TETRA DEVICES SOFTWARE FEATURES CATALOGUE

MOTOROLA SOLUTIONS

This catalogue provides an overview of licensed software features available for Motorola Solutions TETRA Subscribers.

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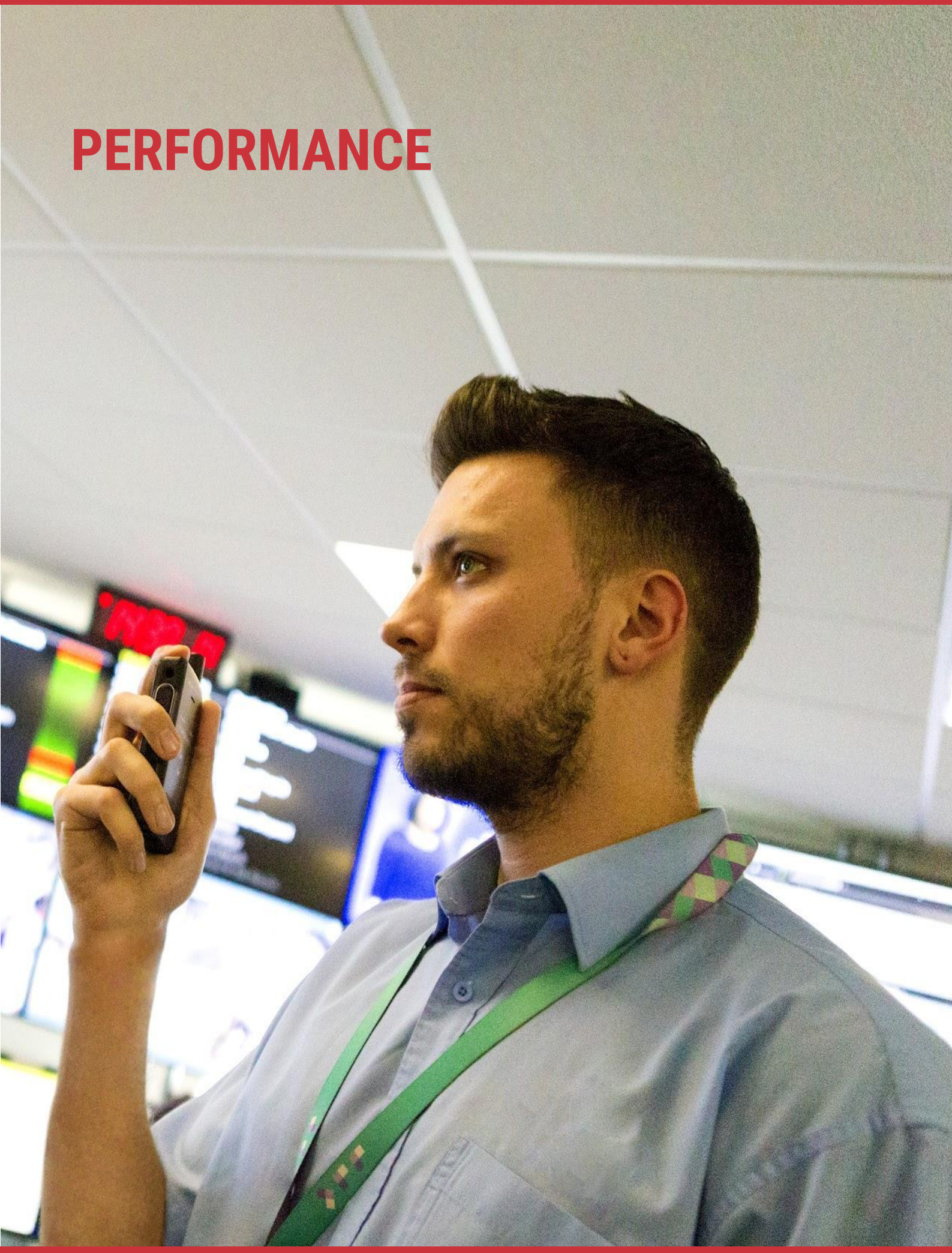
PERFORMANCE



PERFORMANCE

Toggle Radio Frequency (RF) Power - Class 3L

This feature allows a user to switch a portable radio between 1W and Class 3L power settings.

Operating at Class 3L provides a wider operating range. Operating at 1W provides longer battery life.

Toggle Radio Frequency (RF) Power - Class 3

This feature allows a user to switch a portable radio between 1W and Class 3 power settings.

Operating at Class 3 provides a wider operating range. Operating at 1W provides longer battery life.

Bluetooth Enablement

This features enables:

- Generic Bluetooth audio
- Bluetooth object push (for selected models).

Global Navigation Satellite System

Global Navigation Satellite System (GNSS) capability allows the radio to report positional information.

- Radio supports LIP, Long LIP and LRRP protocols
- Data can be sent as Short Data or Packet Data
- Normal and High accuracy
- Multiple trigger options available for customer to specify: Distance, event, time, emergency, mode change, transmission, coverage, battery etc
- Flyaway filter reduces “false” readings
- Modification of triggers / reporting over the air
- Multiple applications can send triggers to radio
- Single destinations for reports
- Destination can be changed by a source over the air
- Even with GNSS switched off, Emergency can trigger positional update
- Interaction with Infrastructure (applications) for “throttling”, reporting, mapping etc
- Supports GPS/Glonass/Beidou/Galileo based on model variation

PERFORMANCE

Car Kit Enablement

Enables the car kit functionality of the portable radio while the radio is connected to the car kit

Wi-Fi Over-The-Air-Programming (OTAP)

Taking advantage of the broad data pipe of the Wi-Fi Network, Wi-Fi Over-The-Air Updates (OTA Updates) are ideally suited to more comprehensive software updates. You can also reconfigure radio codeplug programming with OTAP over Wi-Fi.

