



# MOTOTRBO™ IMPROVE SERVICE TO YOUR CUSTOMER BASE

## PROFESSIONAL DIGITAL TWO-WAY RADIO SYSTEM



### MOTOTRBO BENEFITS Account Managers

- Reach your workforce anywhere they go with voice and data
- Improve efficiency and safety on the job
- Keep connected easily and seamlessly
- Accelerate your response and improve customer service
- Maximize your system investment and infrastructure
- Enhance value and reduce operating costs

Utility poles topple. Power lines plummet. Outages occur across the county. Your work crews have plenty of territory to cover to respond quickly to repair and restore power. Instant dispatch and unbroken communication are so essential to managing your field force, you need a system that is 24/7/365 reliable wherever they go. A system so efficient and easy to use, it can increase safety, improve customer service and reduce operating costs, too.

### THE CHALLENGE

**Ensuring clear and continuous communication across your coverage area is vital to running your cooperative efficiently.**

Your employees work in loud and harsh outdoor environments where they can't afford to miss a call or misunderstand a message. And they often endure long shifts where they depend on their radio to retain power and perform reliably. Analog radio systems are prone to drop-offs in coverage as they lose signal strength, as well as interruptions and interference from static and noise.

### THE SOLUTION

**Versatile and powerful, MOTOTRBO is the ideal solution.**

The MOTOTRBO professional digital communication system combines the best of two-way radio functionality with the latest digital technology. It integrates voice and data seamlessly, offers enhanced features that are easy to use and delivers impressive capacity and coverage to meet your growing communication needs. With exceptional voice quality and long battery life, MOTOTRBO keeps your mobile workers connected when communication is a must.

# EQUIP CREWS WITH A BETTER POWER TOOL: MOTOTRBO

Whether your mobile workers are on a hilly road or high up a pole, with MOTOTRBO™ digital two-way radios and accessories you can communicate clearly and conveniently. The advanced noise-cancellation technology removes background noise and boosts voice clarity. And when your team needs more than just voice, they can use MOTOTRBO for data transfer, text messaging and GPS location services.

## COMMUNICATION MANAGERS CAN MOBILIZE AND MANAGE WORKERS. MORE EFFECTIVELY.

### Communicate clearly with exceptional audio.

Using the latest digital technology, MOTOTRBO provides clearer and crisper voice communications over a wider area without interference or distracting static. MOTOTRBO digital radios deliver powerful voice, as well as advanced data features. The result is clear communications with your workers no matter where they are in the field.

### Prioritize communication immediately.

Emergencies do happen and you need to communicate with your workers when they do. MOTOTRBO's transmit interrupt suite – with voice interrupt, emergency voice interrupt and data over voice interrupt – enables you to prioritize critical communication the moment you need it.

### Share information quickly, easily and seamlessly.

Whether you need to send directions to the next work site or receive notification a job is complete, MOTOTRBO's text messaging feature enables communication between radios and dispatch systems, between radios and email-addressable devices, and to remote PC clients attached to radios.

### Keep connected with your workers in the field.

With the MIP 5000 radio console, you can have centralized dispatch capability for visibility and access to your mobile work teams no matter where their job takes them. MOTOTRBO's integrated GPS gives you easy, immediate access to track your employees and your assets.

### Extend coverage and expand capacity.

Meet your communication needs today and in the future with a variety of MOTOTRBO solutions:

- **IP Site Connect** uses an IP network to extend the voice and data capabilities of MOTOTRBO. You can create a continuous network that covers your employees at 15 geographically-dispersed sites. Or you link up to 15 sites to create wide area coverage at a single site.
- **Capacity Plus** is the single site digital trunking solution that maximizes the capacity of your MOTOTRBO™ system. Use it to enable a high volume of voice and data communication for over a thousand users at a single site, without adding new frequencies.
- **Connect Plus** is the scalable, multi-site digital trunking solution that helps keep your mobile workforce connected. With this high capacity MOTOTRBO system, calls can be queued during busy times until an open channel is available, important users can be assigned priority status when the system is in high demand, and a wireline console can be used for centralized dispatch. Using the dispatch console, dynamic site roaming lets your people move from site to site without having to manually change channels.

