

Market Focus... TETRA Networks

As TETRA networks evolve, Amphenol Jaybeam's product portfolio continues to expand to meet and exceed demands placed on customer networks.

Mature networks continue to develop to enhance capacity and maintain service levels. New networks are under huge time pressures to get it right the first time and provide a robust and reliable service.

Amphenol is the trusted partner of leading operators, systems integrators and system installers when deploying these mission critical communication systems.



In this edition, we look at how to future-proof networks using wideband TETRA antennas and how minor modifications to existing products improve product performance in the harshest of environments



“Offering a product that will guard against the uncertainty of how your network will look in 5 years reduces the risk of obsolescence.”

Heavy Duty (HD) Dipole Stack Arrays

The 71482XXHD is an upgrade to the market leading 71482XXX four stack dipole array antenna. Enhancements to the cable configuration and boom increase mechanical durability - ideal for high speed wind sites, whilst managing the wind loading characteristics.

In tests, these heavy-duty antennas survive wind-loads equivalent to those the antenna will encounter in gusts of up to 67ms⁻¹ and resist loads encountered at up to 83ms⁻¹ with minimal bending at the mounting points. In other words...180 mph or 300 km/h wind.

The antennas construction consist of an array of four centre fed dipoles with phasing harness mounted on an aluminium mast designed for TETRA network applications. These are wideband 380-430 MHz with 0°, 5°, 10° & 15° downtilt option. This range is carefully designed to provide low passive intermodulation to minimize network interference.

Produced to the highest quality standards, these robust antenna designs will ensure reliable operation in harsh environmental conditions.



2011-2012 Catalogue

Amphenol Jaybeam has released a *new and improved* catalogue for 2011-2012 with all technical and engineering datasheets covering PMR, TETRA, Air Radio and Broadcast from 50 MHz to 2.7 GHz.

The new “Product Finder Guide” enables a search by frequency, gain and/or heavy duty characteristics, quickly leading to the best in few models. The layout allows the user to see if the antennas are directional or omnidirectional and the type of antenna structure. In electronic format, the best in few part numbers have hyperlinks directly

to datasheets. Ideally, only three clicks are required from opening the catalogue to viewing the datasheet.

With over 60 years in the industry, this is the most comprehensive catalogue ever.

- [Base Station Antenna Products](#)
- [Mobile Antennas](#)
- [In Building Wireless \(IBW\)](#)
- [Marine](#)
- [Phasing Harnesses](#)
- [Antenna Installation Hardware](#)

Email sara.guy@jaybeamwireless.com for your complimentary CD.

Future-Proof Your Network & Protect Your Investment with Wideband TETRA Antennas

Wideband TETRA infrastructure promises “future-proof TETRA networks” for network capacity expansion. This solution is ideal - with the right selection of components that best complements the infrastructure. Since no two sites have the same demographics, an assortment of products to cover every eventuality and planning challenge is required.

Amphenol Jaybeam has designed a portfolio of wideband TETRA antenna products to complement the future-proofing process. The range of products includes collinear omnis, panels, yagis, stacked dipoles and microcell antennas.



is no loss in performance. The wideband antennas perform as exceptionally well as the single band versions and the cost savings are the same.

Amphenol's wideband antennas offer a low maintenance and reliable solution for network operators and systems integrators to minimize capacity constraints and optimise network sites demanding new antenna technology. It's a progressive step even if the new infrastructure equipment has not yet been selected.

The wideband antenna technology is compatible with existing TETRA infrastructure but “future-proofed” to cover both 380-400 MHz and 410-430 MHz bands for capacity expansion in the future. There

“Some network operators have access to both 380-400 MHz and 410-430 MHz bands while others might need access in the future. System integrators work on both, but not necessarily for the same customer”, says Alan Spencer of Amphenol Jaybeam. “Offering a product that will guard against the uncertainty of how your network will look in 5 years reduces the risk of obsolescence.” In knowing that the wideband TETRA antennas will work on any network, it helps to make an inspired choice when selecting and planning antenna requirements.