

# CONNECTED FLEET

2 Introduction



## RESILIENT MOBILE COMMUNICATIONS FLEXIBLE DEPLOYMENT FOR ALL ENVIRONMENTS



# CONNECTED RESPONDER

Introduction 10

Portable Wi-Fi hotspot 11

Body-worn camera 12

UAV Streamer 13

ExStream Video Application 14

Book a Demo 15

About Excelerate 15



[excelerate-group.com](http://excelerate-group.com)

# CONNECTED FLEET

Excelebrate is a global market leader in the provision of satellite and cellular services where failure is not an option and optimum performance is critical.

We are best known for our large command & control vehicles that we have been delivering throughout the UK and internationally for the past 20 years. Today, we have a bigger focus on more scalable connectivity solutions for all types of front-line vehicles. With the increasing number of smart devices being used, connectivity needs to be guaranteed to everyone and not just command and control vehicles.

We have invested heavily in developing new solutions so we can offer our customers various options around cellular and satellite (or both) networks for their connected vehicle solution.





**Thomas Reimann**

Executive Director of Healthcare  
Coordination and Support Service  
Hamad Medical Corporation

*Our vision is to be the best in world paramedic and healthcare service. This drives our innovation and guides the solutions we adopt.*

*Working in a commercial relationship with a partner like Excelebrate is so important on a project like this.*

*Solutions need to be practical for a paramedic and firefighter to use. For us it is also important to find a solution that benefits the patient, not just the Incident Commander.*

# HAMAD MEDICAL

Hamad Medical is leading the world in placing connectivity at the heart of its digital transformation strategy, enabling the best use of current and future technologies to improve command and control, situational awareness and ultimately patient care.



Hamad Medical's 220-strong fleet of smart ambulances features robust connectivity and the ability to generate Wi-Fi networks to support paramedics working outside. A well-equipped ambulance today could potentially have up to eight different SIM cards for connected devices such as defibrillators, other medical equipment, body worn cameras and vehicle telematics. Excelebrate's Excell antenna, using one or two SIM cards installed on Hamad Medical's smart ambulances, ensure the best performance within any cellular network by optimising the distance, speed and throughput of the connection. Reducing the number of SIM cards also saves cost.

# JOINT OPERATIONS

Northamptonshire Fire and Rescue Service and Police's joint command unit represents the endless opportunities presented by both greater interoperability between agencies and the intelligent use of digital communications. Since 2016, it has been deployed at multiple complex incidents, pre-planned & community events and major incidents.



The first of its type in the UK, the high-tech vehicle features satellite, 4G and private LTE communications, while the built-in technology includes the ability to receive and view footage from remote static cameras, body worn cameras, UAV's and the police helicopter.

The service are now rolling out a fully connected fleet to support various operational scenarios.



**Phil Pells**

Area Commander – Operational Support  
Northamptonshire Fire & Rescue Service

*The Joint Command Unit provides a unique command and control capability, enabling both fire and police officers to work together in a single vehicle.*

*We are now working closely with Excelebrate for the roll-out of our smart fire appliances to be delivered in 2021.*



# SMART AMBULANCE

COVID-19 has caused many organisations to adapt quickly to remote working. It has highlighted a need for high quality and reliable connectivity - particularly in healthcare, to cope with increased demand and enforced restrictions. With Intensive Care Units overflowing in South East London at the height of the pandemic, SPRINT - The Specialist Retrieval and Intensive Care Transfer Service began.

## THE CHALLENGE

Deliver a solution that will keep all critical applications online in and around the vehicle – even in communications challenged environments.

## THE EXCELERATE SOLUTION

Excelerate provided a multi-WAN router equipped with 4G Extra unsteered roaming SIMs and an Excell roof-top antenna for persistent and reliable connectivity.



## THE RESULTS

- Reliable connectivity throughout the South East London area, even where networks become congested and are patchy
- Able to remain connected to clinical IT systems securely when the Ambulance leaves the hospital
- Long-range WiFi that enables paramedics and their devices to stay connected even when they enter patient households



**NHS**  
**SPRINT**

# OPTIMISED 4G CONNECTIVITY

## EXCELL

Excell ensures the best performance within any cellular network by optimising the distance, speed and throughput of the connection.