### Migrate at your own pace.

With MOTOTRBO, you can keep operations running smoothly during a change in communication systems. Since MOTOTRBO radios operate in analog and digital mode, you can use them on your existing analog system and begin migrating over to digital – one talk group or department at a time – while maintaining communication across your entire workforce.

**“MOTOTRBO has given us nearly 100% coverage and the audio quality on the fringe is crystal clear, even when the background is noisy.”**

David Brokamp,  
Vice President of  
Engineering Sumter EMC,  
Americus GA



## APPLICATION BRIEF RURAL ELECTRIC COOPERATIVES

### Get exceptional value and cut costs.

By utilizing TDMA digital technology, MOTOTRBO enables two virtual channels within a single 12.5 kHz channel – double the capacity of analog. Since you don't need a second repeater, you save on equipment costs, too.

By integrating voice and data in one device, MOTOTRBO saves you the expense of additional equipment for text messaging and GPS location tracking. And to help control the cost of replacing batteries prematurely, our leading-edge IMPRES technology automatically maintains your battery fleet to lengthen battery life.

### Connect to Supervisory Control and Data Acquisition (SCADA) systems.

Combine MOTOTRBO with Motorola's SCADA product, ACE3600 that helps manage peak demand and lower operating and maintenance costs. The ACE3600 Remote Terminal Unit is scalable, modular and can be used for simple pole top monitoring or to manage hundreds of I/Os at a small substation or interconnection point. It brings DNP3.0, MODBUS, IEC60870-5-101 protocol support through serial or IP ports. Certified with MOTOTRBO, ACE3600 brings unmatched data reliability and security in a single commercial, future-proof package.

#### BENEFITS FOR COMMUNICATION MANAGERS

Clear voice communication without static or noise

Integrated voice and data in one device

Text messaging when voice communication isn't practical

GPS tracking and dispatch for access to mobile workers

Scalable solutions to meet your communication needs

Easy migration from analog to digital

## FIELD SERVICE CAN KEEP IN TOUCH. FROM A TRUCK, TRENCH OR TREE.

### Hear clearly in harsh environments.

Service workers often find themselves in noisy conditions – with the whine of engines, the force of nature or the roar of equipment behind them. MOTOTRBO's Intelligent Audio feature, available on select models, automatically adjusts the radio's volume to fit the



level of noise in the environment. The volume turns up in noisy places so you won't miss a call and turns down in quiet settings so you won't disturb others. And with MOTOTRBO's background noise suppression, you can be confident communication comes through loud and clear.

### Depend on durable radios that deliver.

Outdoor environments can be tough and two-way radios need to be tough-as-nails. MOTOTRBO radios meet the most demanding specifications including IP57 for submersibility in water (portable models), and U.S. Military 810 C, D, F and G. Our "inherently safe" portable radios are ideal for locations where flammable gas, vapors or combustible dust may be present.

### Get longer battery life for long work shifts.

Responding to a service outage or emergency incident requires a long shift. And they require communication equipment that will work the entire time. MOTOTRBO radios operate up to 40% longer between recharges as compared to typical analog radios. To prolong the life of your batteries and maximize talk time, "smart energy" IMPRES technology automates battery maintenance so radios are ready to go whenever they are.

### Work smarter with hands-free accessories.

Whether in a truck heading to a job or in the midst of repairing a downed line, your workers need hands-free tools that let them focus on the job. We offer a full portfolio – from visor microphones for hands-free operation to keypad microphones to transmit text messages back to dispatch. Wireless accessories free your service work to interact safely--so drivers can keep their hands on the wheel while they communicate. Workers can also be up in a cherry picker repairing a line while maintaining radio communications from the truck cab. A full range of Bluetooth® compatible accessories enable flexible and safe communications.

### SERVICE-CENTERED APPLICATIONS THAT SERVE YOU

- **Text messaging:** Send text messages so workers can read when convenient and not distract them from the road.
- **Location tracking:** Monitor vehicle locations in real time to optimize routes; since the GPS is integrated, there are no external devices to install and maintain.
- **Dispatch:** Monitor and communicate with your mobile workforce from a centralized location.
- **Lone Worker / Man-Down:** Radios automatically notify dispatch if the device falls at a certain angle and rate of speed, or if there is no activity during a certain amount of time. So even if workers are unable to call for help, their radio will.
- **Network monitoring:** Monitor, manage and report on your system's usage to minimize downtime and ensure optimal performance.

