

SOLUTION BRIEF

REDCOM SIGMA® XRI-400 CYBERSECURITY OVERVIEW

In today's technological climate, cybersecurity is becoming more important to mission success by the day. As our near-peer adversaries continue to invest in cyber capabilities for protection as well as aggression, it is critical that we secure our technological assets across all echelons. Such security is equally important to both the strategic decision-maker and tactical warfighter. REDCOM Sigma XRI-400 is designed with these considerations in mind, and is rigidly purpose-built for even the most intense cyber operations.

REDCOM Sigma® XRI-400 is a full-featured C2 platform that delivers voice, video, chat, and radio interoperability in a single box. The XRI includes four radio ports and a low SWaP compute platform, all powered by REDCOM's flagship Sigma C2 software.

Even the most disparate parts of your radio network can be bridged together with the XRI to facilitate encompassing and effective command and control. The XRI also integrates with analog technologies for interoperability between cutting-edge and legacy architectures.



REDCOM Sigma® XRI-400 delivers maximum interoperability in a low-SWaP design weighing just 2.6 lbs (1.2 kg).

The CIA Triad

The CIA Triad is a fundamental concept in the field of modern cybersecurity. As a cornerstone of current cybersecurity practice, adherence to the CIA Triad guides security practitioners to consider the practical safety of the design and use of critical mission resources. Security of your mission is of critical importance, which is why the XRI is built to encompass and execute these defining cybersecurity principles both at home and in the field.

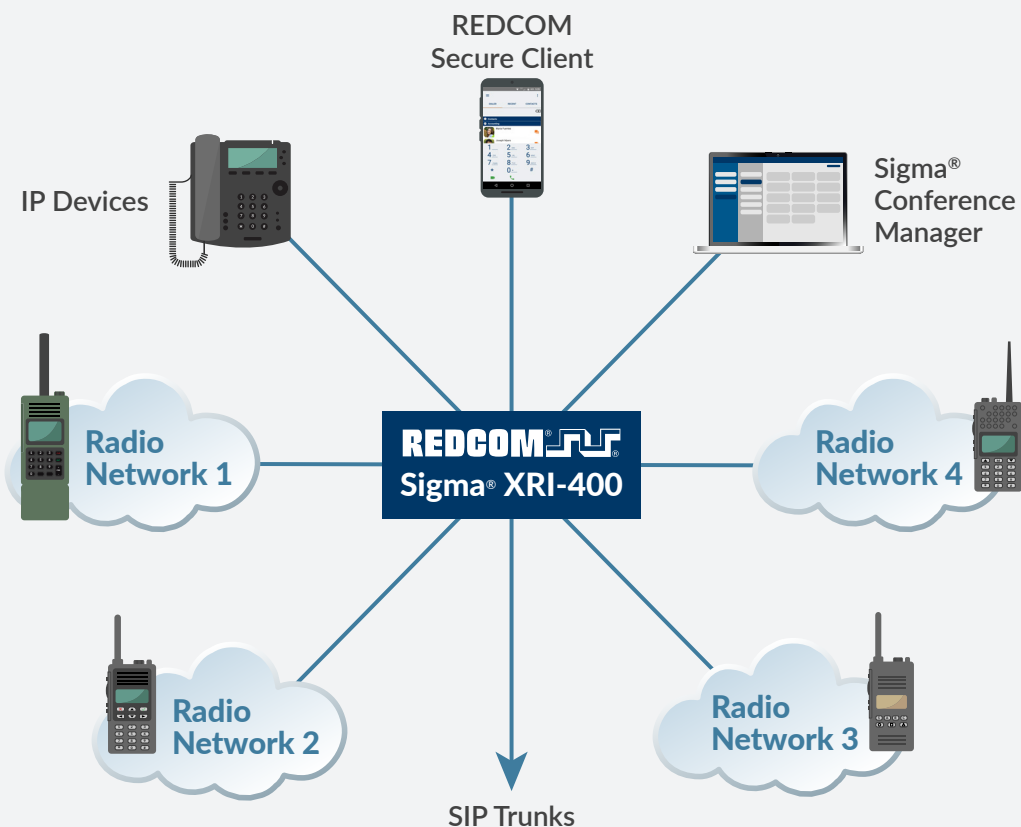
Availability – When your system architectures become staggeringly complex, availability of your critical C2 becomes a game of interoperability. XRI is all about interoperability. In fact, it is what the “I” stands for. There is a reason why this concept is the foundation of the CIA triad; without availability, nothing else matters. The XRI is constructed to reflect this. Its agnosticism to host radios, enhanced and versatile C2 platform driven by REDCOM Sigma software, and ability to thrive in latent or disconnected environments make the XRI a critical tool for communication availability. Similarly, XRI capabilities are available in other domains, most notably the Combined Joint All Domain Command & Control (CJADC2) theatre. With an easy-to-learn and easy-to-use interface, complete with rapid startup and teardown times, availability of your command, control, and critical communication capabilities to your necessary recipients is fluid, rapid, and assured, even in contested battlefronts.