Wi-Fi OTAP enables many radios to be updated in one go, without doing one-to-one programming, enabling remote radio reconfiguration. This reduces operation downtime through having the radios return to base for physical docking and one-to-one updates.

Connections are secured via the Transport Layer Security (TLS1.2) protocol to ensure the data pipe between the radio and the server is secure and data integrity is guaranteed. This means that OTAP can be performed, securely and transparently, anywhere the radio can access assigned Wi-Fi.

NOTE: Requires iTM, and the OTAP feature needs to be enabled in the receiving radio

Noise Suppression

This feature includes:

- **Adaptive Wind Noise Mitigation**
  Keeps communications clear and intelligible even in windy conditions.
  The adaptive algorithm detects when wind noise is present during a transmission and then automatically employs the loudspeaker as a microphone for optimal wind noise mitigation.
- **Adaptive Multi-Microphone Beam-Forming Noise Suppression**
  Multiple microphones with advanced algorithms to automatically adapt to diverse environments for optimal noise suppression.
  Using beam-forming technology, the user's speech level is effectively optimised while minimising the impact of loud background noise.

PERFORMANCE

Automatic Acoustic Feedback Suppression

Using multiple radios in close proximity to one another can sometimes cause acoustic feedback howling and distortion that compromises radio communications.

The automatic acoustic feedback suppression feature intelligently adjusts the audio profile of the receiving radio automatically to avoid the negative effects of acoustic feedback.

This enables teams and individuals to focus on the task at hand, rather than being distracted by having to lower audio volume or change feedback suppression settings manually as they move between environments.

COVERAGE & CAPACITY

COVERAGE & CAPACITY

Automatic DMO

If the radio loses the trunked control channel, after a 30 second grace period, the radio automatically switches to "Automatic DMO" mode. When it re-detects the trunked control channel, the radio re-affiliates with the TMO trunked system and goes back into TMO mode.

Automatic DMO mode will end if:

- The user manually switches the radio to Trunked Mode Operation (TMO) mode
- The user manually enters Direct Mode Operation (DMO) mode

Network Monitor

Enables the monitoring of an available Trunked Mode Operation (TMO) network whilst radio is using the Direct Mode Operation (DMO) channels.

When in DMO with "Network Monitor" option enabled, radio is able to:

- Register and authenticate on the TMO Network
- Indicate to the user the Network Monitor mode
- Accept TMO incoming individual calls addressed to the Radio
- Be operational DMO Radio at the same time i.e. PTT press will cause initiating a group call to the selected DMO Talkgroup, can establish individual call in DMO

It does not support any other TMO services e.g. SDS or other call types.
It does not allow user to change selected DMO Talkgroup.

Emergency Alert

Enables radios in talkgroup Trunked Mode Operation (TMO) mode, when out of the network coverage, to alert those radios within the range of direct mode.

Emergency Alert is a feature that supplements existing emergency features to increase the likelihood of receiving Direct Mode Operation (DMO) emergency alert.

It uses a dedicated DMO emergency channel that is being background scanned.

COVERAGE & CAPACITY

Repeater

This feature enables a radio when synchronized with a radio operating as a Repeater in Direct Mode Operation (DMO) to communicate with other radios in DMO that are also synchronized with the Repeater.

Enhanced Gateway and Repeater

This feature enables:

- Individual Call via Gateway
- SDS and Status via Gateway
- One Touch Button (OTB) support for DMO Pre-emptive SDS

Cell Select By Group

The Cell Select by Group feature allows ranges of talkgroups, or talkgroup folders to be given specific Subscriber Class (SC) values so that when those talkgroups are used, the new SC value is used for cell determination. Base sites have static SC values but the radio has a more dynamic SC. Default radio SC is used when no SC talkgroup is selected.

Cell Select by Group can be used:

- To preserve traffic channel capacity, by ensuring that when two cells that have same coverage and are placed together to multiply traffic capacity. The use of this site is optimised between the groups. For example if all radios attached to Talkgroup 1 are on first cell, and only one radio attached to that talkgroup is on second cell, then group call will use two traffic channels (one on first cell and one on second), reducing the effectiveness of the site capacity.
- To spread Mobile Station population across cells and prohibit them from roaming.

This can be used for major events, when there are many radios in small area with multiple base stations that increases roaming traffic. This feature reduces congestion.

COVERAGE & CAPACITY

Ignore Local Site Trunking

Ignore Local Site Trunking (LST) is sometimes called – Do not leave LST cells.

This feature provides ability for radios to ignore the fact that a site has entered Local Site Trunking.

The radio holds a list of up to 8 ranges of site identities which it will apply this feature to. Once this feature has been enabled, the radio codeplug needs some additional configuration.

In the codeplug there is a table of up to 8 ranges that can be configured. These ranges define a start and end Location Area (LA) codes for the sites that are to be considered for remaining attached to if the site goes into LST.

No additional configuration is required and no network application or configuration is needed.

Once the LA codes are programmed into the codeplug, then if the radio is attached to a site that has an LA code that is listed in the table – and that site goes into local Site Trunking – then the radio will not attempt to roam to a Wide Area site.

Home Cell Stickiness

Home Cell Stickiness is a feature that can be enabled to influence the roaming characteristics of the radio. A radio has many ways to determine which base station (cell) to use for service. These include cell capabilities, Subscriber Class and Home Location Areas (HLAs).

In simple terms HLAs are a set of cells that the radio has been programmed to prefer – compared to other cells. A number of Location Area codes may be programmed into a radio (up to 32). When a radio is making a decision about what cell to select (roaming etc), then an HLA will be seen as preferential.

