

## FALCONDIRECT

We Keep You Connected

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### Looking for.....

the best value in On-Site radios? Look no further! We offer three MIL-SPEC 810 approved models with, fast delivery, free programming, and great pricing! A Quick Review Chart is provided below. More detailed information is available on the Internet at

www.technetradios.com, www.falcondirect.com/tc610, and http://dtr2way.com/default.aspx.

### **TecNet HeadLine HYT TC-610 Motorola DTR-650** Specifications Do you speak **ICOM** digital? MOTOROLA VHF or UHF Analog 900 MHz Digital

Frequency Band Water protection & dust Size Weiaht Number of channels Transmitter power Audio output LCD alpha display Audible/vibrate alert Warrantv Regular selling price

**Our Price** Programming kit (optional) Battery type/Life FCC License required?

VHF or UHF Analog MIL-SPEC 810F 4.25 x 2.3 x 1.4" 7.8 Ounces 16 5W VHF, 4W UHF 1 watt Yes Audible only 2 years \$289 \$225 \$50 Li-Ion 14-17 hrs.

IP66 (Washable) 4.7 x 2.2 x 1.3" 9.5 Ounces 16 800 mW No Audible only 2 years \$308 \$60 VHF No – UHF \$300

5W VHF, 4W UHF Call us for best price! Li-lon - 9-10 hrs. **VHF No – UHF \$300** 

IP54 (Blowing rain) 5.2 x 2.3 x 1.4" 7.3 Ounces 10 Talk Groups 1 Watt 1000 mW Yes Yes 1 year Call us for best price! at 800.489.2611 \$175 Lithium Ion - 19 hrs. No

Free programming is included with all models. Information on our available service programs is available at www.UltraCarePlus.com. In particular, check out the TimeShare program. We think you'll like it! In essence you pay a onetime cost of just \$25 for partial ownership in a spare radio. If you ever need service, you pay just \$25 for a next day exchange radio, and all shipping cost during the warranty period. No other service program even comes close!

Our most popular accessories are as follows:

Carrying case—\$39

Speaker-microphone—\$59

Spare battery—\$59

All radios listed are available for evaluation. For additional information please visit our special web page at http://ultracareplus.com/trials.aspx. You're going to like doing business with us! Our job is taking care of YOU!

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PlantRadios.doc

### A brief word about IP ratings

One of the more important ratings for portable radios is the IP (Ingress Protection) rating.

Ingress Protection is the degree of protection provided by the product enclosure. In many cases, the level of protection provided by the enclosure is marked on the product in the form of an "IP" code

#### IP Codes:

Example: IP 55 would indicate a dust protected (first digit 5) piece of equipment which is protected against water jets (second digit 5)

1 <sup>st</sup>	Protection Against Foreign Objects (i.e. dust)	2 <sup>nd</sup>	Protection Against Moisture	
Digit		Digit		
0	Not protected	0	Not protected	
1	Protected against objects greater than 50mm	1	Protected against dripping water	
2	Protected against objects greater than 12mm	2	Protected against dripping water when tilted up to 15N	
3	Protected against objects greater than 2.5mm	3	Protected against spraying water	
4	Protected against objects greater than 1.0mm	4	Protected against splashing water	
5	Dust protected	5	Protected against water jets	
6	Dust tight	6	Protected against heavy seas	
		7	Protection against the effects of immersion	
		8	Protection against submersion	

In simple terms, the greater the number, the better the product is able to withstand the rigors of rough use and bad weather.

# A brief explanation of MIL-SPEC 810 ratings

The TC-610, F50V and DTR650 are all MIL-SPEC 810 F rated. You can look up the methods and procedures for more detailed information. For now, the point is that an 810F rated radio has been more thoroughly tested and certified than E, D, or C Class certified radios. Not all radios are subjected to MIL-SPEC testing. This is not to say that they couldn't pass the applicable testing standard. In some cases, the manufacturer may not serve the military market and has chosen not to incur the cost of MIL-SPEC testing. More information on MIL-SPEC 810 is available at <a href="http://en.wikipedia.org/wiki/MIL-STD-810">http://en.wikipedia.org/wiki/MIL-STD-810</a>.

