain	1,195 f/s (364 m/s)	1,400 f/s (427 m/s)	1,400 f/s (427 m/s)	1,400 f/s (427 m/s)	1,400 f/s (427 m/s)	1,470 f/s (448 m/s)	1,400 f/s (427 m/s)
.44 Magnum 240g SWCGC	N/A	N/A	1,400 f/s (427 m/s)	N/A	1,400 f/s (427 m/s)	1,430 f/s (435 m/s)	1,400 f/s (427 m/s)
9mm x 18mm SJLC, 105 grain	N/A	N/A	N/A	N/A	N/A	1,017 f/s (310 m/s)	1,017 f/s (310 m/s)
7.62 x 25mm SJLC, 86 grain	N/A	N/A	N/A	N/A	N/A	1,475 f/s (450 m/s)	1,475 f/s (450 m/s)
.40 Cal S&W, GDHP, 180 grain	N/A	N/A	N/A	N/A	N/A	1,025 f/s (312 m/s)	N/A
7.62 x 51 NATO M80 Ball, 150gr	N/A	N/A	N/A	N/A	N/A	2,400 f/s (732 m/s)	N/A

STANDARDS

Testing performed in accordance with the following specifications:

- 1. Ops-Core SF Helmet Performance Specification PS-1228
- 2. Modified and Abbreviated Family of Tactical Headborne Systems dated June 30 2017

- 1. Ops-Core XP Helmet Performance Specification PS-1063
- 2. Modified and Abbreviated US Army Purchase Description Helmet, Advanced Combat (ACH) CO/PD-05-04 dated 30 October 2007

- 1. Ops-Core LE Helmet Performance Specification PS-1118
- 2. National Institute of Justice (NIJ) Standard 0106.01 Ballistic Helmets dated December 1981 using NIJ Standard 0108.01 Ballistic Resistant Protective Materials dated September 1985 Type IIIA threats (9mm 124gr FMJ RN and 44 Cal Magnum 240gr SWCGC)

- 1. Ops-Core XP Helmet Performance Specification PS-1063
- 2. Modified and Abbreviated US Army Purchase Description Helmet, Advanced Combat (ACH) CO/PD-05-04 dated 30 October 2007

- 1. Ops-Core LE Helmet Performance Specification PS-1118
- 2. National Institute of Justice (NIJ) Standard 0106.01 Ballistic Helmets dated December 1981 using NIJ Standard 0108.01 Ballistic Resistant Protective Materials dated September 1985 Type IIIA threats (9mm 124gr FMJ RN and 44 Cal Magnum 240gr SWCGC)

- 1. Gentex Performance Specification for Tactical Ballistic Helmet R1: PS-1378, including portions of:
- 2. Modified and Abbreviated US Army Advanced Combat Helmet AR/PD 10-02
- 3. NIJ Standard 0108.01 Ballistic Materials Level IIIA Threats Tested in Accordance with NIJ 0106.01
- 4. Modified and Abbreviated NIJ Draft Specification for Ballistic Materials, Level RF-1 Tested in Accordance with NIJ 0106.01

- 1. US Marine Corps Purchase Description Modular Integrated Communication Helmet (MICH), Type II FQ/PD 06-35 Version C dated 24 January 2012
- 2. National Institute of Justice (NIJ) Standard 0106.01 Ballistic Helmets dated December 1981 using NIJ Standard 0108.01 Ballistic Resistant Protective Materials dated September 1985 Type IIIA threats (9mm 124gr FMJ RN and 44 Cal Magnum 240gr SWCGC)

PERFORMANCE DATA



PROTECTIVE COMPONENTS	STEP-IN VISOR	FAST VISOR	SENTRY VISOR	HANDGUN FACE SHIELD	PVS-31 NVG SNAP SHIELDS
2 grain (V50)	N/A	N/A	N/A	N/A	N/A
4 grain (V50)	640 f/s (195 m/s)	N/A	N/A	N/A	N/A
16 grain (V50)	N/A	N/A	N/A	N/A	N/A
64 grain (V50)	N/A	N/A	N/A	N/A	N/A
17 grain / 1.1FPS (V50)	N/A	825 f/s (251 m/s)	825 f/s (251 m/s)	N/A	550 f/s (168 m/s)
9mm FMJ RN (V0 at 0 Obliquity)	N/A	N/A	N/A	1,400 f/s (427 m/s)	N/A

STANDARDS
Testing performed in accordance with the following specifications:

Meets all the ANSI Z87.1 spectacle requirements for ballistics and optics. Provides MIL-PRF-32432 ballistic protection.

In accordance with Military Standard 662. Visor does not make contact with the face after impact of 1kg ball dropped from height of 0.8 meters per NU 0104.02 Requirement 4.2.6.