When HLAs are programmed into the radio – and the sellable feature of Home cell stickiness is enabled – the radio's mobility decisions can be modified by using the Attraction and Retention offset values.

This can reduce the load on a network by reducing the number of unnecessary cell reselection. It can help to keep radios on defined HLA's, managing congestion, roaming and radio distributions.

Feature is in two parts:

- Cell Retention: make the serving cell appear larger and thus encourage the radio to stay on the cell
- Cell Attraction: make a neighbor cell that is programmed to the radios list of HLAs; appear larger and thus more attractive to roam to

Once this feature has been enabled, the radio codeplug needs the additional configuration of the HLA's and the attraction / retention offsets.

COVERAGE & CAPACITY

Migration

Migration is the simplified operation of Migration that excludes DNS and Authentication/AIE.

NOTE: There are three levels of Migration: Migration, Migration Dynamic, and Migration Encryption. The and the more comprehensive levels include the features of the lower levels.

Migration Dynamic

Dynamic Migration is a feature which facilitates automatic network migration. It is the intermediate operation of Migration that includes DNS but excludes Authentication/AIE. This feature consist of three major functions

- It allows your radio to dynamically select the appropriate network after your radio is powered up.
- If you change talkgroup to the one from a different network, the radio will automatically migrate to this network (in this feature it is possible to assign network to particular talkgroup in the codeplug).
- It provides the option to automatically migrate to a network which is available in the region (network needs to be first pre-configured in the codeplug). It is useful in case of no service state as the radio will attempt to establish communication with any available network.

Migration Encryption

This is the full version of Migration that allows authorised users to maintain full E2EE whilst migrating between different networks, network operators or countries


POLICE
POLICE

PRODUCTIVITY & EFFICIENCY

PRODUCTIVITY & EFFICIENCY

Shadow Groups (Address Bundle)

Shadow Groups (Address Bundles) allows terminals to be configured, by Customer Programming Software (CPS) or Integrated Terminal Management (iTM) system, to send Status and Emergency alarms, Global Positioning System – Location Information Protocol (LIP), and Radio Messenger Service / Funk Melde System (RMS / FMS) to defined destination addresses replacing the home address. It sends messages to up to four addresses per Talk Group for Trunked Mode Operation (TMO), and to one address per Talk Group for Direct Mode Operation (DMO).

TMO bundles can have up to 4 addresses assigned, and there can be up to 255 Address Bundles. Each Talk Group can have up to 4 different bundles associated to it. This allows multiple dispatchers to simultaneously understand the status and location of team members as they roam between regions. An address bundle can also be specified for Dynamic Group Number Assignment (DGNA) added Talk Groups.

Status / Emergency alarms, GPS-LIP and RMS / FMS Shadow Groups (Address Bundles) can also be different from each other.

Shadow Groups allows different regional command and control centers to obtain information from one radio. When the Shadow Groups (Address Bundles) feature flag is enabled, unsolicited reports will be sent to the destination ISSI addresses defined in the TMO Address Bundles List and DMO Address Bundles List respectively, and associated to a given Talk Group.

Immediate Text Message

This feature is a major enhancement to the normal Short Data feature, allowing text messages to be immediately sent to the radio's display. The message remains on the display until the user presses a soft key. Radios send a Short Data Service (SDS) acknowledgment for an Immediate Text Message, so sending applications can determine that the message was received.

Message received tones and periodic tones can be played to notify the radio operator that an Immediate Text Message has been received. This means the user does not have to check their radio constantly for messages and can keep their attention focused where it needs to be.

Immediate Text Messages have a higher display priority than most other radio messages and information displays (for example, Dynamic Group Number Assignment, etc.), so the user can rest assured that they will see the most important messages as soon as they are received.

Immediate Text Message Enhancement

Upon receiving an Immediate Text Message the radio will be able to perform some activities as a higher priority than viewing the Immediate Text Message, such as send a tactical message via shortcut key, change the volume, change the selected talkgroup or establish an individual or group call.

NOTE:
The Immediate Text Message feature needs to be enabled to receive an Immediate Text Message.
For MXP600 this feature is included in Immediate Text Message.

PRODUCTIVITY & EFFICIENCY

Individual Call Manipulation

This feature adds the following call management options:

- Call Take
- Call Hold
- Call Transfer
- Call Wait
- Call Forwarding

NOTE: This feature requires network support from DIMETRA 9.0.

Radio User Identity / Radio User Authentication

Radio User Identity / Radio User Authentication (RUI / RUA) is a Dimetra Network and Terminal feature that allows an individual to use any radio from a pool of radios and register the radio to their specific identity.

- User can pick up and register the radio as themselves
- Individual calls and SDS messages for the user are sent to the radio
- Restriction can be placed on the capabilities of radios / users

SDS Remote Control

This feature allows terminals to receive AT commands (normally sent into the Peripheral Equipment Interface (PEI) port) sent over the air using Short Data Services (SDS) messages.

Security is built in. There is a 6 digit password and commands can only be received from specified controllers. The feature provides the ability for remote radio management and allows users to obtain “live” information from radios.

The full set of commonly used AT commands can be used.

Enable Secondary Common Control Channel

The Secondary Common Control Channel (SCCH) provides additional capacity in a second channel for location information when many users are in close proximity. SCCH makes a voice channel available to carry additional signaling and data traffic. On a large site with significant GPS and data traffic the single Control Channel can become congested and this will impact on all forms of data and voice traffic.

PRODUCTIVITY & EFFICIENCY

Radio Messaging Service

Radio Messaging Service (RMS) allows bi-directional messaging and the mutual exchange of certain numeric codes between the radio users and their control rooms. The latest sent or received status message will be displayed on the screen and the feature also provides an in and outbox of previous RMS messages.