The Excell solution combines the benefits of both omni-directional and directional antenna's in to one superior 4G solution.

Harnessing the flexibility of the omni-directional antenna with the power of the directional antenna, the Excell can deliver the best performing connectivity possible.

### MORE SPEED, MORE COVERAGE

Unlike traditional antennas, it has beam forming and a built-in modem that minimises signal loss in comparison to traditional antenna installations.



### THE BEST ON THE MARKET

The Excell antenna system was put to the test in a remote location within the Brecon Beacons, Wales, UK. The signal strength on an iPhone on two of the major terrestrial networks was extremely poor with access to edge (2.5G) data service only. Here is how Excell performed VS a cellular router with High Gain antennas (Speeds in Mbps).



[Download the brochure](#)

# UNSTEERED ROAMING



**4G<sup>e</sup>xtra**

The Best Coverage from all of the UK's Major Networks in a Single SIM

## 4G EXTRA

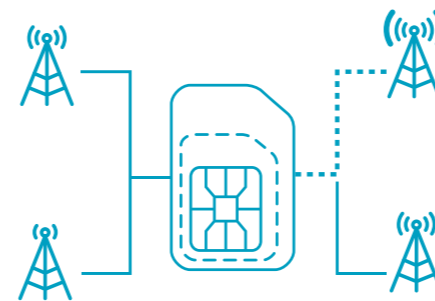
### WHAT IS UNSTEERED ROAMING?

Not all networks have strong coverage everywhere. Most SIM cards force your device to stay connected to the primary network or their preferred partner even if the signal is poor. This is called steered roaming.

4G Extra SIMs are unsteered and deliver connectivity across all the major networks in a single SIM. The SIM has no preferred partner network and automatically detects and connects to the strongest available signal with no user intervention.

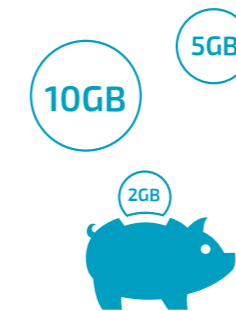
Our unsteered 4G Extra SIMs always prioritise connectivity and are great for keeping **both vehicles and devices** online, regardless of location.

### KEY BENEFITS OF 4G EXTRA



#### AMAZING COVERAGE

The 4G Extra SIM has no priority network and will seamlessly switch to the best available connection for increased coverage, and performance.



#### FLEXIBLE USAGE

Have full control over your data and use as little or as much, as and when needed. If you are ever running low, you will be notified and can top-up at any time.



#### POOLED DATA PLANS

Share data between multiple users and devices so that those with low usage don't get charged for wasted data that isn't used.

[Learn more](#)

# FLAT-PANEL SATELLITE

## ZERO GAP CONNECTIVITY

The Kymeta flat-panel satellite terminal addresses the need for high-throughput communication systems where on-the-move access to reliable connectivity is essential.



