

Cairns® XF1 Fire Helmet

MSA
The Safety Company



WHEN YOU GO IN, WE GO IN WITH YOU.



**PART TRAILBLAZER.
PART TOP GUN.
ALL CAIRNS.**

THE RIGHT TIME FOR SOMETHING NEW

We know the MSA Cairns XF1 looks entirely different than the helmet you're wearing now. And that's the point. At MSA Cairns, we're always striving to innovate helmet technology—which is why we're always talking to firefighters about their gear. From these conversations, we knew it was the right time to bring a European-style fire helmet to North America.

The design of the National Fire Protection Association (NFPA) 1971- and 1951-compliant Cairns XF1 capitalizes on the expertise of firefighters who wear jet-style fire helmets, while blending in the needs of the North American firefighter.

MEETING FIREFIGHTER NEEDS: BENEFITS OF THE CAIRNS XF1



REDUCED SNAGS

The Cairns XF1 has been engineered as much for comfort and fit as safety. The most obvious feature is what it lacks—the XF1 is brimless. While untraditional, the lack of a brim makes it easier to crawl into tight spaces and retain your helmet.



INTEGRATED ACCESSORIES

The Cairns XF1 offers several optional accessories, like a secondary (ocular) visor, lighting, and communications. All are integrated seamlessly into the design, retaining its sleek profile.¹



EASY TO CLEAN

The Cairns XF1's modular design allows it to be quickly disassembled for thorough inspection, care and maintenance. Plus, the helmet's soft goods are removable, washable and replaceable—all without the use of tools.



LIGHTING THE WAY

This compact light accessory is housed inside the helmet, reducing exposure to heat, flames, and impact. The strategic placement of LED lights on either side of the helmet improves visibility in dark conditions without detracting from others' vision.



PERSONALIZED FIT

Several easy-to-find adjustments can be made enabling the fire helmet fit to be customized to the individual. When it's all said and done, the XF1 doesn't just fit firefighters—it fits most of them comfortably.²



CUSTOMIZED LOOK

The Cairns XF1 is available in four colors, black, white, yellow, and red, and two finishes, matte and glossy, for firefighters to choose a look that fits their style. Front plates, in a variety of colors, black pre-printed and custom printed options, are available.

¹ Accessories are not certified to NFPA; however, their addition to the helmet does not affect NFPA compliance.

² This information based on Beta trial of 250 participants with various facepieces, including competitor SCBA.



CAIRNS XF1 FIREFIGHTER-DRIVEN FEATURES



RELIABLE DESIGN, EXCELLENT PROTECTION

Designed to withstand the rigors of structural fire fighting:

- Lightweight shell molded from high heat-resistant thermoplastic provides protection against typical fire scene hazards.
- Full-coverage impact cap combined with the fitted suspension system allows for equal distribution of forces.
- Shell, face shield, and earlaps, provide coverage from impacts, projections, heat, and flames.
- Brimless style prevents shifting and bumping.
- Increased head mobility allows for expanded field of view, especially upward.

EASY CARE TO SAVE TIME & MONEY

Designed to be quickly disassembled for care and maintenance as required by NFPA 1851:

- The modular design allows for thorough inspection, cleaning, and replacement of parts.
- Soft goods are removable, washable, and replaceable with minimal effort and no tools.³ Wash cycle testing conducted at MSA labs showed that the soft goods, including the chinstraps, withstood 52 wash cycles.⁴
- Both helmet sizes use many of the same components to minimize spare parts management and costs.



COMFORT THROUGH INNOVATION

Designed for a comfortable fit and easy adjustability:

- Robust, yellow components designate helmet interaction points for the user.
- Front headband angle adjusts to establish proper fit when wearing a hood or SCBA facepiece.
- Three-position ratchet adjustment provides for individualized/customizable fit.
- Pivoting, three-point chinstrap automatically aligns to the proper wearing angle with or without facepiece.

³ MSA does not recommend washing suspension straps due to their key role in dissipating impact. Follow the Product Instructions for removing and replacing suspension straps.

⁴ When washed according to instructions provided.

MSA CAIRNS XF1 ACCESSORIES

MSA offers a variety of integrated accessories designed to maximize available headroom while minimizing snag hazards.