When enabled;

- Update RMS Status – The radio user can utilise the numeric keypad (0 to 9) for sending one of ten (10) predefined RMS Status to a predefined address.
- Received RMS Status – will be displayed in blue colour on 4th line on idle screen. Latest received RMS will normally need to be acknowledged by the radio user.
- RMS Free Text – This is a one-directional message from control room to Mobile Station. Received RMS Free Text will be displayed in blue on the 5th line on the idle screen.

Messages are sent using TETRA Short Data and can be used to control or determine a users "status".

Radios will accept received RMS messages only from the Calling Party Address defined in the Customer Programming Software (CPS) whilst outgoing messages will be sent to the RMS Status Target Address also configured in the CPS.

Radio Messaging Service Enhancement

Radio Messaging Services (RMS) Enhancement allows for the optional use of Status messages rather than Short Data Services (SDS) messages as the transport layer.

RMS via Status is supported on all limited keypad radios.

When enabled, RMS messages are sent as Statuses instead of SDS-TL Type 4.

Choosing Status limits the transport options, during which the following SDS options are not supported:

- Free Text RMS.
- Operational Tactical Address (OPTA)
- Message Timestamp
- End-to-End Encryption
- Delivery Status Report (L3 ACK)

RMS Enhancement for Screen Timer - display duration for RMS status message is configurable in Customer Programming Software (CPS):

- Temporary (1-30 sec)
- Permanent
- Additional Address

Address bundles mask prevents the transmission of specific RMS status messages to the additional target address.

Additional enhancement adds to the existing RMS capability as follows:

- Extends the RMS message support to 100 user define-able messages
- Enables customers to send any of the 100 RMS messages through the combination of buttons on the radio keyboard
- Allows for the addition of a status Location Information Protocol (LIP) trigger to the RMS functionality.

NOTE: For MXP600 this feature is included in Radio Messaging Service

PRODUCTIVITY & EFFICIENCY

LMR Over-The-Air-Programming (OTAP)

CPS uses a TETRA network to send critical radio codeplug update elements to target portable radios remotely in the field. (e.g., Talkgroup field change, contact list change).

CPS can send out OTAP to many radios in one go, without doing one-to-one programming, enabling remote radio reconfiguration. This reduces operation downtime through having the radios return to base for physical docking and one-to-one updates.

NOTE: OTAP feature needs to be enabled in the receiving radio

Multipart SDS

Multipart SDS (mSDS) is a new SDS protocol to support long message transmission. It enables a radio to send and receive messages using the mSDS protocol.

mSDS enables a bigger payload. This can help reduce the number of messages and thus congestion on the channel:

- A user can easily send a long text message (more than 140 characters) using mSDS protocol, rather than multiple standard SDS
- It is useful for sending data such as: Call-out alert messages, fingerprints, incident information, telematics data, over-the-air management of technical parameters.

Wireless Application Protocol

Wireless Application Protocol (WAP) is a technical standard for accessing information over a wireless network. It allows users to browse the organisation's database to obtain required information.

WAP Push

Wireless Application Protocol (WAP) is a technical standard for accessing information over a wireless network. The Push feature is an addition to WAP – where a Switch and Management Infrastructure (SwMI) connected application can push information from the database to the radio user(s). It avoids the need for users to locate information – it's pushed to them, giving the receiver access to accurate and up to date information in a timely and efficient manner.

Powerful applications can be built to send information to users such a 'Wanted' information with pictures or 'Missing Persons' with location and picture.

When enabled –

- Data can be text or pictorial
- Data can have a heading, text message and picture
- Data can be sent with different priorities, with highest level of priority the radio user does not need to interact to receive the data
- Multiple users can be sent the same information – limitations only on channel capacity per site

PRODUCTIVITY & EFFICIENCY

Multi Slot Packet Data

Multi Slot Packet Data (MSPD) increases data throughput for users, allowing the radio to use up to 4 slots as allocated.

- Radio can support MSPD for internal or external data applications (Internal WAP or external PEI devices)
- Provides additional Packet Data capacity
- Must be configured on a 2 or more Base Radio site
- Different to Dynamic Packet Data channels

To enable MSPD the feature flag in the radio needs to be selected. No other configuration is required within the radio as this setting means that the radio becomes capable of handling MSPD traffic.

The network has to be configured to support MSPD, and traffic channels allocated. There are a number of other network based parameters that have to be configured to support MSPD.

MSPD provides the ability for additional Packet Data. This does mean that additional channel "spectrum" may be required to balance voice and data traffic channels. MSPD requires network support.

Temporary Group Call Preemption

On occasions a user may need to interrupt an ongoing conversation with urgent information.

The Temporary Group Call Pre-emption feature enables a user to transmit and interrupt the current voice group call. Double press the PTT button on the radio to interrupt the ongoing call within the same priority group.

Temporary group call pre-emption is available in both DMO and TMO.

BSI E2EE Enhanced Audio

Improves voice quality when using End-to-End Encrypted communication.

NOTE: Only applicable with BSI model of radios

Simultaneous Physical Equipment Interface and Audio

Simultaneous Physical Equipment Interface (PEI) and Audio enables the ability to combine audio and data send through the side connector for MTP8000Ex Series, MTP850Ex and MTP810Ex ATEX portable radios.

SAFETY & SECURITY

SAFETY & SECURITY

Bluetooth Indoor Location

Enables an extended Short Data Services (SDS) Location Information Protocol (LIP) Report containing Bluetooth Low Energy (BTLE) Location Beacon data via the TETRA network. Supports easy transition between indoor BTLE and outdoor GPS location tracking.

Requires Bluetooth Smart to be enabled.

