RAILINK®

RAILINK® Enabled FAST® SF Helmet System

Ops-Core's new FAST SF Helmet System is the lightest weight ballistic headborne system yet. This remarkable reduction in weight is made possible by the integration of three advanced subsystems: the next-generation FAST SF ballistic shell, the LockDown™ Liner, and the Head-Loc® Flex chinstrap.

With the introduction of the new FAST SF Helmet System comes the additional capability of the RAILINK enabled FAST SF Helmet System. RAILINK Power and Data System is an innovative power and data solution that is the first of its kind. RAILINK Power and Data ARC Rails serve as the backbone of a rapidly evolving, scalable ecosystem, enabling seamless connectivity across your headborne system. With RAILINK Power and Data System, users can effortlessly integrate compatible accessories without the need for additional batteries or complex cable management.

Designed and rigorously tested with extensive feedback from elite US military and law enforcement personnel, this is the platform of the future, adding additional capability to the headborne system with new accessories.

FAST SF HELMET SYSTEM KEY FEATURES

- Ballistic protection from 9mm rounds (1200 f/s) with a shell weight of just 1.23 lbs/557 g (Size L) the FAST SF offers the same level of ballistic protection as its predecessor but with a 10% reduction in overall system weight.
- LockDown Liner System incorporates a user-customizable suspension system with multiple strategically placed pads, enouraging airflow. The LockDown Comfort Liner, featuring moisture-wicking fabric and reticulated foam, offers adaptable density for diverse head shapes and comfortably supports heavy VAS and NVG systems.
- LockDown conformable nape pad and cable Occ-Dial® adjustment mechanism offer enhanced stability, securing a larger contact area on the rear of the user's head, adapting to individual contours for an improved fit compared to other, more rigid systems.
- LockDown cable system enables an interference-free fit with headband communication systems.
- Redesigned Head-Loc Flex retention system introduces a unique convertible chin cup that can be worn either over or under the chin, eliminating the need for a mask extender with the O2 and CBRN kit for most users.
- Lightweight Modular Bungee Shroud (MBS) reduces snag hazards and features carabiner clips to improve NVG retention and stability while reducing interference with other rail-mounted accessories.

RAILINK KEY FEATURES

- **RAILINK ARC Rails**
  Combine the industry standard dovetail track for mechanical accessory attachment with an integrated power and data transmission network.
- **Power & Data from a Single Source**
  Dedicated circuits provide power and high bandwidth data to VAS/NVG and accessory systems, all powered from a single source.
- **Smart Nodes for Mechanical & Electronic Connection**
  Accessories are connected to the system through Smart Nodes, providing mechanical attachment as well as electronic power and low speed data connection.
- **Universal VAS/NVG Interface**
  The universal RAILINK VAS/NVG power interface allows the use of a broad array of night vision systems, including the latest systems that incorporate fused thermal channels and require power and data to operate. Dedicated cables routed within the RAILINK system streamline fitment by removing the need for externally routed battery pack cables and reduce undesirable snag hazards.
- **Connectivity Across Systems**
  Using a communications protocol, power and data are routed through the network from node to node and to the Battery Pack+, which can serve as a controller to share information around the helmet and supports sharing across a network to other soldier systems.
- **Backward and Forward Compatible**
  RAILINK Power and Data System has been designed to be backward and forward compatible with all FAST high cut helmet systems.
- **Bulk Reduction and Reduced Fatigue**
  With VAS systems and all accessories drawing power from the single source of RAILINK Power and Data System, the accessories themselves become much smaller and can also be mounted in closer proximity to the center of gravity of the helmet, which results in a lowering of fatigue to the wearer during extended operations.
- **Maximize Space and Simplicity**
  Mounting outside of the ARC rail dovetail track means more open space for other accessories. Drawing from a single power source means added simplicity for the user, eliminating the need for managing multiple types of batteries per device.

RAILINK Enabled FAST SF

FAST SF HELMET SYSTEM SPECIFICATIONS

Performance Specification**: Modified and Abbreviated Family of Tactical Headborne Systems, dated June 30th 2017; Ops-Core Performance Specification FAST SF PS-1608

NIJ Standards: NIJ 0106.01 with NIJ 0108.01 Level IIIA (9mm FMJ @ 1,400 ft/s) Threat

Compression Testing: Top-Bottom = .020" (0.51 mm) Max @ 400 lbs. (181.44 kg), Side-Side = .125" (3.18 mm) Max @ 300 lbs. (136.08 kg) lbs.