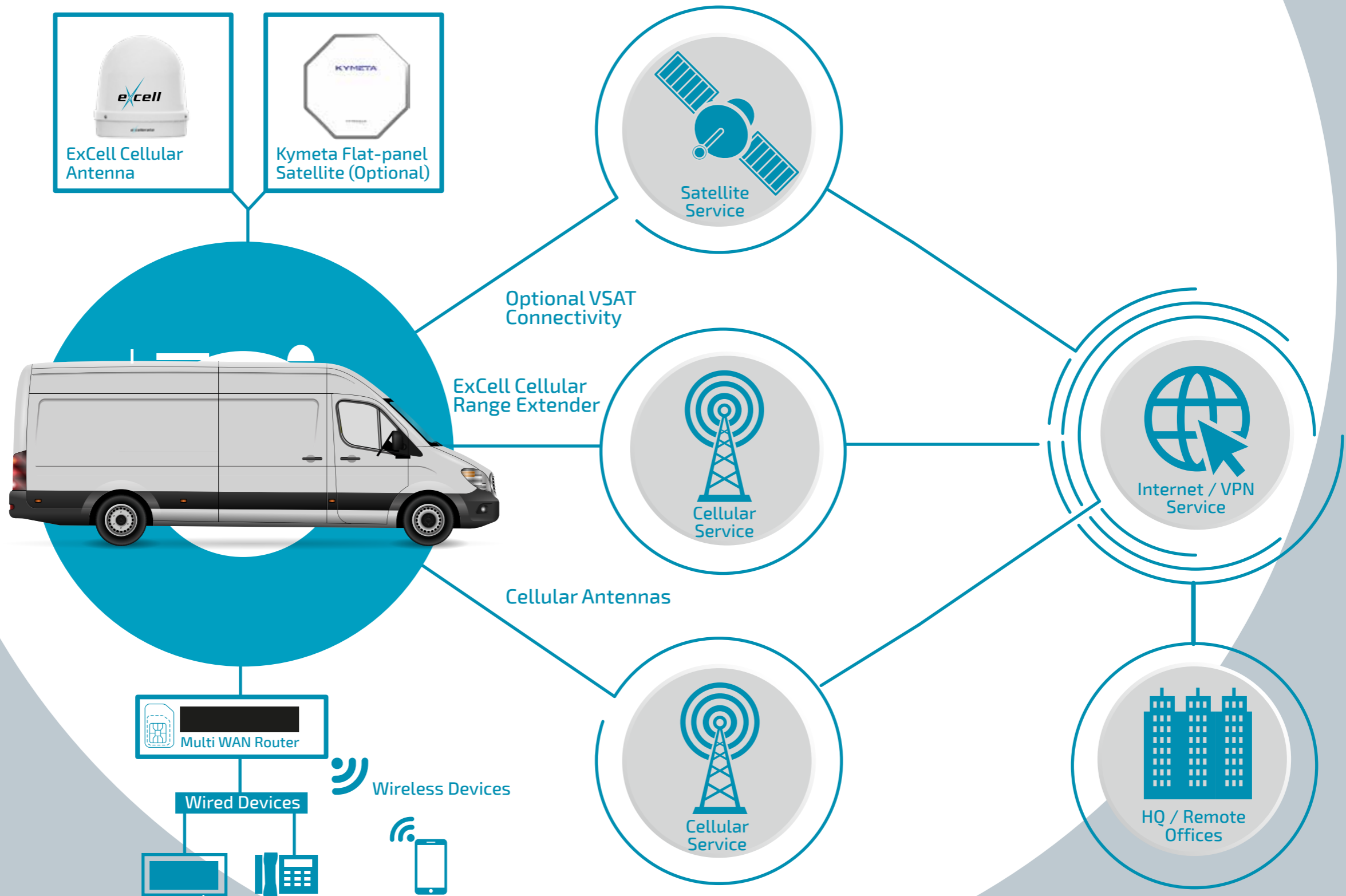
### KEY FEATURES

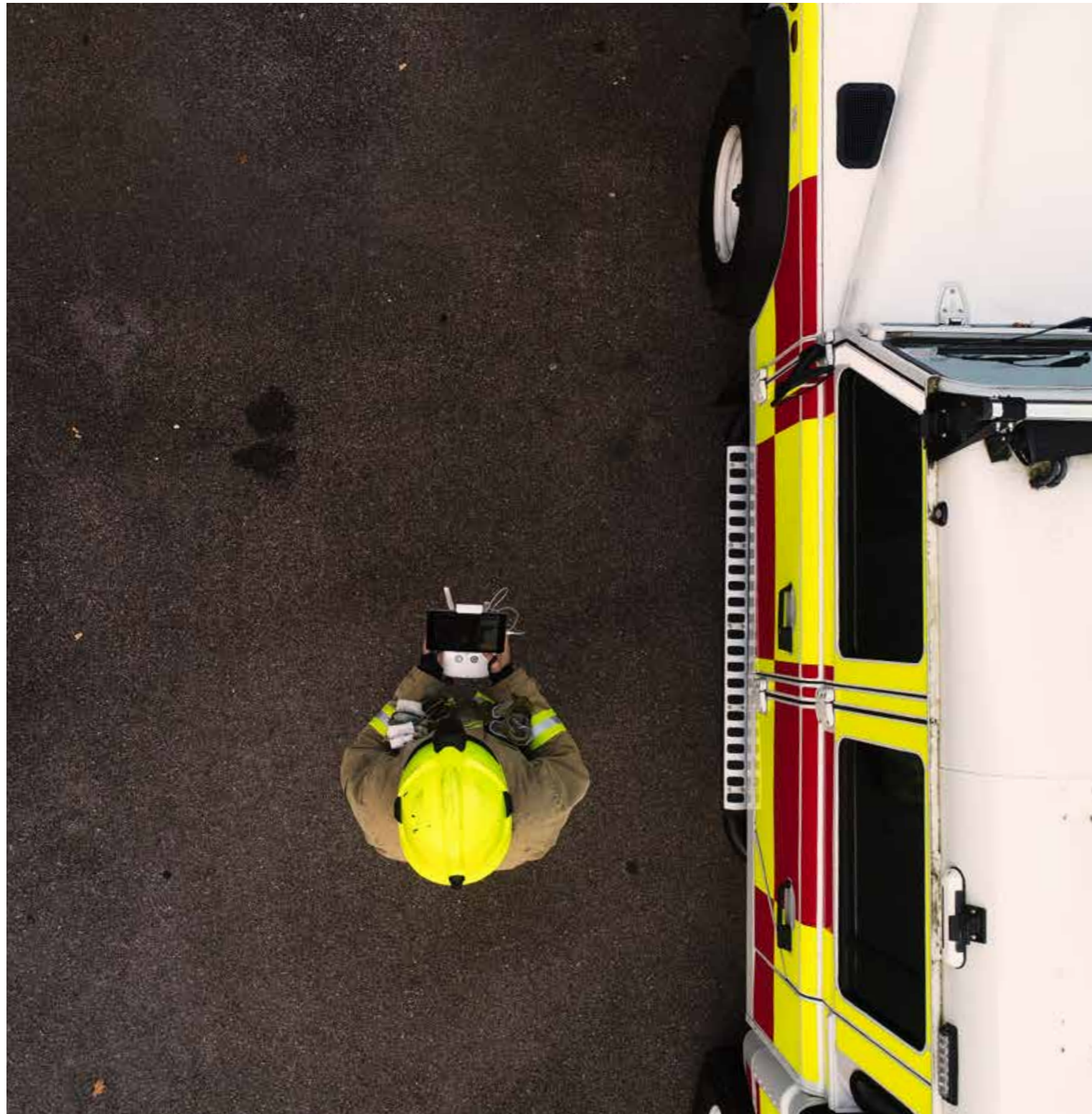
- Lightweight
- Flat-panel for low-profile installation options
- No moving parts and electronic steering for low maintenance and reliable connectivity
- Compatible with satellite and hybrid satellite-cellular networks
- Simple power-on startup and auto-acquisition for easy operation
- Broad applicability for vessels and vehicles
- Reliable communications even at high speeds and on rough terrain
- Low power consumption and requirements





# CONNECTIVITY DIAGRAM





# CONNECTED RESPONDER

The world we live in is becoming increasingly connectivity-centric. The number of devices used in the field is ever increasing and reliable connectivity is critical for any number of smart devices to function.

Devices like body-worn cameras and UAV's (unmanned aerial vehicles) rely on varying degrees of connectivity. At Excelebrate, we streamline connectivity by developing solutions that are simple and user-friendly. For us, it's about making complex technologies simple so that responders can focus on the task at hand, rather than the technology.





# LiNX HUB

## DESIGNED FOR REMOTE AND FIELD-BASED OPERATIONS

Linx Hub is a rugged portable Wi-Fi hotspot that can easily be set up in any location, environment or terrain. Designed with mobility in mind, the unit's numerous features can vastly improve connectivity in a wide range of situations.

## USER-FRIENDLY INTERFACE

Using our patented DDMI technology, all systems are integrated in to one user-friendly interface so all functions can be controlled with ease. With these various functions also having a dedicated user page, anyone can operate the Linx Hub.