Portions of U.S. Army ACH CO/PD-05-04:2007

Modified and Abbreviated NJ Standard 0106.01 Ballistic Helmets using NJ Standard 0108.01 Ballistic Materials Level IIIA threats (9mm 124gr FMJ RN at 1400 fps and .44 Cal Magnum 240gr SWGC at 1400 fps)

Class 1-Spectacle ballistic impact standards of (MIL-PRF-32432 Military Combat Eye Protection) The NVG Snap Shields meet ANSI z87.



PROTECTIVE COMPONENTS	FAST BALLISTIC MANDIBLE	FAST SIDE ARMOR	FAST LOW PROFILE BALLISTIC APPLIQUE	FORCE-ON-FORCE MANDIBLE*	RIOT / BREACHING VISOR
2 grain (V50)	4,075 f/s (1,242 m/s)	N/A	4075 f/s (1,242 m/s)	Ballistic Resistance: RTP 7.62 x 51 UTM round at 375 f/s. The Force-on-Force Mandible does not provide protection outside the coverage area designated by the rigid polymer frame and conformable fabric cover. *Mainly used for training purposes.	Tested to EN 166:2001 Visor requirements. A steel ball of 6 mm diameter fired at 192m/s. A steel ball of 6.35mm diameter is fired at the visor to both the front and side at a speed of 12m/second (approximately 270 mph).
4 grain (V50)	3,450 f/s (1,059 m/s)	N/A	3450 f/s (1,051 m/s)		
16 grain (V50)	2,425 f/s (739 m/s)	N/A	2425 f/s (739m/s)		
64 grain (V50)	1,700 f/s (518 m/s)	N/A	1700 f/s (518 m/s)		
17 grain / 1.1FPS (V50)	N/A	2,200 f/s (670 m/s)	2379 f/s (725 m/s)		
9mm FMJ RN (V0 at 0 Obliquity)	1,195 f/s (364 m/s)	1,200 f/s (365 m/s)	1195 f/s (364 m/s)		

STANDARDS
Testing performed in accordance with the following specifications:

Designed and tested in accordance with Gentex PRS-1009 Product Specification for the Ops-Core FAST Ballistic Mandible.

Designed and tested in accordance with Gentex PRS-1349 Product Specification for the Ops-Core Low Profile Ballistic Applique.

*Mainly used for training purposes.

Tested to EN 166:2001 Visor requirements. A steel ball of 6 mm diameter fired at 192m/s.

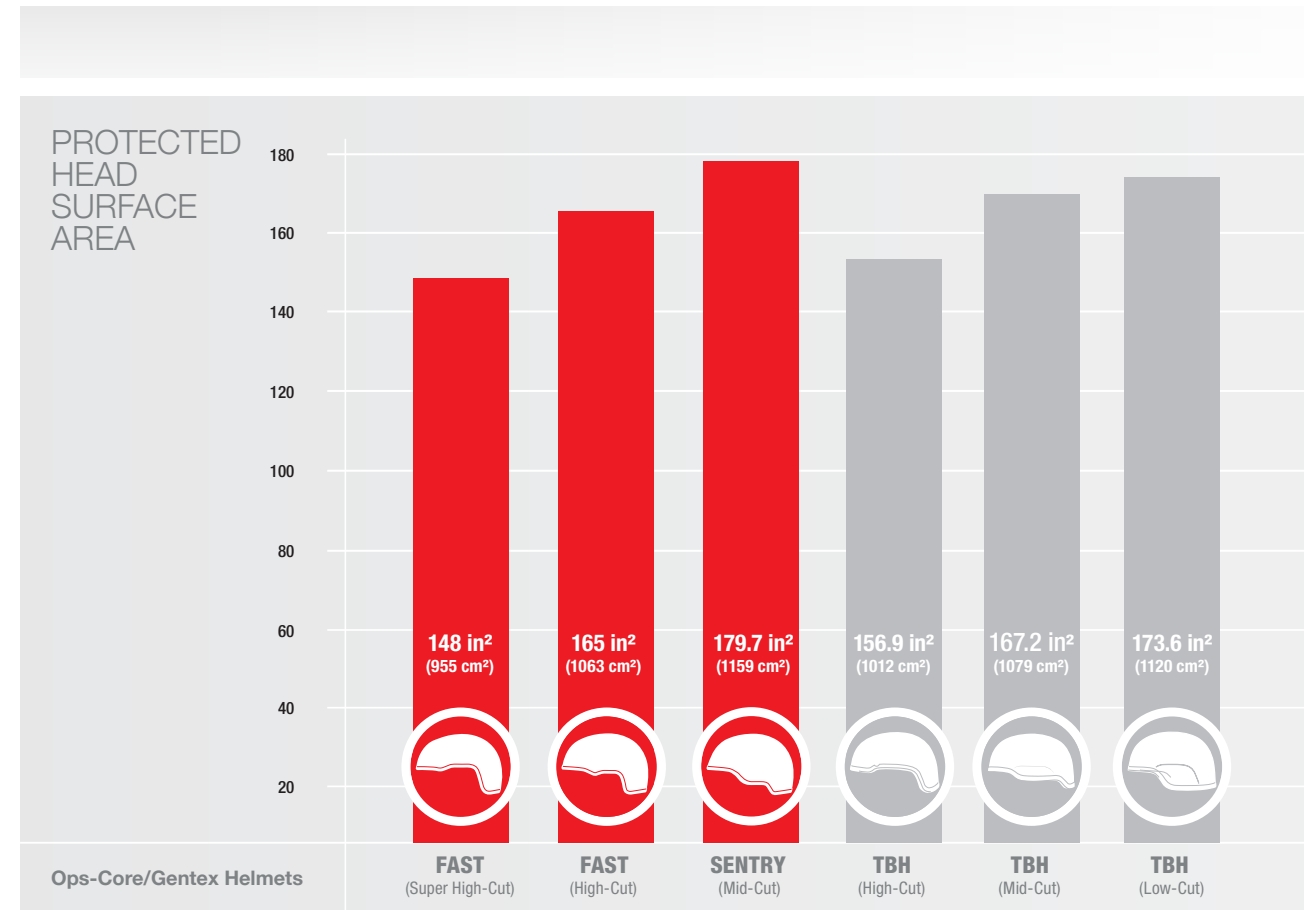
A steel ball of 6.35mm diameter is fired at the visor to both the front and side at a speed of 12m/second (approximately 270 mph).



