

DMR RADIOS

A comparison of Hytera versus Motorola

INTRODUCTION

The latest and greatest in communications technology is MotoTRBO! We all know that, or at least that is what we are told. Is that really true? That depends on perspective. If it is from the perspective of a sales representative selling only a single brand and model, then the aforementioned assumption might well be true. The question is, how it looks when you look at ALL the facts.....

First, let's dispel the rumor that Motorola invented a new technology with MotoTRBO. The name MotoTRBO is simply a Motorola brand name for products designed to operate using DMR technology. DMR was developed in Europe by multiple manufacturers working together to offer a technical standard for COMMERCIAL use, NOT mission critical use. For verification, please see www.info4u.us/DMR_Story.

The DMR standard was ratified in 2005. DMR is an open European Telecommunications Standards Institute (ETSI) technical protocol backed by MANY radio manufacturers, not just Motorola. As a result, buyers can have confidence in long term supply and the benefits of competition-driven feature development, supplier responsiveness and market pricing.

The members of the DMR consortium include Fyde Micro, Hytera, ICOM, Kenwood, Motorola, Selex, Tait Radio, and Vertex Standard (now owned by Motorola). In the USA, only Hytera and Motorola are actively developing the use of DMR technology. Hytera may be a new name to you. The fact is that the company has been around for the better part of two decades and is ranked as the 5th largest communications company in the world. More information on Hytera, and in particular, their offerings in DMR mobile, portable, and fixed station radios is available at www.info4u.us/DMR.pdf.

The point is that MotoTRBO is not the only DMR product offered in the USA, nor was it invented by Motorola, nor was it the first DMR product, or is it superior to other DMR products, nor is it less expensive to purchase or maintain, nor was it developed for mission critical use (i.e. public safety). With these thoughts in mind, we respectfully submit that it may be in your best interest to consider Hytera offerings. Here are a few reasons why we have come to this conclusion. Since only Hytera and Motorola are currently producing terminal products (base stations & repeaters), we feel that any discussion of DMR should be limited to these two prospective suppliers at this time.

SIX SIGMA

Six Sigma is a management framework that has evolved from a focus on process improvement using statistical tools to a comprehensive framework for managing a business. The results that world-class companies such as General Electric, Johnson & Johnson, Honeywell, and many others have accomplished speak for themselves. Six Sigma has become a synonym for improving quality, reducing cost, improving customer loyalty, and achieving bottom-line results. Only the best qualify for meeting Six Sigma standards. Motorola is one of those manufacturers meeting this criteria. So does Hytera. The difference is that Hytera advances the standard to a higher level by subjecting and reviewing every COMPONENT to Six Sigma standards. Hytera is not following, they are ADVANCING quality standards. That is important to YOU!

PSEUDO TRUNKING

Here's another new term for you. *Trunking*, as it applies to radio communications is the process of automatically selecting the first available channel when the user of a mobile or portable radio wants to talk. With a conventional radio, the user must switch to another channel (if one is available) when the primary channel is in use by other users. Traditional trunking is accomplished by connecting multiple repeaters through the use of a device known as a controller on each repeater station functioning as a part of a multi-channel trunked radio system.

In essence, a two channel trunked system would consist of two repeater stations and two controllers connected to each other, either by a wired connection (Local Area Network), by leased circuits, microwave, or satellite UNLESS you happen to be using a SINGLE Hytera repeater programmed for Pseudo Trunking, a Hytera EXCLUSIVE!

Here's an example of Pseudo trunking: A large hospital user recently chose the Hytera DMR radio system because it provided private encrypted communications capability for patient privacy compliance. They also could separate different user groups to allow the same channel to be shared by different operating groups. This allowed individual user groups to talk in private without interfering with others, yet maintaining the ability to talk to other groups, individuals, or everyone using the system in an emergency.

The ability to communicate without waiting for a channel to become vacant is simply not acceptable in a healthcare environment. So, they specified two repeaters to allow a user to choose an available repeater when needed. That requires manual channel changing by the user. Not a neat solution. The solution was Pseudo Trunking!

Every Hytera DMR repeater has Pseudo Trunking as a standard feature. In simple terms, a SINGLE repeater can handle TWO simultaneous voice conversations in complete privacy with no button switching required. The Hytera repeater can provide the functions of a controller (i.e. automatic selection of an available channel) with no channel selection required by the user - A Hytera EXCLUSIVE! Our hospital user was going to purchase two repeaters, with duplexers, antennas and cable systems with MotoTRBO. With Hytera, ONE repeater station does it all - essentially cutting cost in HALF! Nice feature!

Here are a few other things to consider:

UHF System Comparisons

FEATURE	HYTERA	MOTOROLA
Price	Typically 20% less than Motorola	Typically 20% more than Hytera
Portable Power	4 Watts RF	4 Watts
Mobile Power	45 Watts	40 Watts
Repeater Power	50 Watts Continuous	40 Watts Continuous
Internal duplexer	Available	Not available
Trunking (2 CH)	Standard	Not available
Color LCD display	Yes	No
Channel Capacity	256	160
Warranty	5 years	2 years

There are other things like a patented antenna for portables that GUARANTEES superior performance and both audible and vibrate alert capability (Both Hytera exclusives, plus our exclusive *Try Before You Buy Program*. Call us at 205.854.2611 or email sales@falcondirect.com for additional information. You'll be glad you did!