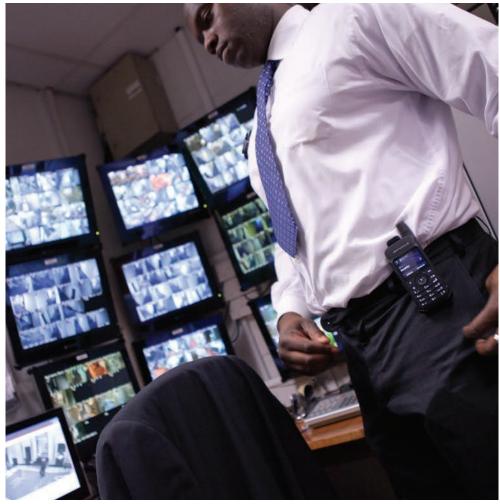
SMARTPTT PLUS FOR MOTOTRBO™



PREMIUM CONTROL ROOM SOLUTION FOR MOTOTRBO™ DIGITAL TWO-WAY RADIO SYSTEMS SOLD AND SUPPORTED BY MOTOROLA SOLUTIONS





SMARTPTT PLUS FOR MOTOTRBO™

INDUSTRIES

PREMIUM CONTROL **ROOM SOLUTION**

FEATURE-RICH, ROBUST AND TRUSTED

Motorola Solutions brings you SmartPTT PLUS through cooperation with Elcomplus LLC - one of the market leaders for control room solutions.

Exclusively available through Motorola Solutions and supported by our customer service teams, the product offers the most advanced features for radio fleet management, dispatch and voice and data communications. It leverages the enhanced MOTOTRBO wireline network interface, which allows dispatchers to interface directly with the system over IP. This improves the system stability, security and reliability but also reduces hardware overheads and can lower maintenance costs. The MOTOTRBO Control Room Solutions have undergone stringent quality testing in Motorola Solutions' labs ensuring they meet the highest standards of quality, solve business critical problems and deliver exceptional customer experiences.

POWERFUL FUNCTIONALITY

SmartPTT PLUS keeps operators in complete control of even the most demanding multi-site systems. Designed with the dispatcher in mind, a wide variety of everyday operations can be automated using defined rules and smart tools such as scheduled text messages, voicemails for offline radios or geofencing. Dispatchers can now monitor the status of users and their location with live updates, while assigning tasks to the most relevant resources, and improving the personnel safety with automatic alarms. SmartPTT PLUS also now offers system monitoring tools to help you maintain the health of your radio system.

SIMPLE AND ROBUST

A key benefit of SmartPTT PLUS is the MOTOTRBO wireline network interface which establishes a direct link between the control room and the radio system. Connectivity is simplified for a more cost-effective and reliable solution architecture. And dispatchers benefit from an enhanced experience with full transparency, recording of all group and individual calls and more communications security from the radio to the application.

MODULAR AND FLEXIBLE

SmartPTT PLUS is modular so you only have to buy the features you need. It can be tailored to individual requirements to ensure optimum performance across a range of industries. It is also easily scalable from small to large systems that are ready to grow with your business as it expands.

TRIED AND TESTED

Developed specifically for MOTOTRBO professional digital two-way radio systems, SmartPTT PLUS has been tested in Motorola's engineering labs to ensure the highest quality performance and seamless integration into the MOTOTRBO system.

- COMMUNICATE WITH ALL TEAMS MOBILISE THE RIGHT PEOPLE
- **ENHANCE SAFETY & PRODUCTIVITY**
- IMPROVE RESPONSE TIMES
- **STAY IN CONTROL**
- CONNECT WITH OTHER SYSTEMS
 IMPROVE YOUR SYSTEM PERFORMANCE



SUPPORTED

Products bearing the "Motorola Solutions Sold and Supported" logo are premium products developed by Motorola Solutions partners to fulfil critical functions in MOTOTRBO™ systems. These products are tested and integrated in direct cooperation with Motorola. They are sold through Motorola Channel Partners and supported through Motorola's customer service teams.