**APPLICATION BRIEF**  
RURAL ELECTRIC COOPERATIVES

**MOTOROLA TWO-WAY RADIOS**



**GENERAL DESCRIPTION**

Device Highlights	<ul style="list-style-type: none"> <li>• Mobile radio</li> <li>• Analog and digital voice communications</li> <li>• Reliable and affordable</li> <li>• Rugged</li> <li>• Crystal-clear digital audio</li> <li>• Compatible with basic MOTOTRBO wide-area systems</li> </ul>	<ul style="list-style-type: none"> <li>• Mobile Radio</li> <li>• Analog and digital voice and data communications</li> <li>• Communications powerhouse</li> <li>• Rugged</li> <li>• Crystal-clear digital audio</li> <li>• Compatible with all MOTOTRBO wide-area systems</li> <li>• Supports text messaging</li> <li>• Supports productivity-enhancing data applications</li> </ul>	<ul style="list-style-type: none"> <li>• Portable radio</li> <li>• Analog and digital voice and data communications</li> <li>• Communications powerhouse</li> <li>• Extremely rugged</li> <li>• Crystal-clear digital audio</li> <li>• Compatible with all MOTOTRBO wide-area systems</li> <li>• Supports text messaging</li> <li>• Supports productivity-enhancing data applications</li> </ul>	<ul style="list-style-type: none"> <li>• Portable radio</li> <li>• Digital voice and data communications</li> <li>• Sleek and stylish</li> <li>• Highly durable</li> <li>• Enhanced digital audio</li> <li>• Compatible with all MOTOTRBO wide-area systems</li> <li>• Supports text messaging</li> <li>• Supports productivity-enhancing data applications</li> <li>• Slim and light</li> </ul>
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**DESIGNED FOR:**

Dispatch	•	•		
Supervisor			•	•
Field Worker	•	•	•	

**USER AND APPLICATION CONSIDERATIONS**

Technology	Analog and DMR digital	Analog and DMR Digital	Analog and DMR Digital	DMR Digital
Weight (std battery)	2.9 lbs (1.3 kg)	3.9 lbs (1.8 kg)	12 oz (340 g)	5.8 oz (165 g)
Channels	128	up to 1000	up to 1000	1000
Programmable Buttons	4	4	4 + 1	2 + 1
Dedicated Emergency Button	No	No	Yes	Yes
Bluetooth for Wireless Headset Support	No	Yes	Yes	Yes
Display/Keyboard	Yes/Yes	Yes/Yes	Optional/Optional	Yes / Yes
Fleet Management	Yes	Yes	Yes	Yes
Application Support	No	Yes	Yes	Yes
Battery Life	-	-	Up to 17 hrs	Up to 11.5 hrs

**AUDIO TECHNOLOGY**

Technology	Analog (DMR Digital Options)	Analog and DMR Digital	Analog and DMR Digital	DMR Digital
Background Noise Suppression	Yes (Enhanced)	Yes (Enhanced)	Yes (Enhanced)	Yes (Enhanced)
Advanced Features	Dual-Capacity Direct Mode Intelligent Audio IMPRES™ Audio			

**INTEGRATED VOICE COMMUNICATIONS**

Inter-communications with telephones	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>
Inter-communications with Motorola's mobile computers and VoWLAN phones	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>
MOTOTRBO Dispatch Features	Yes	Yes	Yes	Yes

**ACCESSORIES**

Headsets, Earpieces, Microphones	Yes	Yes - Wide Selection	Yes - Wide Selection	Yes - Wide Selection
Carry Options	-	-	Cases, clips, lanyards	Holster, clips, lanyards
IMPRES™ Smart Energy System <sup>2</sup>	-	-	Yes	No

<sup>1</sup> Requires additional infrastructure <sup>2</sup> Lengthens battery life and extends talk time

For more information on how to improve service to your customer base, your service area, visit [www.motorola.com/mototrbo](http://www.motorola.com/mototrbo)

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**MOTOTRBO**  
DIGITAL  
REMASTERED.

