

Solution brief

Rapid Response Connectivity Unit

**Verizon Frontline
deployable asset**



Introducing the Verizon Rapid Response Connectivity Unit (RRCU).

Created through The Verizon Frontline Innovation Program, the RRCU is designed to excel when it matters the most. The unit is a heavy-duty, all-terrain and multi-user asset that can be deployed by one person in fewer than 15 minutes. Capable of delivering secure and reliable voice and internet service, the RRCU provides rapid response capabilities in emergency situations.

The RRCU is equipped with both satellite and cellular backhaul. It establishes a private cellular network (LTE and 5G) spanning miles, delivering incomparable connectivity. Additionally, a Wi-Fi network provides diverse connectivity options for nearby personnel, ensuring seamless communication in dynamic operational environments.

The RRCU is configurable based upon specific requirements. One of the standout features of the RRCU is its built-in Edge Compute capability. This empowers first responders by enabling the hosting of applications on the edge, providing critical support exactly where it's needed. The RRCU isn't just a connectivity solution; it's a comprehensive platform that enhances operational efficiency and response effectiveness.

1

Deploy

RRCU provides rapid deployment for quick response.

2

Connect

The RRCU establishes seamless connectivity for continuous communication in crises.

3

Empower

RRCU's Edge Compute empowers on-site personnel with critical applications.



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Connectivity

The RRCU serves as a central hub, efficiently managing and distributing the connectivity to provide a seamless and high-capacity experience.

- The system employs a Wi-Fi 6 network capable of connecting up to 120 users.
- With private cellular network capability (LTE and 5G), the coverage can span miles and connect 1000+ users.
- This network draws internet connection from either the satellite, public 4G/5G network or direct Ethernet WAN.

Satellite Connectivity

The satellite system operates with a GEO or LEO option optimized for deployment and alignment. It also provides a hybrid solution by employing multiplexing to combine the bandwidth and capacity of both networks. This demonstrates a commitment to staying at the forefront of technological advancements in satellite communication.

Extended Mobile Operations

Experience paramount adaptability with the RRCU. Choose between a gas or diesel generator to provide maximum capacity for extended hours. Our commitment to customization means we tailor the solution to fit your exact needs. Versatility and reliability, precisely how you need it.

Edge Compute

The RRCU boasts an advanced Edge Compute capability, placing powerful computing resources right at the network's periphery.

- **Proximity to data source**
The RRCU's Edge Compute minimizes latency by processing data closer to its source, ensuring rapid response times for applications requiring real-time interactions.
- **Customization for specific requirements**
The modular design allows for customization, providing that the server aligns precisely with your unique requirements, making it a versatile solution for diverse use cases.
- **Scalability**
As demands evolve, the RRCU's Edge Compute capability scales effortlessly. Whether you're expanding operations or adapting to changing conditions, the system grows with you.
- **Reliability and redundancy**
Built with reliability in mind, the RRCU's Edge Compute features redundancy mechanisms, ensuring continuous operation even in the face of potential hardware failures.

Ruggedized Server Rack

Elevate your server experience with our Ruggedized Server Rack—a powerhouse designed for the toughest environments. Equipped with a built-in cooling and heating unit, this rack ensures optimal server temperature, even in the harshest conditions. Dust and vibration resistance further guarantee uninterrupted performance. Trust in a server solution that stands up to any challenge, delivering reliability where you need it most.

Military and First Responder use cases

First Responders in 2023

In 2023, the Verizon Frontline Crisis Response Team, primarily composed of former first responders and military personnel, actively supported public safety agencies across the U.S. during various emergencies. They responded to 1,700+ requests from nearly 900 public safety agencies, leading to deployments in almost every state and Washington, D.C. The team provided over 7,200 Verizon Frontline solutions, including repeaters, mobile hotspots, routers, smart devices, drones and deployable satellite solutions like Satellite Picocells on Trailers (SPOTs) and deployable connectivity solutions like the RRCU.

Key response efforts in 2023 included:

- **Wildfire response**
The team supported wildland firefighters with about 2,400 Verizon Frontline solutions, responding to 204 requests across various locations, including Hawaii and Virginia.
- **Hurricane response**
They aided during three major hurricanes (Hilary, Idalia and Lee), with Hurricane Idalia prompting the delivery of nearly 100 Verizon Frontline solutions in states like Florida, Georgia, South Carolina and North Carolina.
- **Tornado/Derecho response**
The team addressed nearly 80 requests in 15 states following tornadoes and derechos, providing 119 Verizon Frontline solutions.
- **Search and Rescue/Recovery**
The response team supported search and rescue/recovery missing person missions.



Homeland Defender exercise at Muscatatuck Urban Training Center

A large-scale, multi-organizational exercise that prepares agencies to deploy in the event of natural and man-made disasters. Bringing various state, national, international and private organizations together to train side-by-side ensures these teams are ready to respond when disaster strikes.

The RRCU was configured to propagate a 4G and Wi-Fi signal connecting various devices across the training grounds.

Verizon Frontline deployed in support of National Guard training exercise >



“Swamp Stomp” search and rescue exercise Wilmington, North Carolina

Emergency response and rescue experts from across the Carolinas and Virginia join for the annual Swamp Stomp event. This specialized training session is designed to enhance the capabilities of search and rescue teams, preparing them for scenarios involving lost or missing individuals.

The RRCU was on hand for the training for 4G and Wi-Fi support.



Explore more 5G-enabled solutions for first responders on the front lines and those supporting them at verizon.com/frontlineinnovation

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Learn about the Verizon Frontline Crisis Response Team

verizon.com/responseteam



Explore the Verizon Frontline Innovation Program

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For more information on the Verizon Frontline Crisis Response Team:

- Contact your Verizon Account Manager
- Call 800.981.9558
- Visit verizon.com/responseteam