MAXIMISING EFFICIENCY & SAFETY FOR HAZARDOUS CONSTRUCTION SITES

With specialist teams working to strict deadlines in potentially dangerous situations, reliable communications and personnel monitoring is critical for maximising worker safety and efficiency. MOTOTRBO Control Room Solutions keep everyone connected so multiple teams can coordinate operations. Real-time personnel monitoring and automatic alarms provide an immediate response in the event of



TRANSPORT

MANAGING TRANSPORT SERVICES MORE EFFICIENTLY

and be in constant contact with personnel to ensure e safety of workers and the public. Strong audio coverage across a wide area and efficient dispatch ervices and fast resolution of issues.

ENHANCING SAFETY AND OPERATIONS IN **REMOTE MINES**

Often located in difficult to access locations where cellular coverage is limited, mining and exploration sites present a unique challenge. To efficiently manage daily operations and ensure worker safety, a reliable voice and data communications infrastructure is required to connect staff at the site with head office. A high performance control room solution enhances dispatch operations, tracks supply vehicles travelling between sites and enables a quicker response to break-downs and emergencies.



DELIVER EXCEPTIONAL CUSTOMER SERVICE

optimum service for customers. Managing and monitoring shifts is a key factor in maximising ontrol Room Solutions help you stay in constant who is doing what and where so you can quickly assign duties should the need arise.



OPTIMISING COMMUNICATIONS & EFFICIENCY IN MANUFACTURING

With many specialist teams working on shifts and to strict deadlines, manufacturing demands a strong, reliable communications system. And because working environments can be potentially hazardous, monitoring personnel at all times s critical. An integrated control room solution keeps everyone in ouch with reliable inter-group radio coverage while tracking the ocation of multi-site workers.



KEEPING PERSONNEL SAFE ACROSS OILFIELDS

Maintaining good communication with work teams and ensuring their personal safety is a key priority for oil industry executives, especially in areas of extreme weather. Integrated MOTOTRBO Control Room Solutions boost communications between management and teams with extended call functionality while allowing for the monitoring and management of radio users across vast territories

COST-EFFECTIVE & EASY TO DEPLOY

VOICE AND DATA COMMUNICATIONS

SmartPTT PLUS provides integrated fully-featured dispatch control over single and multisite or multi-channel systems. It supports voice communication and data operations for conventional single site repeater, IP Site Connect, Capacity Plus, Linked Capacity Plus and Connect Plus systems by direct wireline interface with the MOTOTRBO network.

At the heart of the MOTOTRBO Control Room Solutions is the enhanced wireline network interface. This simplified architecture establishes a direct connection between the control room solution and system. With no additional hardware required, system stability, security and reliability are improved for more effective dispatching, monitoring and records management.

Utilising the wireline network interface, dispatchers can now communicate directly over IP to the system without having to go through control stations. This makes liaising with radios and talkgroups so much quicker, easier and more effective essential when dealing with emergencies or reassigning workers to maximise productivity.

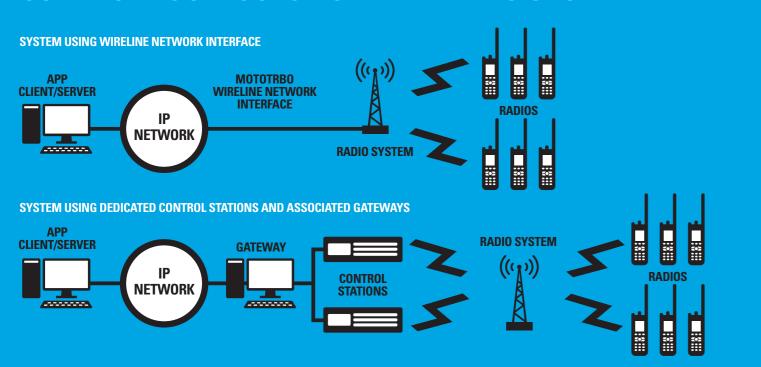
The simplified architecture also ensures SmartPTT PLUS is more cost-effective with reduced hardware investment, easier deployment and lower maintenance costs.

Redundancy can also be built in to improve system availability.