**CUSTOMIZED
FRONT PLATE**



**INTEGRATED
OCULAR VISOR**



LIGHT MODULE



**COMMUNICATION
HEADSET**

LIGHT MODULE

Unique, compact light located inside the helmet improves visibility in dark conditions without detracting from others' vision:

- Internal location reduces the light's exposure to heat, flames, and impact.
- Light module is ATEX (Zone 1, IP56)-rated.
- Light placement on each side of the helmet allows for expanded field of view.
- Yellow on/off switch is easy to see and rubberized for better grip with gloved hands.
- Uses AAA batteries for up to 10 hours of continuous operation.
- Flashing light indicates remaining battery level.
- Light module weighs just 3.5 oz. (99 g) with batteries—about 33% lighter than other helmet-mounted flashlights.
- Adding the light module does not affect compliance with NFPA-1971 or NFPA-1951.

INTEGRATED OCULAR VISOR

The optional ocular visor provides additional eye protection that is easy to deploy:

- Patented pivot adjustment system allows the visor to articulate to and away from the face, helping to provide gap-free protection even when the user is wearing corrective lenses.
- Visor is easy and quick to remove to clean or replace with no tools. Great secondary eye protection when a full-face protection is not needed.
- Protective anti-scratch coating helps ensure extended lifetime.
- Unique wide field of view in all directions.
- Compliant to ANSI/ISEA Z87.1:2015 as an impact protector—similar to safety eyewear typically worn by firefighters for nonstructural fire responses such as motor vehicle accidents.
- Adding the ocular visor does not affect compliance with NFPA-1971 or NFPA-1951.

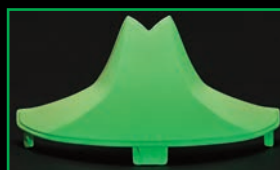
INTERNAL COMMUNICATION HEADSET

The internally-mounted headset snaps easily inside the helmet, providing incoming communication right to the ear, where it's needed most:

- The headset can be installed without tools and does not affect how the helmet fits on the firefighter's head.
- Users have the option of one or two integrated speakers.
- The flexible, noise-cancelling Electret boom microphone extends more than 3 in. (76 mm) in length and can be used with or without SCBA facepiece.
- When not in use, the microphone stows safely out of the way behind the wearer's head.
- Fire-retardant cable download offers NEXUS (7.1 mm jack, four pole) connecting plug.
- Headset adds minimal weight (3.5 oz. [99 g] for one speaker or 4.4 oz. [124 g] for two speakers).
- This accessory is ATEX (Zone 1, IP56)-rated
- The headset operates with various push-to-talk (PTT) modules, such as MSA HandyCom, enabling connection to a radio:
 - Housing with large, easy-to-push button
 - Download cable to the radio with connection plug
 - Belt/strap attachment via durable integrated clip
- No batteries needed; powered by the radio through the PTT.
- Adding the communication headset does not affect compliance with NFPA-1971 and NFPA-1951.

FRONT PLATES*

- 11 pre-printed black plates, including those for ranks, EMS and Chaplain.
- Plates available in 9 colors.
- Can be customized with metal badge, molding, or multi-color printing.
- Can be removed in a few seconds without special tools.



*XF1 Luminous Front Plate
(GA1150-32)*



*XF1 Front Plate, Lieut. w/1 trumpet
(GA1150-N4)*

*Minimum order quantities apply to customized front plates. Pre-printed black plates and blank colored plates can be ordered as single pieces.

Cairns XF1 **Fire Helmet**



MSA CAIRNS XF1

FIRE HELMET TECHNICAL DATA

SIZE	
MEDIUM	Head sizes from 6½–7¼
LARGE	Head sizes from 7¼–8¼
WEIGHT <i>Base helmet (with full face shield), compliant to NFPA-1971 and NFPA 1951</i>	
MEDIUM	55-57 oz. (159 +/- 30 g)
LARGE	60–62 oz. (170 +/- 30 g)
COLORS	
	Black
	Yellow
	White
	Red
FINISHES	
	Matte
	Glossy
APPROVALS	
	NFPA 1971, Standard on Protective Ensembles for Structural and Proximity Fire Fighting (current edition)
	NFPA 1951, Standard on Protective Ensembles for Technical Rescue Incidents (current edition)
SHELL	
	High temperature thermoplastic (injection molded)
IMPACT LINER	
	Shock-absorbing polyurethane foam with aramide reinforcement
CHINSTRAP	
	Kevlar®/Nomex blend
SOFT GOODS & EAR COVERS	
	Nomex
FULL FACE SHIELD	
	High temperature thermoplastic with AF/AS coatings