Bluetooth SMART

Bluetooth must be enabled before Bluetooth Smart can be used. Bluetooth Smart adds Bluetooth 4.0 and Bluetooth Low Energy (BTLE) for longer sensor battery life and enhanced sensor enablement allowing sensor data to be displayed on the radio. The radio can also be used to monitor the Bluetooth battery level.

Bluetooth Smart Proximity Pairing

Bluetooth and Bluetooth Smart must be enabled before Bluetooth Smart Proximity Pairing can be used. This feature adds the simple and intuitive ability to proximity pair with Bluetooth capable smart devices.

NOTE: For MXP600 this feature is included in Bluetooth SMART

Bluetooth Connectivity

Bluetooth must be enabled before the Bluetooth Connectivity feature can be used.

Bluetooth Connectivity enables the radio terminal to act as a modem for Bluetooth connected devices.

With MR15 and above, up to a maximum of seven sensors can be connected.

Bluetooth Radio Control

Bluetooth must be enabled before Bluetooth Radio Control can be used. This feature enables remote control of the radio terminal via AT Commands so devices such as smartphones, PDAs and tablets can be used to control the radio.

NOTE: For MXP600 this feature is included in Bluetooth Connectivity

SAFETY & SECURITY

Call-Out

The Call Out system enables dispatchers to quickly and efficiently organise resources in an emergency situation, as they can immediately identify who is where and send a message to personnel in the right area. In turn, those personnel have to respond by either accepting or declining the message. The dispatcher knows who is available and can swiftly assemble a group to progress to an incident. In order to achieve this Call Out uses Short Data Service (SDS) messages in such a way so that:

The message is immediately displayed on the screen of the terminal.

- A loud and distinctive alert tone is generated
- The user has to Accept or Reject the Call Out so the control room knows who is available for deployment
- When a Call Out is accepted the terminal cannot change to another talkgroup unless they reject the Call Out

Call-Out ISSI

The Call-Out ISSI feature checks incoming Call-Out messages and only accepts Call-Out messages from authorized parties. It discards any unauthorized Call-Out messages.

NOTE:
When the feature is disabled, the radio accepts Call-Out without constraint.
For MXP600 this feature is included in Call-Out.

Man Down

Man Down is a safety feature aimed at providing alert information to the user and controllers in case of an accident. This fully integrated solution triggers an emergency procedure when the carrier of the radio remains motionless for a set period or falls down*. Man Down utilises the emergency feature to alert control rooms.

The man down alarm functionality will trigger the radio's internal software emergency routine when the radio detects it has been horizontal for longer than a pre-programmed time which could indicate the radio user has fallen over. Similarly, the alarm will be triggered if the radio hasn't detected movement and is stationary for longer than a pre-programmed time*.

When Alarm is triggered an emergency call will be made to alert the control room and as per normal emergency call, hot-mic will be enabled during

Man Down, allowing control room to obtain more information about the user. The radio will also emit a loud tone for rescuers to locate the victim.

Third Party Applications can be used to monitor and alert managers about any potential problems for users. Additionally if GNSS is enabled, the radio can report positional information back to control room.

SDS remote control can be used to manage Man Down from the Control Room.

*NOTE: TPG2200 and ST7000 support no movement detection only.

SAFETY & SECURITY

Emergency Destination In Local Site Trunking

This is an enablement feature that allows a new Emergency destination to be used when in Local Site Trunking.

SDS Over End-to-End Encryption

Enables Short Data Services (SDS) messages to be sent over End-to-End Encryption (E2EE) communications.

Permanent Disable / Permanent Disable V2

Permanent Disable or Kill is the ability to "kill" a radio by a remote command from Switch and Management Infrastructure (SwMI). The Radio reacts to specific signaling from the SwMI to "kill" the radio making the radio unusable.

When "Killed" the radio will:

- erase ALL encryption key material
- delete the codeplug to remove all personalization
- delete firmware

NOTE: There are two options: return to Motorola Solutions to re-enable the radio, or V2 allows customer to re-enable the radio themselves.

Enhanced Security

Combined Direct Mode Operation Static Cipher Keys, Group Cipher Keys and Over the Air Rekeying.ucture (SwMI).

Group Cipher Key Over The Air Reprogramming

Group Cipher Keys (GCK) allow enhanced talkgroup encryption and provides cryptographic separation between talkgroups. Keys can be updated without recalling radios. Specific key sets can be updated from the Switch and Management Infrastructure (SwMI). Provides agency cryptographic separation on a network.

SAFETY & SECURITY

Static Cipher Keys

Pre-programmed Static Cipher Keys (SCK) for Direct Mode Operation (DMO) and Trunked Mode Operation (TMO). Talkgroups can be mapped to specific cipher keys for enhanced security and separation of communications

Static Cipher Keys Over The Air Reprogramming

Over the Air provision of Static Cipher Keys (SCK) for Direct Mode Operation (DMO) and Trunked Mode Operation (TMO). Keys can be updated without recalling radios. Specific key sets can be updated from the Switch and Management Infrastructure (SwMI).


Ray Nixon

MOBILE RADIOS

MOBILE RADIOS

Multiple Radio Control (MRC)

The Multiple Radio Control (MRC) feature enables control of two Radios (Transceivers) with one Control Head.

The configuration supports two Transceivers and one Control Head. The Control Head can be either a standard Remote Ethernet Control Head (ReCH) or a Telephone Style Control Head (TSCH).

Both transceivers require the MRC feature enabled.

Transceivers can be different frequency bandwidths.

The radios can also support two external Rear Accessory Connector (RAC) Microphones and two external RAC PTT.