PERFORMANCE DATA

RIGOROUS TESTING

Ballistic specs are primarily derived from government contracts and law enforcement requirements for handgun, rifle, and fragmentation. Gentex designs and tests helmets to exceed the minimum standards. The goal is to give the wearer confidence that their helmet is going to perform in the most demanding conditions.



All coverage measurements based on size L helmets.

PERFORMANCE DATA

BLUNT IMPACT

This measure evaluates impacts from falls and flying objects in threat environments. A helmeted headform is mounted to a sliding rack and dropped onto an anvil. Two drops at each of five locations on the helmet and under three temperature conditions, are performed. Per ACH CO/PD-05-04, G-forces are then recorded with a maximum threshold of 150 Gs to prevent concussion or fracture. All Gentex and Ops-Core helmets are tested to this exacting impact standard.

FAST SF

FAST XP

FAST SF
CARBON
COMPOSITE

FAST
CARBON

FAST BUMP

FAST LE

SENTRY XP

SENTRY LE

TBH-R1

TBH-III MC

Vertical Drop Simulation onto Oval Anvil

All systems meet the requirement of 2 impacts on 7 locations with 10 f/s velocity all measurements < 150 Gs in ambient, hot and cold conditions.

FAST BALLISTIC
MANDIBLE

FAST CARBON
COMPOSITE MANDIBLE

Vertical Drop Simulation onto Curbstone Anvil

All systems meet the requirement of 1 impact on 3 locations with 8.66 f/s velocity

PERFORMANCE DATA

WEIGHT

Choices about weight are often driven by the daily duration of wear and the extent of movement of the user. Special Forces teams tend to prefer lighter weights, while conventional forces more often select heavier helmets that maximize coverage and protection. Weight is driven by cut and shell material. Most prevalent today is an aramid (Kevlar®) shell with lighter – but more expensive – polyethylene shells rapidly gaining adoption.



FAST SF

WEIGHT
(Size Large)

Shell Only	1.44 lbs (653 g)
Complete System	2.25 lbs (1019 g) to 2.40 lbs (1089 g)



FAST XP

Shell Only	1.88 lbs (853 g)
Complete System	2.55 lbs (1157 g) to 2.84 lbs (1288 g)



FAST LE

Shell Only	2.39 lbs (1085 g)
Complete System	3.20 lbs (1451 g) to 3.35 lbs (1519 g)



SENTRY XP

Shell Only	2.03 lbs (921 g)
Complete System	2.83 lbs (1283 g) to 2.98 lbs (1352 g)



SENTRY LE

Shell Only	2.58 lbs (1171 g)
Complete System	3.38 lbs (1533 g) to 3.53 lbs (1601 g)



TBH-R1

WEIGHT
(Size Large)

Shell Only	2.70 lbs (1225 g)
Complete System	3.20 lbs (1450 g) to 3.56 lbs (1613 g)