MSA CAIRNS XF1 PART NUMBERS

HELMETS

MATERIAL NO.	SIZE		FINISH		COLOR			
	MED	LARGE	MATTE	GLOSSY	BLACK	RED	WHITE	YELLOW
GYM1018500000-NE16	■		■		■			
GYM1018500000-RD16	■		■			■		
GYM1018500000-BU16	■		■				■	
GYM1018500000-JC16	■		■					■
GYL1018500000-NE16		■	■		■			
GYL1018500000-RD16		■	■			■		
GYL1018500000-BU16		■	■				■	
GYL1018500000-JC16		■	■					■
GYM1018500000-NA16	■			■	■			
GYM1018500000-RE16	■			■		■		
GYM1018500000-BA16	■			■			■	
GYM1018500000-JD16	■			■				■
GYL1018500000-NA16		■		■	■			
GYL1018500000-RE16		■		■		■		
GYL1018500000-BA16		■		■			■	
GYL1018500000-JD16		■		■				■



Matte Black



Matte Red



Matte White



Matte Yellow



Glossy Black



Glossy Red



Glossy White



Glossy Yellow

FRONT PLATES

MATERIAL NO.	DESCRIPTION
GA1150-16	XF1 Front Plate, black
GA1150-34	XF1 Front Plate, white
GA1150-45	XF1 Front Plate, blue
GA1150-2B	XF1 Front Plate, green
GA1150-46	XF1 Front Plate, yellow
GA1150-33	XF1 Front Plate, orange
GA1150-32	XF1 Front Plate, photolum
GA1150-74	XF1 Front Plate, red
GA1150-4L	XF1 Front Plate, HV yellow
GA1150-N2	XF1 Front Plate, black, Chief, five trumpets
GA1150-N3	XF1 Front Plate, black, Captain, two trumpets
GA1150-N4	XF1 Front Plate, black, Lieutenant, one trumpet
GA1150-N5	XF1 Front Plate, black, Fireman's scramble
GA1150-N6	XF1 Front Plate, black, EMS star of life
GA1150-N7	XF1 Front Plate, black, Deputy Chief, three trumpets
GA1150-N8	XF1 Front Plate, black, Assistant Chief, four trumpets
GA1150-N9	XF1 Front Plate, black, Battalion Chief, two trumpets
GA1150-P1	XF1 Front Plate, Captain two axes
GA1150-P2	XF1 Front Plate, black, Lieutenant, one axe
GA1150-P3	XF1 Front Plate, black, Chaplain's cross



MSA CAIRNS XF1 ACCESSORIES & PARTS

ACCESSORIES

MATERIAL NO.	DESCRIPTION
GA1484	XF1 Lighting module
GA1087C	XF1 Ocular visor assembly
GA010002H3	XF1 Boom microphone headset
GA010002H3A	XF1 Boom microphone headset 2 LS
10163388	PTT for APX6000/7000
10163389	PTT for XTS5000

REPLACEMENT PARTS*

MATERIAL NO.	DESCRIPTION
GA1162	XF1 Headband liner and ratchet cover kit
GA1160	XF1 Chinstrap assembly
GA1153	XF1 Reflective trim kit, lime yellow
GA1159	XF1 Ear cover

*Check the MSAFire.com website for additional replacement parts.

MSA—The Safety Company

Our business is safety. We've been the world's leading manufacturer of high-quality safety products since 1914. MSA products may be simple to use and maintain, but they're also highly sophisticated devices and protective gear—the result of countless R&D hours, relentless testing and an unwavering commitment to quality that saves lives and protects millions of hard working men and women each and every day. Many of our most popular products integrate multiple combinations of electronics, mechanical systems and advanced materials to help ensure that users around the world remain protected in even the most hazardous of situations.

Our Mission

MSA's mission is to see to it that men and women may work in safety and that they, their families and their communities may live in health throughout the world.

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



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