KEY BENEFITS

- Less hardware and maintenance costs
- Better reliability due to reduced points of failure
- Full group and individual call recording
- Less complexity for easy deployment
- Easily integrates into existing on-site IT networks
- Redundancy with multiple clients working from server
- Works over multi-site and multi-channel systems

THE MOTOTRBO WIRELINE NETWORK INTERFACE PROVIDES DIRECT CONNECTIVITY BETWEEN THE CONTROL ROOM SOLUTION AND RADIO SYSTEM



SMARTPTT PLUS FOR MOTOTRBO™ SOLUTION MODULES

FEATURE-RICH

SmartPTT PLUS includes a variety of functional modules for improved fleet management and dispatch. In addition to the comprehensive set of core modules, users can add extra functionality and control with optional modules.

CORE



FI FFT ADMINISTRATION

Efficiently manage fleet operations and remotely control radios. Get live status updates and configure the radio to send online/offline reports to the server.



EVENT LOGGING

Log all system events including voice calls, text messages and status changes. Customise rules, filter and group events or generate reports detailing location and radio status.



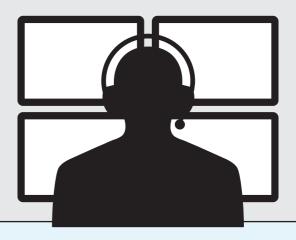
ALARM & LONE WORKER

Improve the safety of personnel with automatic alarms and lone worker protection. The alarm can also be sent as an automated message, e-mail or SMS.



VOICE DISPATCH

Provide communications between the dispatcher and remote radios. Make broadcast, group, private, remote monitor or emergency calls even quicker using programmable shortcuts.





JOB TICKETING*

Create, assign and monitor job tickets through the radio network to deliver routine tasks more efficiently. Radio users can accept or decline the job ticket by simply pushing a button.



TELEMETRY*

Monitor and manage remote equipment from the control room. The system supports native MOTOTRBO telemetry with multiple profiles supported for different devices.



TEXT MESSAGES & EMAIL

Easily communicate with other devices when voice communication is not possible. Send broadcast, group or private text messages. Radio users can text back to the dispatcher.



AES ENCRYPTION

Secure your communications with the industry-standard 256-bit encryption scheme.



INDOOR POSITIONING*

Track personnel and business assets inside your facility with a Bluetoothbased indoor location system.



SYSTEM MONITORING

Monitor the performance and utilization of your system: Real-time activity; Diagnostics and control; Alarm log and alarm notifications; RF coverage map; Analytics and reports



VOICE RECORDING

Continuous voice recording of all calls with playback for analysis, reporting or training purposes. Audio files are stored in MP3 format on the Radio Server and Dispatcher.



DATA WEB CLIENT

Empower remote dispatchers to access the system using a web interface.



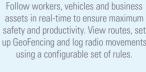
4-WIRE

Interface easily with legacy analog systems using the 4-wire voice interface. The system bridges analog group calls and MOTOTRBO group calls.



IP SYSTEM BRIDGE

Communicate between radios located on different networks. Interconnect geographically distributed systems and set up permanent and dynamic bridging of voice and data calls.





RF COVERAGE MONITORING*

Maximise system performance and make sure everyone is connected with RF coverage maps. These provide a graphical representation of network coverage based on the RSSI level of signals received from GPS-enabled MOTOTRBO radios.



GPS TRACKING

PHONE INTERCONNECT

MOTOTRBO radios and telephones and also allows a dispatcher to make and receive telephone calls through the dispatcher console.

OPTIONAL

SmartPTT PLUS

Developed in cooperation with Elcomplus, an innovative communications company based in Tomsk, SmartPTT PLUS is a professional dispatch software solution providing integrated fully-featured dispatch control over multi-site and multi-channel systems.

Designed exclusively for MOTOTRBO digital two-way radio systems, this control room solution supports voice communications and data operations in conventional systems, Connect Plus, Linked Capacity Plus, Capacity Plus and IP Site Connect using a direct wireline interface.



FUNCTIONAL MODULES

SmartPTT PLUS provides a flexible range of services to dispatchers, executives and team leaders, helping them manage their fleet and optimise productivity of workers and assets. The customisable user interface with hot keys enables quick and easy control. Monitor audio, data and asset location, access up-to-the-minute records and review events. Track staff and send or receive private text messages to personnel in the field for a quick response to emergencies.