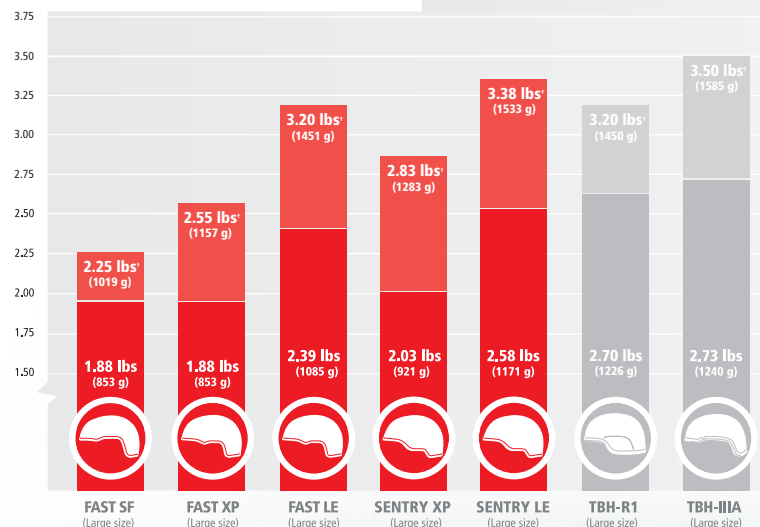


TBH-III A MC

Shell Only	2.73 lbs (1240 g)
Complete System	3.50 lbs (1585 g) to 3.62 lbs (1643 g)



WEIGHT COMPARISON



† Represents the lowest weight when configuring your helmet complete system

PERFORMANCE DATA

ENVIRONMENT

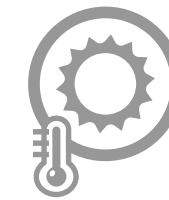
ENVIRONMENTAL TESTING

Gentex derives its tests from the toughest standardized military requirements. To test submersion, helmets are soaked in water for 12 hours. For temperature tolerance, helmets are subjected to heat at 160F/71C, ambient temperature, and cold at -40F/-40C. Then, they undergo a full battery of function, ballistic and impact tests. Additionally, helmets are tested against caustic and corrosive agents like gasoline, DEET, salt spray, and petroleum products.



Cold Temperature Storage and Operating

- 60° F (- 51° C)
9mm 124gr FMJ RN Resistance to Penetration (RtP) and Ballistic Transient Deformation (BTD)



Hot Temperature Storage and Operating

+ 160° F (+ 71° C)
9mm 124gr FMJ RN Resistance to Penetration (RtP) and Back Face Deformation (BFD)



Sea Water Submersion

3 Hours / Salt Water
9mm 124gr FMJ RN Resistance to Penetration (RtP) and Ballistic Transient Deformation (BTD)*



Corrosion Resistance

24 Hours
Surface Testing / DEET Insect Repellent; Gasoline; Motor Oil; Hydraulic Fluid; Aviation Fuel; Rifle Bore Cleaning Fluid; Lubrication Oil; Face Paint

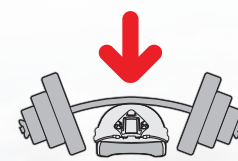


Flame Resistance

2 Seconds
Surface Testing / Open Flame Self-Extinguishing Shell

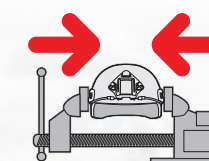
*FAST LE and Sentry LE does not include Ballistic Transient Deformation (BTD) conditions.

COMPRESSION RESISTANCE



400 lbs
Top to Bottom
Compression

0.020"
(0.508 mm) max
dimensional change
after compression
@ 400 lbs (181 kg)



300 lbs
Side to Side
Compression

0.125"
(3.175 mm) max
dimensional change
after compression
@ 300 lbs (136 kg)



USA

Air Force Senior Airman Fermin Garcia III readies a fuel hose for storage at Libby Army Airfield, Ariz., Nov. 4, 2019, during Bushwhacker, an exercise focused on dynamic force employment.

Photo By: Air Force Staff Sgt. Sergio Gamboa

WE ARE HERE TO SERVE YOU

We Serve Customers Worldwide

We work to serve our customers wherever they need us, supporting militaries and security teams in the U.S. and around the world for over 100 years. Dedicated teams at our four facilities in the U.S., two European operations, and a global network of sales offices and agents in over 40 countries are ready to support you.

We Offer the Power of Gentex Corporation Locally

Partner with a local authorized Gentex Corporation distributor/agent to get our industry-leading products plus all the benefits of working with a local company. To find a location near you, visit gentexcorp.com/contact

Responsive, World-Class Maintenance Support

To help maintain product performance, we offer replacement parts and maintenance programs for all our fielded systems. This keeps the equipment performing as well as it did when new, and in many cases, even better with the advancement of new components.

GENTEX NORBO

Gentex Norbo Korunma Teknolojileri A.Ş.

Başkent Organize Sanayi Başkent Bulvarı No:49
Malıköy-Sincan/Ankara

Tel : +90 312 640 1585
Fax : +90 312 640 1590
e-mail: info@gentexnorbo.com
www.gentexnorbo.com