



Special Projects Group

Rapid Deploy Command Control Communications & Security Solutions

## Samix System

**When responding to a major incident, command and control need to have as much information as possible direct from scene. Being able to receive live pictures, voice and other data enables informed decision making, ensuring the safety of front line staff and public alike.**

**With extensive experience in wireless communications solutions, many of which have been designed to meet the needs of the emergency response sector, 802 Global has developed their Samix System which is a total incident ground data, video and voice communications solution. Using advanced, yet proven, wireless mesh, COFDM and satellite technologies, the Samix System ensures that video images can be transferred from the front line to wherever they are needed, whether that is to local or regional command, or even to HQ or Gold Command. Similarly vital data can be sent from those locations direct to the incident ground.**

### How it works

Using 802 Global's Samix RDMN-3 rapid deploy wireless mesh nodes, an incident wide radio network can be quickly and easily established. The RDMN-3 can be tripod mounted to give instant and easily moved coverage, the nodes can also be vehicle mounted, for example on a command unit, or in aerial ladder platform (ALP) mount they can deliver real time images from ALP thermal and optical cameras.

Using the radio network established by the RDMN-3 (including optional 802.11n extended wi-fi coverage), multiple camera feeds can relay images from the front line back to command and control. Enabling the command chain access to real time video information about the progress of an incident allows fully informed and responsive decision making.



- Rapid deploy video imaging across incident enables command to see exactly how an incident is progressing
- Bodyworn wireless cameras using COFDM technology allow monitoring of front line personnel, ensuring safety
- ALP mount solutions for delivering aerial images from thermal and optical cameras to deliver commanders an optimum view of the incident
- Satellite communications to ensure links with the rest of world can be maintained
- Voice and data communications available across the incident regardless of local communications infrastructure
- Ethernet extensions to enable video and voice to be maintained in even the most challenging environments

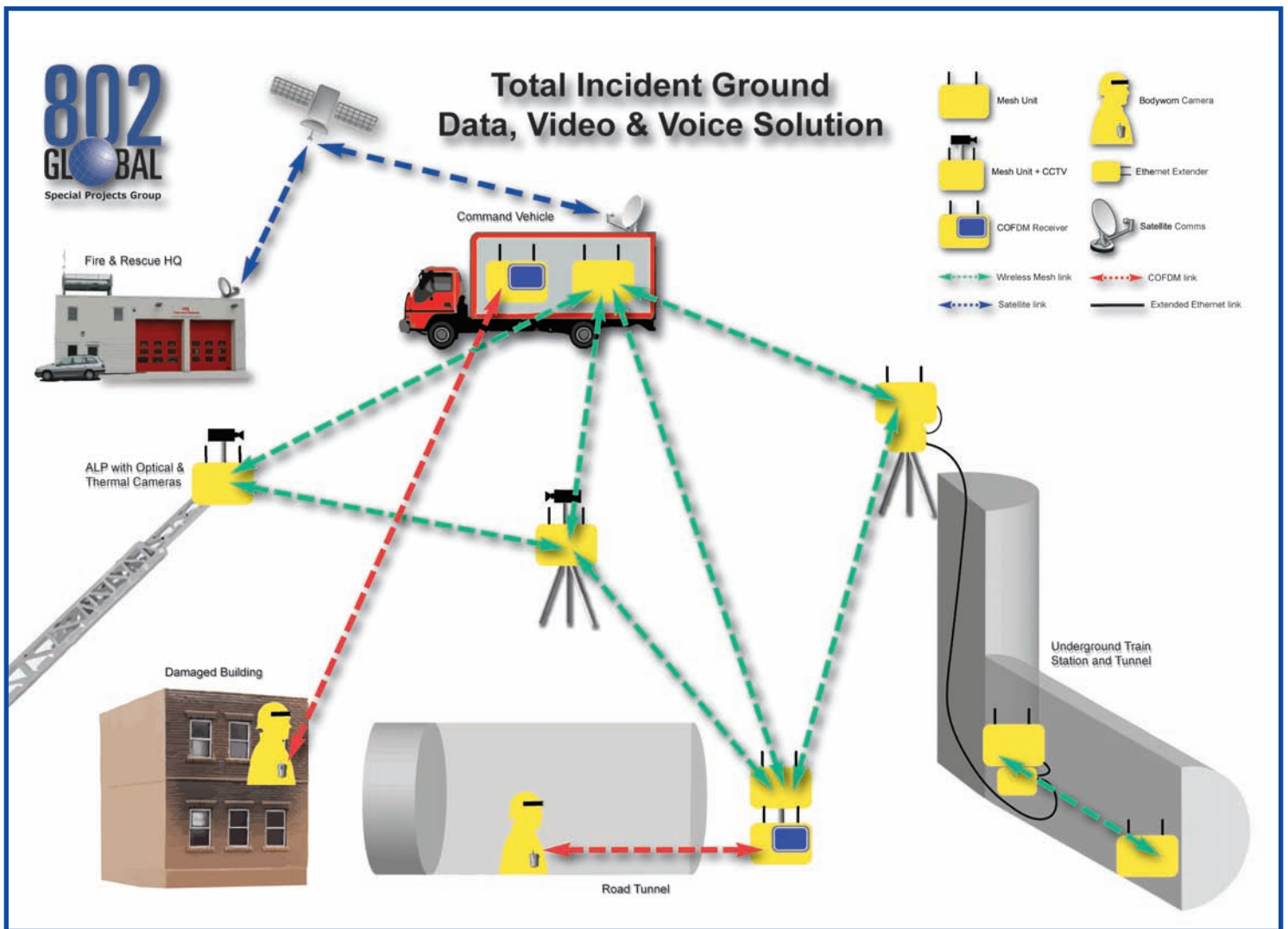
Further, with the inclusion of 802 Global's Samix Camera System, images from critical points of the incident can be viewed, and front line responder safety can be fully monitored and managed. The wireless bodyworn Samix Cameras can relay images, even in non line of sight environments, to a local video image receiver unit for viewing on the incident ground, for example by sector commanders. By using the radio mesh, the images can also be relayed to more distantly located command units. Unlike other bodyworn cameras, the 802 Global product is a compact, lightweight single unit with all the elements, including the battery pack, combined into a single housing. This makes the unit easier and quicker for responders to put on and less prone to damage or entangling.

By adding satellite capability those images can be distributed back to HQ or even Gold Command if necessary. Similarly information from those locations, such as hazardous chemical databases or building layout diagrams, can be made available to the incident commanders. Use of satellite ensures communications can be maintained even when terrestrial or mobile networks are down or overloaded.

In certain circumstances, despite the robust and tested penetration of the mesh and COFDM technologies, the 802 Global Samix Ethernet

Extender capability can be used to ensure that the reach of the communications network can be established in even the most radio hostile environments, such as deep shafts within mines or underground train stations.

Another key element of any incident response is a well designed and equipped command vehicle. By working closely with highly experienced coach-build partners, 802 Global are able to offer a bespoke command vehicle design and build service which delivers highly functional fully integrated command vehicles, full of practical design details and the latest technologies.



For more information on the 802 Global total incident ground solution please see the individual product datasheets: Samix RDMN-3 Rapid Deploy Mesh Network Nodes, Samix Camera System, Samix Ethernet Extender, Satellite Communications, Command Vehicle Solutions

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