Enhanced Dual Control Head (DCH)

New configurable selection for Dual Control Head (DCH) displays:

- Heads - the display on both Control Heads, either 2 x Remote Ethernet Control Heads (ReCH) or 2 x Telephone Control Heads (TSCH) will at all times show identical content.
- Active / Passive - the information shown on the two control heads depends on the state of the control head. One control head is denoted the active control head, which will display the normal control head content with soft-keys, the other display is denoted the passive control head, which will show the idle display without soft-keys.
- Backlight Control - the user can set the backlight level independently for each control head. The assigned One Touch Button (OTB) for each control head will independently control the backlight.

MOBILE RADIOS

OEM Control Head RDC Protocol

The Original Equipment Manufacturer (OEM) Control Head Remote Display and Control (RDC) protocol extends access to the Motorola Solutions RDC interface. The RDC interface is licensed and made available to 3rd party vendors (via Motorola Solutions Application Partner Program).

Application Solutions for OEM CH will require each mobile radio to have the OEM-CH Feature enabled.

Gateway

This feature enables a radio when operating in Trunked Mode Operation (TMO) to communicate with a radio operating as a Gateway. The Gateway can communicate directly between the TMO trunked network and DMO direct mode channels and also in the opposite direction. It also enables radios when operating in DMO to synchronize with a radio operating as a Gateway to communicate directly between DMO direct mode channels and TMO trunked network and also in the opposite direction.

SOFTWARE FEATURE DEPENDENCIES

PERFORMANCE

SOFTWARE LICENSE	PORTABLES												MOBILES		
	MXP600	MTP3100	MTP3150	MTP3250	MTP3500	MTP3550	MTP6650	MTP8500Ex	MTP8550Ex	ST7000	ST7500	TPG2200	MTM5200	MTM5400 MTM800FUG	MTM5500 MTM800FUG ET
Toggle Radio Frequency (RF) Power - Class 3L	I	L	L	L	L	L	L	L	L	L	L	X	X	X	X
Toggle Radio Frequency (RF) Power - Class 3	PPB	X	X	X	X	X	L	X	X	X	X	X	X	X	X
Bluetooth Enablement	I	X	X	L	L	L	L	L	L	L	L	X	X	X	X
Global Satellite Navigation System (GNSS) - GPS	I	X	L	L	L	L	L	L	L	L	L	L	L	L	L
Global Satellite Navigation System (GNSS) - Glonass	PPB	X	L	L	L	L	L	L	L	L	L	X	L	L	L
Global Satellite Navigation System (GNSS) - Beidou		X	L	L	L	L	L	L	L	X	X	X	L	L	L
Global Satellite Navigation System (GNSS) - Galileo		X	X	X	X	X	X	X	X	X	X	X	X	X	X
Car Kit Enablement	PPB	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Wi-Fi OTAP & OTA Updates	PB	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Noise Suppression	PB	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Automatic Acoustic Feedback Suppression	PB	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Key

L	I	PPB	PB	X
Licensed Feature	Included as Standard	Licensed Feature included in Power & Performance Bundle	Licensed Feature included in Performance Bundle	Feature Not Available

