هيئة الاتصالات وتقنية المعلومات
Communications & Information Technology Commission

CITC Technical Specification

Specification for Analogue and Digital PMR Equipment

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Scope

This specification applies to analogue and digital Private Mobile Radio PMR Handsets, base stations and ancillary equipment.

The private mobile radio service PMR is a person-to-person or -group two way radio communication system offering mobile communication between radios directly or via infrastructure.

Enforcement

This specification shall enter into force on 20/07/2021.

Any previous version of this technical specification is withdrawn.

General Requirements

- All equipment must comply with the requirement of CITC specification GEN001, be safe and must not adversely affect other electrical equipment.
- All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CITC. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. please visit www.citc.gov.sa for details.
- If more than one interface type is offered by a piece of equipment, each interface must meet the applicable technical specifications.
- Further information on the characteristics and presentation of network interfaces can be obtained by coordinating with the mobile network operators.
- It is mandatory that test reports are obtained from a laboratory that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement.

Limits and conditions

Testing should be carried out to ensure compliance with the listed specifications.

Frequency band	Max Output Power or Magnetic Field	Usage	Standard	Comments
136 – 174 MHz	Subject to licensing	Radio equipment intended for the transmission of data (and speech) and having an antenna connector	EN 300 113 EN 300 471 EN 301 489-5	Specific frequency assignment is subject to licensing.
136 – 174 MHz	Subject to licensing	Radio equipment intended for the	EN 300 390 EN 301 489-5	Specific frequency

		transmission of data (and speech) and using an integral antenna		assignment is subject to licensing.
136 – 174 MHz	Subject to licensing	Radio equipment with an internal or external RF connector intended primarily for analogue speech	EN 300 086 EN 301 489-5	Specific frequency assignment is subject to licensing.
136 – 174 MHz	Subject to licensing	Radio equipment transmitting signals to initiate a specific response in the receiver	EN 300 219 EN 301 489-5	Specific frequency assignment is subject to licensing.
136 – 174 MHz	Subject to licensing	Radio equipment using integral antennas intended primarily for analogue speech	EN 300 296 EN 301 489-5	Specific frequency assignment is subject to licensing.
136 – 174 MHz	Subject to licensing	Radio equipment using an integral antenna transmitting signals to initiate a specific response in the receiver	EN 300 341 EN 301 489-5	Specific frequency assignment is subject to licensing.
136 – 174 MHz	Subject to licensing	Multichannel transmitter specification for the PMR Service	EN 300 341 EN 301 489-5	Specific frequency assignment is subject to licensing.

400.05 – 470 MHz	Subject to licensing	Radio equipment intended for the transmission of data (and speech) and having an antenna connector	EN 300 113 EN 300 471 EN 301 489-5	Specific frequency assignment is subject to licensing.
400.05 – 470 MHz	Subject to licensing	Radio equipment intended for the transmission of data (and speech) and using an integral antenna	EN 300 390 EN 301 489-5	Specific frequency assignment is subject to licensing.
400.05 – 470 MHz	Subject to licensing	Radio equipment with an internal or external RF connector intended primarily for analogue speech	EN 300 086 EN 301 489-5	Specific frequency assignment is subject to licensing.
400.05 – 470 MHz	Subject to licensing	Radio equipment transmitting signals to initiate a specific response in the receiver	EN 300 219 EN 301 489-5	Specific frequency assignment is subject to licensing.
400.05 – 470 MHz	Subject to licensing	Radio equipment using integral antennas intended primarily for analogue speech	EN 300 296 EN 301 489-5	Specific frequency assignment is subject to licensing.
400.05 – 470 MHz	Subject to licensing	Radio equipment using an integral antenna transmitting signals to initiate	EN 300 341 EN 301 489-5	Specific frequency assignment is subject to licensing.

		a specific response in the receiver		
400.05 – 470 MHz	Subject to licensing	Multichannel transmitter specification for the PMR Service	EN 300 341 EN 303 405 EN 301 489-5	Specific frequency assignment is subject to licensing.

Equipment that is originating from the USA may alternatively be tested in accordance with ANSI C63.26.

Licensing Requirements

A spectrum license is required.

Additional Requirements

There is no additional requirements for this technical specification.

References

The following referenced documents are indispensable for the application of this document. If no issue or revision number is quoted along with the title of a technical specification or standard, the latest published version should be used.

EN 300 086-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile Service; Radio equipment with an internal or external RF connector intended primarily for analogue speech. Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive.

EN 300 113-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile Service; Radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive.

EN 300 296-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; radio equipment using integral antennas intended primarily for analogue speech; Part 2: Harmonised EN covering essential requirements under Article 3.2 of the R&TTE Directive.

EN 300 405

Land Mobile Service; Analogue and Digital PMR446 Equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU.

EN 300 390-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio Equipment intended for the transmission of data (and speech) and using an integral antenna. Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

EN 300 471-2

Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Access protocol, occupation rules and corresponding technical characteristics of radio equipment for the transmission of data on shared channels. Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive.

EN 303 039

Land Mobile Service; Multichannel transmitter specification for the PMR Service; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU

EN 301 489-1

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.

EN 301 489-5

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 5: Specific conditions for Private land Mobile Radio (PMR) and ancillary equipment (speech and non-speech).

ANSI C63.26

American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

MPT 1327

A signalling standard for Trunked Private Land Mobile Radio Systems.

History

For reference, the latest versions of the technical specifications are published on the CITC website www.citc.gov.sa.

Description	Status	Date
	Issue 1	11/03/2006
	Issue 2	10/01/2010
Merge of RI009 "Specification for Analogue PMR Base Stations and Ancillary Equipment" with RI010 "Specification for Analogue PMR Handsets and Ancillary Equipment" and inclusion of digital PMR.	Issue 3	10/07/2021