An integrated solution for MOTOTRBO, SmartPTT PLUS bridges different types of networks and manages systems of any size and topology. It's easy to increase the number of users on the radio communication network or its geographical coverage at any time to handle increased demand. And with the simplified wireline network interface, reliability is extremely high.

A key strength of SmartPTT PLUS is its distributed architecture, allowing users to build reliable communication systems with hot standby servers. One dispatcher can connect to multiple servers at the same time, serving different sites and regions from one dispatcher position. It eases the deployment of two-level dispatch systems with independent regional dispatchers and a main control room dispatch position connecting all regional systems for centralised control.



CORE **OPTIONAL** GPS TRACKING **VOICE DISPATCH VOICE RECORDING** FLEET ADMINISTRATION IP SYSTEM BRIDGE **EVENT LOGGING** PHONE INTERCONNECT* RF COVERAGE MONITORING* **AES ENCRYPTION** JOB TICKETING* 9 9 INDOOR POSITIONING* \mathcal{M} **TELEMETRY*** 4-WIRE **TEXT MESSAGES DATA WEB CLIENT** & EMAIL X



*Not available for Connect Plus systems

SYSTEM MONITORING

SMARTPTT PLUS FOR MOTOTRBO™ SOLUTION OVERVIEW

TECHNICAL INFORMATION

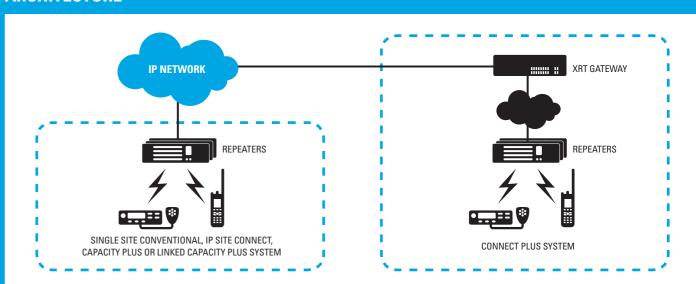
| RADIO SERVER PC | DISPATCHER PC | IP BANDWIDTH | MOTOTRBO |
|---|--|--|---|
| SPECIFICATION | SPECIFICATION | | Hardware |
| Intel Core i3 processor or higher 2 GB RAM or more Hard drive Network adapter Windows 7, Windows 8, Windows Server 2008 operating systems | Intel Core i3 processor or higher 2 GB RAM or more Hard drive for database server: at least 12 GB with Microsoft SQL Server 2008 R2 Express. Sound card Network adapter Sound recording and playback devices (e.g. microphone and speakers) Windows 7, Windows 8 operating systems | Between Server and Repeater: 64 kbps per a repeater Between Server and Client: 64 kbps per client per voice channel | Radio Firmware Version: R01.08.32 or higher Repeater Firmware Version: R02.21.09 or higher |

These are general guidelines, the final system specifications will depend on users' MOTOTRBO system size and configuration

LANGUAGES

Arabic, Brazilian Portuguese, English, French, German, Italian, Korean, Polish, Russian, Slovak, Spanish, Simplified Chinese, Traditional Chinese and more.

ARCHITECTURE

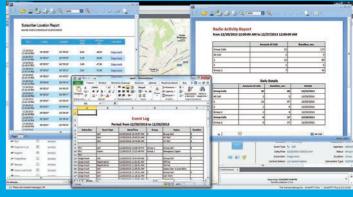


USER INTERFACE

CUSTOM DISPATCHER INTERFACE, FLEET ADMINISTRATION

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REPORTING



MORE CONTROL, IMPROVED DISPATCHING AND AUTOMATION OF DAILY TASKS. GET MORE FROM YOUR MOTOTRBO RADIO SYSTEM.

For more information on how to enhance operational efficiency and improve staff safety with SmartPTT PLUS, visit www.motorolasolutions.com/mototrbo or find your closest Motorola representative or Authorised Partner at www.motorolasolutions.com/contactus

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