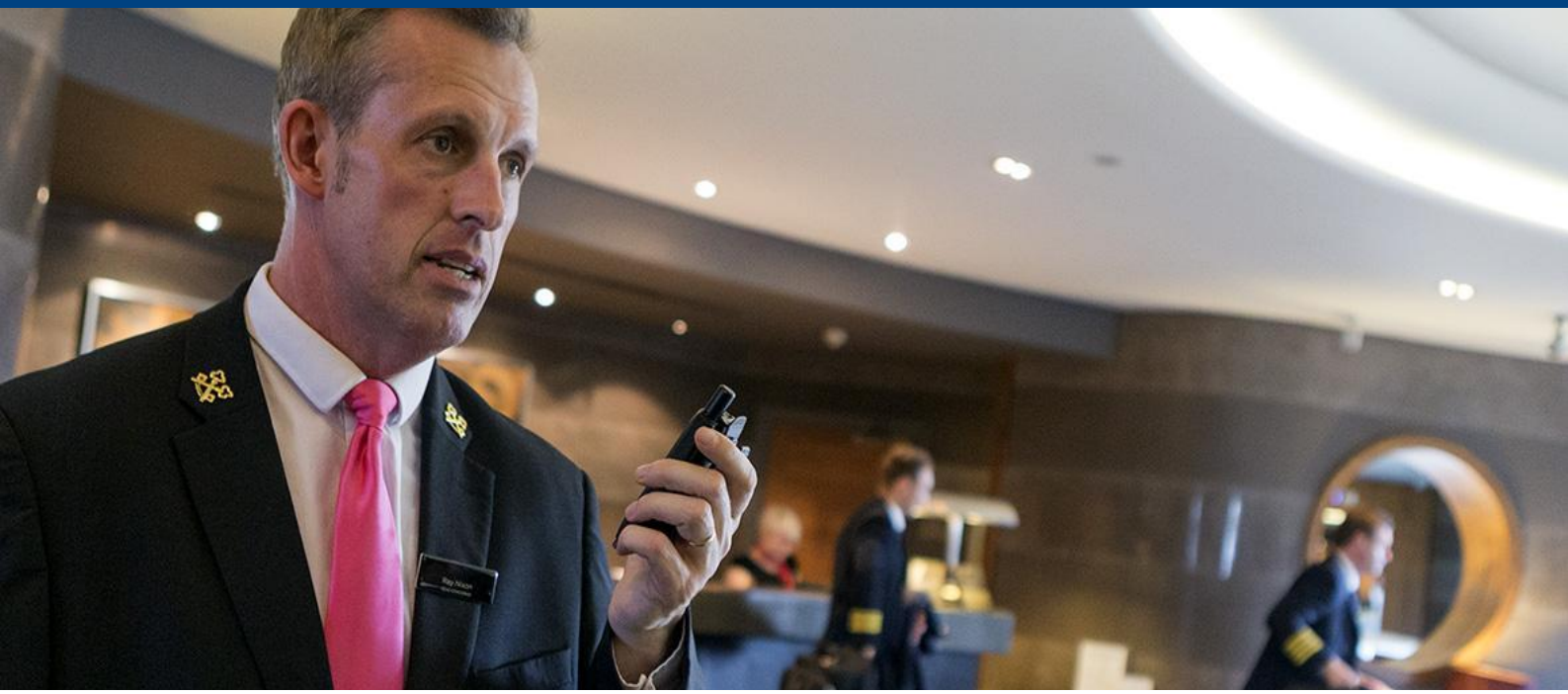
COVERAGE & CAPACITY

SOFTWARE LICENSE	PORTABLES												MOBILES		
	MXP600	MTP3100	MTP3150	MTP3250	MTP3500	MTP3550	MTP6650	MTP8500Ex	MTP8550Ex	ST7000	ST7500	TPG2200	MTM5200	MTM5400 MTM800FUG	MTM5500 MTM800FUG ET
Automatic DMO	CCB	X	X	X	L*	L*	X	L	L	X	X	X	L	L	L
Network Monitor	CCB	L	L	L	L	L	L	L	L	X	X	X	L	L	L
Emergency Alert	CCB	L	L	L	L	L	L	L	L	X	X	X	L	L	L
Repeater	CCB	L	L	L	L	L	L	L	L	X	X	X	X	L	L
Enhanced Gateway and Repeater	CCB	L	L	L	L	L	L	L	L	X	X	X	X	L	L
Cell Select by Group	CCB	L	L	L	L	L	L	L	L	L	L	X	L	L	L
Ignore Local Site Trunking (LST)	CCB	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Home Cell Stickiness	CCB	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Migration	CCB	L	L	L	L	L	L	L	L	X	X	X	L	L	L
Migration Dynamic	CCB	L	L	L	L	L	L	L	L	X	X	X	L	L	L
Migration Encryption	CCB	X	X	L	L	L	L	L	L	X	X	X	L	L	L

* Feature available in MTP3500 and MTP3550 Revision B only, please speak to your Motorola Solutions representative for more information.

Key

L	CCB	X
Licensed Feature	Licensed Feature included in Coverage & Capacity bundle	Feature Not Available



PRODUCTIVITY & EFFICIENCY

SOFTWARE LICENSE	PORTABLES												MOBILES		
	MXP600	MTP3100	MTP3150	MTP3250	MTP3500	MTP3550	MTP6650	MTP8500Ex	MTP8550Ex	ST7000	ST7500	TPG2200	MTM5200	MTM5400 MTM800FUG	MTM5500 MTM800FUG ET
Shadow Groups (Address Bundle)	PEB	L	L	L	L	L	L	L	L	L	L	X	L	L	L
Immediate Text Message	PEB	L	L	L	L	L	L	L	L	X	X	L	L	L	L
Immediate Text Message Enhancement		L	L	L	L	L	L	L	L	X	X	L	L	L	L
Individual Call Manipulation	PEB	L	L	L	L	L	L	L	L	X	X	X	L	L	L
Radio User Identity / Radio User Authentication (RUI/RUA)	PEB	X	L	L	X	L	L	X	L	X	X	X	L	L	L
SDS Remote Control	PEB	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Enable Secondary Common Control Channel	PEB	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Radio Messaging Service (RMS)	PEB	L	L	L	L	L	L	L	L	X	X	X	L	L	L
Radio Messaging Service (RMS) Enhancement		L	L	L	L	L	L	L	L	X	X	X	L	L	L
LMR Over-The-Air-Programming (OTAP)	PEB	L	L	L	L	L	L	L	L	L	L	X	X	X	X
Multipart SDS (mSDS)	PEB	X	X	X	X	X	L	L	L	L	L	L	L	L	L
Wireless Application Protocol (WAP)	PEB	L	L	L	L	L	L	L	L	X	X	X	L*	L*	L*
WAP Push	PEB	L	L	L	L	L	L	L	L	X	X	X	L*	L*	L*
Multi Slot Packet Data (MSPD)	PEB	L	L	L	L	L	L	L	L	X	L	X	L	L	L
Temporary Group Call Preemption	I	L	L	L	L	L	L	L	L	L	L	X	L	L	L
BSI E2EE Enhanced Audio (only applicable for BSI variant of the radio)	PEB	X	X	X	L	X	L	L	L	L	L	X	X	L	L
Simultaneous Physical Equipment Interface (PEI) and Audio	X	X	X	X	X	X	X	L	L	X	X	X	X	X	X

* From MR2022.2 onwards this feature is no longer supported.The last software version that supports this feature is MR2021.3.