Confidentiality – No matter the make, model, settings, or configurations of your tactical radios, the XRI can accommodate them and facilitate communication to other radio nets. This extends to the radios' waveforms and encryption packages, ensuring that communication traffic is shielded from prying eyes, no matter its destination. This reduces the need to communicate "in the clear" between two parties who might be inconsistent on any one of these fronts, let alone multiple. Similarly, with the XRI's minimized attack surface, it boasts operational security even in the face of sophisticated cyber adversaries. Combined with Sigma software, which is validated in accordance with FIPS 140-2 and certified through JITC, confidential communications passed through the XRI will remain confidential.

Integrity – When emergencies arise, the integrity of your communications is of utmost importance. With XRI, the integrity of your communications stays intact between different radio networks or when radio networks communicate with the rest of the C2 network. This is possible due to the XRI's ability to retain the use of radio waveforms and encryption, even between two radio systems which utilize different packages. XRI also affords added integrity to the less technical aspects of completing the mission through the use of REDCOM Sigma, which enables powerful and complex operations through an intuitive and easy-to-learn interface. When seconds matter, consulting the manual is not an option. Features like Audio Monitoring provide higher assurance that communication ports are being used legitimately and communicating accurately.

TACTICAL INTEROPERABILITY WITH REDCOM SIGMA® XRI-400

A single Sigma XRI-400 unit can bring together radios and IP devices from disparate networks, allowing for secure and seamless communication between IP and RF endpoints.



What does this mean for you?

By incorporating the CIA Triad into the fundamental construction of the XRI, a platform for rigid, accessible, and expansive C2 capability becomes available at the tactical edge. Coupled with its simple and easy-to-use interface, the execution of complex operations is performed with a logical GUI and easily learned commands. This ease of use combined with the XRI's core principle of interoperability allow even the most disparate communication structures to successfully communicate.

As cyber threats increase in frequency and complexity, cybersecurity becomes less of a feature and more of a necessity. To those on the strategic and tactical edges of defending the United States, it is clear that the next significant conflicts will take place on two fronts: kinetic and cyber. Despite these fronts being physically separate, they are one and the same for those actualizing the mission out in the field. REDCOM recognizes these emerging trends in our national defense, and is working to produce equipment, solutions, and services which reflect these evolving factors. We understand that success of the mission begins and ends with the warfighter. By incorporating fundamental tenets of cybersecurity into REDCOM Sigma XRI, REDCOM brings enhanced C2, voice, video, and chat to even the most latent and disconnected tactical environments.

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About REDCOM

REDCOM specializes in the development of advanced strategic, operational, and tactical communication solutions designed to support DoD modernization efforts. REDCOM's MIL-spec products are optimized for low size, weight, and power (SWaP), making them the ideal communications core for deployments to the tactical edge. All REDCOM products are proudly designed, developed, engineered, and supported in the USA. Learn more at www.redcom.com.