

LIVESTREAMING VIDEO, VOICE & DATA

# Hot Zone to Cold Zone Communications in One Piece of Wearable Tech

**Designed from the ground up for the unique comms challenges faced by today's first responders.** The Vorbeck HD4 communications harness contains four high-performance embedded antennas, completely removing any antenna protrusions. Vorbeck HD4 forms a secure self-forming mesh network to enable livestreaming video from the attached low-light camera, clear voice, and high-speed data. The Vorbeck HD4 is lightweight, waterproof, and designed with NFPA 1994 certified material to allow for decontamination.

## Rajant Private Wireless Networks: Ensuring the Safety of First Responders Through Various Temperature Zones

Rajant provides the ideal networking solution to rapidly and reliably interconnect systems, so you can have real-time control and full situational awareness at all times.

For example, a fleet of police cars equipped with a Rajant BreadCrumb® can instantly create a network of nodes encircling an emergency site. Officers, firefighters and first responders, outfitted with compatible radio transceivers on their bodies can expand their network, facilitating transmission of video, audio, and data back to police cars.

### Vorbeck HD4 harness provides secure reliable communications in challenging environments to improve safety and effectiveness:

- Connects you to the cold zone and to each other
- Enables livestreaming video to cold zone and subject matter experts
- Extends communications into tunnels, factories, dams, and skyscrapers through an advanced self-healing mesh network

### Vorbeck HD4 is one-piece of gear that can be put on in seconds:

- Fits comfortably with hazmat suits, SCBA and other gear
- Allows hands-free operation of voice and video
- Expandable with additional third-party sensors
- Made with DuraChem® 500 material



## FEATURES

- Rajant Kinetic Mesh® radio (up to 300 Mbps data rate)
- Embedded electronics
- Fits underneath SCBA
- Swappable battery
- Accessory panel
- Audio visual hub
- Decontaminable
- Waterproof

Rajant and Vorbeck have partnered together to create a communications harness (pictured to the right), which embeds the ES1 BreadCrumb to enable livestreaming of video, voice, and data by personnel in Hot Zones.



### Creating networks where none have existed.

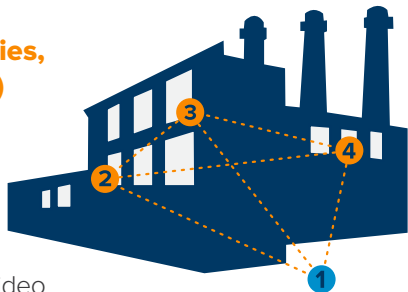
Secure, self-forming ad-hoc mesh networks of HD4 harnesses and Drop Nodes connect team members to incident command even in areas that normally have no RF signal, such as tunnels, skyscrapers or basements.

#### HOT ZONE (factories, buildings, tunnels)

- Low-light camera
- Hands-free voice
- Mobile display

#### COLD ZONE

- Livestreaming HD video
- Voice (open channel/PTT)
- Ambient audio



## SPECIFICATIONS

### Vorbeck HD4 Communications Harness

**Sizes:** 38 – 50 (adjustable)

**Construction:** NFPA 1994 certified material

**Antennas:** 4

**Frequency:** 2.4 GHz, 5.8 GHz

**Features:** Made with DuraChem®500 (NFPA 1994 certified material)

#### Radio:

- High bandwidth (up to 300 Mbps) mesh-networking radio powered by Rajant's patented InstaMesh® networking software
- 4x4 Multi-in Multi-out (MIMO) capability
- Can function as local area Wi-Fi access point for connecting Wi-Fi-capable devices to the mesh network



#### Video:

- Mini IP-66 rated low-light camera
- 1280 x 720 resolution at 30 fps for clear, high quality video in real time
- 2.8mm fixed lens, with an f/2.0 aperture, for a 81° horizontal FOV
- Camera mounted on a quick release housing

#### Voice:

- Push-to-talk or voice-activated open mic headset for hands-free operation

#### Battery:

- 12V 7,200mAh Li-ion battery (8-10 hour continuous)

See how Rajant's mission-critical, fully mobile Kinetic Mesh network can help you take advantage of autonomy today for rapid efficiency and safety gains.

Visit [rajant.com/public-safety](http://rajant.com/public-safety) or [vorbeck.com](http://vorbeck.com) to get started.

Tel: 484.595.0233 | [www.rajant.com](http://www.rajant.com)

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Industrial Wireless Networks **Unleashed.**