The development of the Excelsite Linx Hub originated from working with one of our customers, Mid and West Wales Fire and Rescue Service (MWWF), as part of the response to the T20 Digital Transformation Programme.

[Download the brochure](#)

## KEY FEATURES & CAPABILITIES

- One button deployment - supporting ease of use
- Dual SIM - for enhanced cellular roaming
- Wi-Fi – connect authenticated devices to corporate radius server
- Built in GPS - for improved location tracking and monitoring
- Touch screen interface – displaying network control, cellular settings and lighting
- Lighting – range of lighting presets for alerts and enhanced visibility
- Durable outer casing - for high pressured environments
- Long life battery – approximately 8 hours
- LAN and WAN ethernet ports – for fast and flexible data transfer
- Flexible charging options - including 12VDC and 240VAC



PORTABLE  
WI-FI HOTSPOT

# DUAL SIM BODY-WORN CAMERA

Offering far more than just video recording, the Exstream body-worn camera comes with a range of functions to assist anyone operating in a remote environment for enhanced situational awareness



## Greater Visibility

16mp low illumination camera, 130° wide angle lens



## Enhanced Roaming

Dual SIM for better coverage and added resilience



## Secure Streaming

The Exstream web application allows any number of users to access live streams



## Location Monitoring

Built in GPS for improved location tracking and monitoring



## Push to Talk

Allows user to utilise the device as a radio



## Man-down Alert

Ensures responder safety - also triggers live streaming and shares location via GPS



# WEARABLE TECHNOLOGY

[Download the brochure](#)

# UAV STREAMER

## MAKING REAL TIME AERIAL FOOTAGE ACCESSIBLE BEYOND THE PILOT

When using drone technology, real-time footage isn't always accessible beyond the pilot. Excelebrate's UAV Streamer resolves this problem by making live video streams more accessible. By simply plugging the solution in to your existing UAV system, live footage is streamed over public or private networks securely via Excelebrate's ExStream Video Application. Footage can then be accessed securely anywhere via any authorised device with an internet connection.



[Download the brochure](#)

*Simple and secure  
Just plug and play*



- Plug your UAV controller in to the UAV Streamer solution via a HDMI cable
- Access footage from any authorised device whether desktop or mobile or on a vehicle via the ExStream video application
- Stream real-time footage to any authorised location via 3G/4G
- Control and manage viewing of footage with 2 separate streaming groups

**REAL-TIME  
DRONE FOOTAGE**

# EXSTREAM VIDEO STREAMING SERVICE

The ExStream video streaming service enables the connection of multiple camera applications and includes the ability to securely manage user settings and access.

ExStream can simultaneously display, record, review and export images and remote streams from multiple locations and devices. Footage can be accessed in real-time by multiple people on any authorised device with an internet connection. The footage captured is also stored so that it can be accessed in the future.



This solution is extremely secure as our data centres are ISO 27001 and national critical infrastructure approved (UK only). Any footage or information streamed through ExStream is fully encrypted to provide the highest level of protection for our customers.

**SITUATIONAL  
AWARENESS**

# ARRANGE A DEMO



In 2020, we brought the trade-shows to us

[Watch video](#)



If you require a more detailed consultation or would like to have an appointment for an online or physical demonstration - get in touch!

[Enquire today](#)

## ABOUT US

*It's what you can do with technology that makes us tick*

Excelerate is a specialist and leading Technology Partner, providing solutions for Public Safety, Emergency Services, Health and Patient Care, Communities, Search and Rescue, Commercial and Private, Utilities and Maritime.

Through a combination of cellular, satellite and wireless technology, we provide products and solutions that overcome boundaries and limitations - enabling the flexibility needed for mobile and remote environments.

We are technology agnostic. Instead of focusing on a 'one size fits all' approach we focus on matching and applying the right technology to the application.



Discover more at [www.excelerate-group.com](http://www.excelerate-group.com)



### Address

Excelebrate Technology Ltd  
Willow House, Pascal Close,  
St Mellons, Cardiff. UK. CF3 0LW



### Contact

+44 (0)845 65 85 747  
info@excelebrate.info  
excelebrate-group.com