

# Cairns® XF1 Fire Helmet



**WHEN YOU GO IN, WE GO IN WITH YOU.**



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

### **THE RIGHT TIME FOR SOMETHING NEW**

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*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.<sup>1</sup>



## 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.<sup>2</sup>



## 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. Customized front plates in a variety of colors and custom printing are also available.

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

<sup>2</sup> 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.<sup>3</sup> Wash cycle testing conducted at MSA labs showed that the soft goods, including the chinstraps, withstood 52 wash cycles.<sup>4</sup>
- 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.

<sup>3</sup> 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.

<sup>4</sup> 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.

## CUSTOMIZED FRONT PLATE\*

- Can be customized with metal badge, molding, or multi-color printing.
- Plates available in 9 colors.
- Can be removed in a few seconds without special tools.

\*Minimum order quantities apply to customized front plates.

Cairns XF1 **Fire Helmet**

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# MSA CAIRNS XF1 FIRE HELMET TECHNICAL DATA

|                                    |  |
|------------------------------------|--|
| <b>SIZE</b>                        |  |
| <b>MEDIUM</b>                      | Head sizes from 6½–7¼ inches (52–62 cm)  |
| <b>LARGE</b>                       | Head sizes from 7½–8¼ inches (57–65 cm)  |
| <b>WEIGHT</b>                      | <i>Base helmet (with full face shield), compliant to NFPA-1971 and NFPA 1951</i>   |
| <b>MEDIUM</b>                      | 56–58 oz. (1.59–1.65 kg)   |
| <b>LARGE</b>                       | 60–62 oz. (1.70–1.76 kg)   |
| <b>COLORS</b>                      | Black<br>Yellow<br>White<br>Red  |
| <b>FINISHES</b>                    | Matte<br>Glossy  |
| <b>APPROVALS</b>                   | NFPA 1971, Standard on Protective Ensembles for Structural and Proximity Fire Fighting (current edition)<br>NFPA 1951, Standard on Protective Ensembles for Technical Rescue Incidents (current edition) |
| <b>SHELL</b>                       | High temperature thermoplastic (injection molded)  |
| <b>IMPACT LINER</b>                | Shock-absorbing polyurethane foam with aramide reinforcement   |
| <b>CHINSTRAP</b>                   | Kevlar®/Nomex blend  |
| <b>SOFT GOODS &amp; EAR COVERS</b> | Nomex  |
| <b>FULL FACE SHIELD</b>            | High temperature thermoplastic with AF/AS coatings   |

# MSA CAIRNS XF1 PART NUMBERS

## HELMETS

| MATERIAL NUMBER     | 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  |      | ■     |        | ■      |       |     |       | ■      |

## FRONT PLATES

| MATERIAL NUMBER | 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 |

## ACCESSORIES

| MATERIAL NUMBER | 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                  |



## MSA CAIRNS XF1 COLORS



Matte Black



Matte Red



Matte White



Matte Yellow\*



Glossy Black



Glossy Red



Glossy White



Glossy Yellow

\* Matte Yellow available beginning December 2018

# 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.

**MSA: Because every life has a purpose.**

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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