Environmental Resistance: Temperature storage and operating at ambient, cold -60° F (-51° C), and hot +160° F (71° C), temperature shock, flame resistance, altitude, seawater, field agent resistance, weatherometer

Blunt Impact Protection: 150 g's maximum at 10 ft/s. Maximum allowable dent 0.023"

Ballistic Testing:

**Not all suspension/retention options are tested to full stated standards.

Projectile	Minimum V50 BL(P) at 0°(±5°) Obliquity (ft/s)	Minimum V50 BL(P) at 0°(±5°) Obliquity (m/s)
2 - Grain RCC	4,200	1,280
4 - Grain RCC	3,475	1,059
16 - Grain RCC	2,475	754
64 - Grain RCC	1,750	533
17 - Grain FSP	2,297	700
124 - Grain 9mm FMJ***	1,195 (+50/-0)	364 (+15/-0)

***9mm is V0 tested at this velocity with Backface Transient Deformation (BTD) under 23.4mm (Crown), 27.1mm (Sides), 29mm (Front), and 19.1mm (Rear) when tested on multi-sized clay-filled headforms in accordance with the USSOCOM FTHS Specification.

SHELL SIZING, COVERAGE & WEIGHT

Available Sizes	Medium	Large	X-Large	XX-Large
Head Size (Circumference)	20 ⅞ - 22 in (53-56 cm)	22-23 ¼ in (56-59 cm)	23 ¼ - 24 ⅜ in (59-62 cm)	24 3/8 – 25 1/8 in (62-64 cm)
Square Coverage	137 in^2 (884 cm^2)	148 in^2 (955 cm^2)	163 in^2 (1052 cm^2)	171 in^2 (1103 cm^2)
FAST SF Shell Weight** (Shell with paint & edge band)	1.12 lbs (508g)	1.23 lbs (557g)	1.32 lbs (597g)	1.34 lbs (610g)

(**Estimated calculations of weights) Note: All measurements are +/- 3% tolerance

Shell Construction: Two-stage non-slit
Shell Thickness: 0.170" (4.32mm)
Shell Geometry (Curvature): FAST
Cut Style (Side Protection): High Cut
Available Sizes: Medium (M), Large (L), X-Large (XL), XX-Large (XXL)

Available Colors:

Tan 499 Black MultiCam®

RAILINK SPECIFICATIONS

EMI Testing Standard: MIL-STD-461G
Operating Temperature: Operating temperature: -40F to 130F
Operating Humidity: 0-95% RH non-condensing
Storage Temperature: -40F to 160F
Ingress Protection (Water/Dust): IP67 – 1M for 1 hour (IP67 standard is 1M for 30 min)
Saltwater Immersion: MIL-STD-810H rated
Impact: MIL-STD-810H rated
Elevation: Operational at 30,000ft, survive transport to 40,000ft / 4 hours
Node Voltage: 13V
VAS Voltage: Auto-selection 3V or 9V
NVGs supported: PVS-31A, BNVD-1531, GPNVG-18, Kestrel, F-Pano, F-Bino, BNVD-F
System Weight (Rails & Hotshoe): 8oz (226 grams)

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FULL SYSTEM SPECIFICATIONS

WEIGHT**

Available Sizes	Medium	Large	X-Large	XX-Large
RAILINK Enabled FAST SF Helmet System Weight (FAST SF Shell with RAILINK and LockDown Liner System)	2.35lbs (1066g)	2.43 lbs (1104g)	2.54 (1154g)	2.60 (1180g)

(**Estimated calculations of weights) Note: All measurements are +/- 3% tolerance

ACCESSORIES

Surefire®
Flashlight

Princeton Tec®
Flexlight

CORE Survival®
Strobes

Contact Us

Ops-Core is committed to designing advanced performance capabilities for the elite warrior. For more information regarding the Ops-Core RAILINK Enabled FAST SF Helmet System, contact Ops-Core Customer Service at +1 888.894.1755 or groundcs@gentexcorp.com. The products described are subject to U.S. export controls. Transfer of this product is strictly prohibited to a non-U.S. Person, whether in the United States or abroad, without the proper U.S. Government Authorization.