Standard	MIL 810C		MIL 810D		MIL 810E		MIL 810F	
Stanuaru	Method	Proc.	Method	Proc.	Method	Proc.	Method	Proc.
Low Pressure	500.1	I	500.2	I, II	500.3	I, II	500.4	Ι, ΙΙ
High Temp.	501.1	I	501.2	I, II	501.3	I, II	501.4	I, II
Low Temp.	502.1	I	502.2	I, II	502.3	I, II	502.4-3	I, II
Temp. Shock	503.1	I	503.2	I	503.3	I	503.4	I
Solar Radiation	505.1	I	505.2	I	505.3	I	505.4	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III
Humidity	507.1	I, II	507.2	II, III	507.3	П, Ш	507.4	-
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	-
Dust	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII, X	514.3	I	514.4	I	514.5	I
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV	516.5	I, IV



### Which radio is right for you?

All of our selected plant radios are especially suited for rugged use, reliable operation, and low cost of operation. We will review some of the more important issues as follows:

#### Cost

Prices range from \$225 to over \$300. That is a fairly significant difference until you look at the cost prorated over a minimum five year operating life. A \$225 radio has a daily operating slightly over 12 cents per day. A \$400 radio has a daily operating cost of approximately 22 cents per day – not really a big difference in terms of daily operating cost. No license is required on VHF or digital radios. That's good. The negative side is the potential of interference from other unlicensed users. Additionally, the UHF licensed band has proven to be an excellent choice in and around metal structures.

#### **Performance**

Assuming all radios to be capable of covering the plant area, the next consideration is the functionality of the radio. Is a vibrate alert feature useful or unnecessary? Digital radios, such as the DTR650, have the ability to send and receive text messages. Is this important? All the radios have the ability to segment users into specific talk groups with selective administrative privileges. All have some degree of water and dust protection that is generally better than other radios in the same price category. Which one do you need?

#### Compatibility

Both VHF and UHF radios are compatible with wireless call boxes, wireless PA systems, repeaters, and wireless reporting devices. 900 MHz radios are incompatible for use with any of these optional capabilities. Conversely, 900 MHz is a great choice if it does what you require. Additional information on compatible VHF and UHF special products is available at <a href="http://the-communicators.net/specialproducts.aspx">http://the-communicators.net/specialproducts.aspx</a>.

#### **Maintenance**

Both the VHF and UHF radios offer a 2 year factory warranty (excluding antennas, batteries, and clips) versus one year for the 900 MHz radio. Have you considered the impact of downtime in the event of a malfunction? If you have spare radios, this may not be important. The point is to address your requirements well in advance of actual need. Information on our available service programs is available at <a href="www.ultraCarePlus.com">www.ultraCarePlus.com</a>. For only \$25 per radio, you can enjoy the benefits of an efficient and affordable next day exchange program.

#### Analog vs. Digital Technology

Both the VHF and UHF radios are analog. The 900 MHz radio is digital. There are some significant benefits to digital such as extended battery operating life, size/weight reduction, enhanced functionality (privacy, text messaging, etc.). The cost is a little more than analog but the trend is toward lower cost for digital as prices for analog slowly increase. Still got questions? Just give us a call at 205.854.2611. We're here to serve YOU!



### **Product Profile**

# **OuterCall**

Ever been in a manufacturing plant, school or store where you were interrupted by an overhead PA system!? Some people call this *paging*, not like personal paging, but public paging where large groups of people can receive the same message at the same time without the need for personal paging receivers.

As noisy and obtrusive as these systems are, they still have their place. They also have their limitations. One of these limitations is that that are limited for expansion since they rely or wired networks. Additionally, they generally require access either from a common access point or through network extensions (typically telephones with intercom capability). Ritron Inc. has produced a little video on YouTube that explains the situation quite nicely at www.youtube.com/watch?v=FbC17yc7rKk&feature=related.



The gadget that provides an alternative to an expensive wired paging system extension is called the LoudMouth. Let's consider the example of a rapidly expanding elementary school system using portable class rooms.

The school has a wired PA system with speakers in all the classrooms. Adding PA speakers in portable classrooms can be a time consuming and expensive proposition. Not with LoudMouth! Just add a LoudMouth extension to your PA amplifier, then add the receiver box and speaker shown at the left in the classroom. Now you're connected, but that's not all!

Not only can you extend the capabilities of your existing PA system, you have the added flexibility of adding additional classrooms in a matter of minutes. In a manufacturing plant, you can quickly add outbuildings on the same site or even several miles away, but that's not all!



Remember our comment about the limitations of a wired PA system relative to access? To broadcast a message over the PA system, the caller either must have access to the amplifier control unit or to the nearest telephone when an intercom system with paging is available with the phone system. Not so with LoudMouth.

You can use an ordinary VHF or UHF 2-way radio. With LoudMouth, you can broadcast a PA message from anywhere within the plant, school, or store! Best of all, the LoudMouth system is surprisingly affordable!

You can learn more about LoudMouth at <a href="www.usa-radio1.com/prices/loudmouth">www.usa-radio1.com/prices/loudmouth</a>. If you would like a demonstration, just give us a call at 800.489.2611.

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