

IVOLVE: Wi-Fi

iVolve's recommendation is to start with a solid base and then build your Wi-Fi network as required. In our experience industrial sites are an evolving environment which creates a challenging site for RF communications.

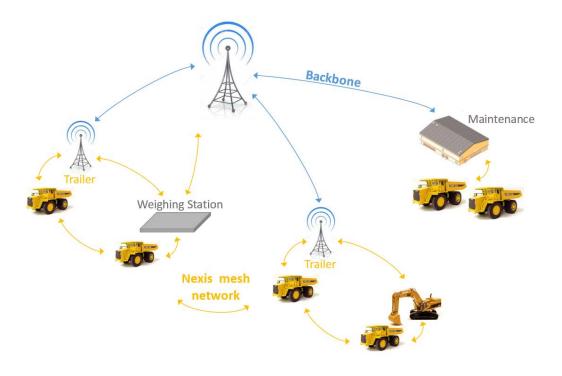
iVolve's Nexis hardware is a powerful networking application platform. In addition to running the on-board FMS application, it also implements a self-discovering, self-healing wireless mesh network between machines and from machines to site infrastructure.

The inclusion of mesh networking is an important consideration in highly mobile environments. In order for two machines to communicate with each other, traditional access point-based Wi-Fi networks require *both* machines to be in range of an access point. Mesh networking allows two machines, in isolation of the rest of the network, to

communicate directly with each other. One example of where this is essential is for truck payload feedback to excavator operators.

The same Nexis hardware that is deployed to machines can also be deployed to selected network infrastructure sites, to act as a gateway between the mesh network and the infrastructure. The Nexis can be connected to the wireless backbone via Ethernet.

The flexibility of the iVolve mesh network means that minimal hardware can be deployed initially, providing cost-effective mesh coverage to only those areas that require it. As the site footprint expands, additional Nexis units can be added to trailers to extend the mesh network to these new areas.







iVolve

Established in 1995, iVolve is an Australian company that develop and manufacture intelligent industrial wireless technologies. The company's real-time data management solutions are tailored to cater to the demands and needs of clients in the mining, construction and energy industries to improve production outcomes, increase safety and decrease maintenance costs.

iVolve's solutions for Production, Assets, Maintenance and Safety (PAMS) is supported by the *Nexis* hardware platform. *Nexis*, a ruggedised mesh wireless router and industrial PC, is the core of each iVolve deployment. It is used to establish a stable, site-wide mesh network and interface to on board machine systems.

www.ivolve.com

For further information, contact info@ivolve.com or head to the website www.ivolve.com.



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