Key

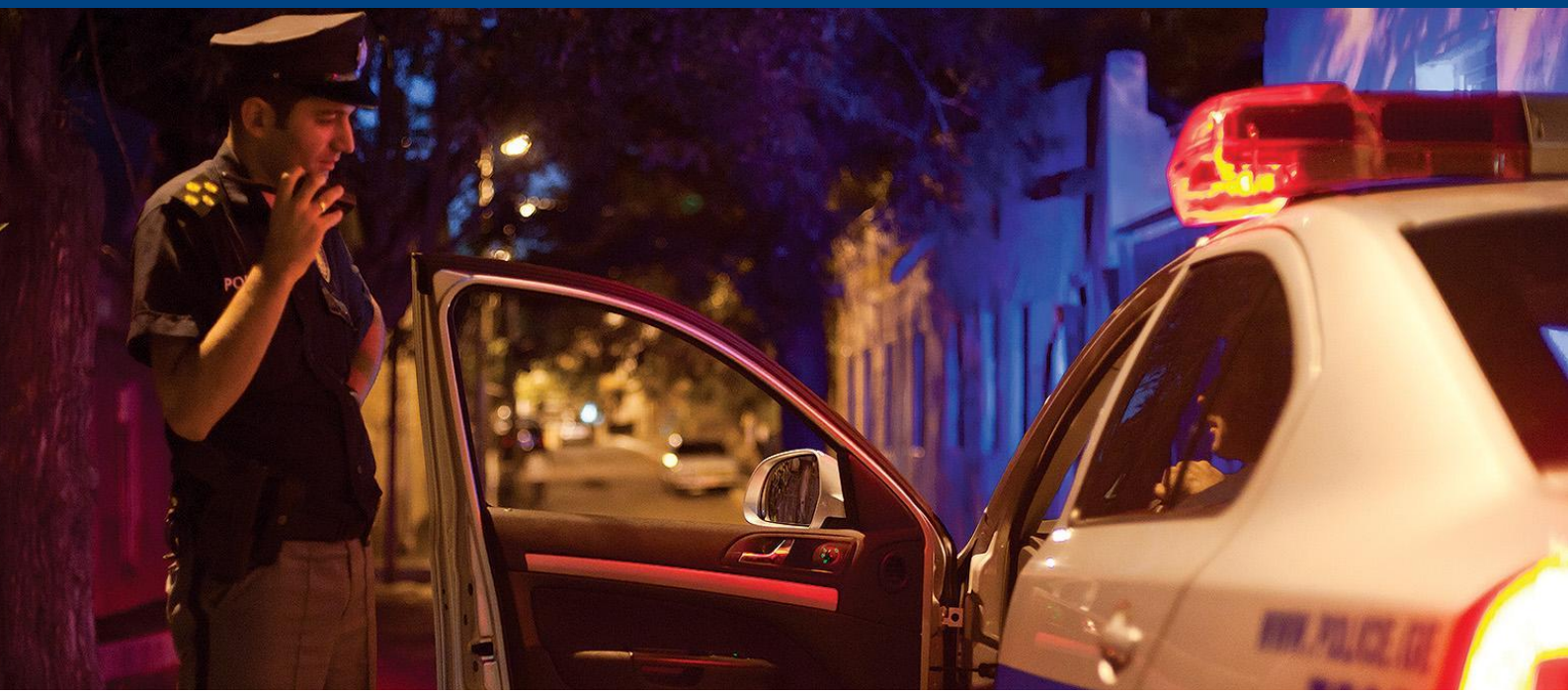
L	PEB	I	X
Licensed Feature	Licensed Feature included in Productivity & Efficiency Bundle	Included	Feature Not Available

SAFETY & SECURITY

SOFTWARE LICENSE	PORTABLES												MOBILES		
	MXP600	MTP3100	MTP3150	MTP3250	MTP3500	MTP3550	MTP6650	MTP8500Ex	MTP8550Ex	ST7000	ST7500	TPG2200	MTM5200	MTM5400 MTM800FUG	MTM5500 MTM800FUG ET
Bluetooth Indoor Location	SSB	X	X	L	L	L	L	L	L	L	L	X	X	X	X
Bluetooth Smart	SSB	X	X	L	L	L	L	L	L	L	L	X	X	X	X
Bluetooth Smart Proximity Pairing		X	X	L	L	L	L	L	L	L	L	X	X	X	X
Bluetooth Connectivity	SSB	X	X	L	L	L	L	L	L	L	L	X	X	X	X
Bluetooth Radio Control		X	X	L	L	L	L	L	L	L	L	X	X	X	X
Call-Out	SSB	L	L	L	L	L	L	L	L	L	L	X	L	L	L
Call-Out ISSI		L	L	L	L	L	L	L	L	L	L	X	L	L	L
Man-Down	SSB	X	X	X	L	L	L	L	L	L	L	L	X	X	X
Emergency Destination in Local Site Trunking	SSB	L	L	L	L	L	L	L	L	L	L	L	L	L	L
SDS Over End-to-End Encryption	SSB	X	X	X	L	L	L	L	L	L	L	X	L	L	L
Permanent Disable	SSB	X	X	L	L	L	L	L	L	L	L	L	L	L	L
Permanent Disable v2	SSB	X	X	L	L	L	L	L	L	L	L	L	L	L	L
Enhanced Security	SSB	X	X	L	L	L	L	L	L	L	L	L	L	L	L
Group Cipher Key Over The Air Reprogramming	SSB	X	X	L	L	L	L	L	L	L	L	L	L	L	L
Static Cipher Keys	SSB	X	X	L	L	L	L	L	L	L	L	L	L	L	L
Static Cipher Keys Over The Air Reprogramming	SSB	X	X	L	L	L	L	L	L	L	L	L	L	L	L

Key

L	SSB	X
Licensed Feature	Licensed Feature included in Safety & Security Bundle	Feature Not Available



MOBILE RADIOS

SOFTWARE LICENSE	PORTABLES												MOBILES		
	MXP600	MTP3100	MTP3150	MTP3250	MTP3500	MTP3550	MTP6650	MTP8500Ex	MTP8550Ex	ST7000	ST7500	TPG2200	MTM5200	MTM5400 MTM800FUG	MTM5500 MTM800FUG ET
Multiple Radio Control (MRC)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	L
Enhanced Dual Control Head	X	X	X	X	X	X	X	X	X	X	X	X	X	X	L
OEM Control Head RDC Protocol	X	X	X	X	X	X	X	X	X	X	X	X	X	L	L
Gateway	X	X	X	X	X	X	X	X	X	X	X	X	X	L	L

Key

L	X
Licensed Feature	Feature Not Available

This catalogue has been updated based on software release MR2022.4
For more information about the features, please contact your Motorola Solutions representative.

For more information about the TETRA portfolio, please visit:
motorolasolutions.com/tetra

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