



## **CITC Technical Specification**

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## **Specification for Wireless Telemetry Equipment**

Issued by The Communications and Information Technology Commission of Saudi Arabia in accordance with article 89 of the Telecommunications Bylaw.

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## Scope

This document applies to Wireless Telemetry 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. See <http://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.

## Entry into force

This specification shall enter into force on 15/07/2019 G

## Frequency of operation

The following table is showing information on frequency bands, maximum output power and applicable specifications:

| Frequency band        | Maximum Output Power or Magnetic Field | ETSI Standard            |
|-----------------------|--|--------------------------|
| 6765 - 6795 kHz       | 42 dB $\mu$ A/m @10m                   | EN 300 330               |
| 13.553 - 13.567 MHz   | 42 dB $\mu$ A/m @10m                   | EN 300 330               |
| 26.957 - 27.283 MHz   | 42 dB $\mu$ A/m @10m<br>10 mW e.r.p.   | EN 300 330<br>EN 300 220 |
| 40.660 - 40.700 MHz   | 10 mW e.r.p.                           | EN 300 220               |
| 433.050 - 434.790 MHz | 10 mW e.r.p.                           | EN 300 220               |
| 433.050 - 434.790 MHz | 1 mW e.r.p.                            | EN 300 220               |
| 434.040 - 434.790 MHz | 10 mW e.r.p.                           | EN 300 220               |
| 863.000 - 870.000 MHz | $\leq$ 25 mW e.r.p.                    | EN 300 220               |
| 868.000 - 868.600 MHz | $\leq$ 25 mW e.r.p.                    | EN 300 220               |

|                       |                  |            |
|-----------------------|------------------|------------|
| 868.700 - 869.200 MHz | ≤25 mW e.i.r.p.  | EN 300 220 |
| 869.400 - 869.650 MHz | ≤500 mW e.i.r.p. | EN 300 220 |
| 869.700 - 870.000 MHz | ≤5 mW e.i.r.p.   | EN 300 220 |
| 2400 - 2483.5 MHz     | 10 mW e.i.r.p.   | EN 300 440 |
| 5725 - 5875 MHz       | 25 mW e.i.r.p.   | EN 300 440 |
| 76 – 77 GHz           | 55 dBm           | EN 301 091 |
| 24.00 – 24.25 GHz     | 100 mW e.i.r.p.  | EN 300 440 |
| 122 - 123 GHz         | 100 mW e.i.r.p.  | EN 305 550 |

## Proof of compliance

It is required 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.

## Technical requirements

Testing should be carried out to ensure compliance with the following specifications as appropriate:

### EN 300 220-2

Electromagnetic compatibility and Radio spectrum Matters (ERM) — Short Range Devices (SRD) – Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW - Part 2: Harmonized EN covering essential requirements under Article 3(2) of the R&TTE directive

### EN 300 330-2

Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short Range Devices (SRD) — Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz - Part 2: Harmonized EN under Article 3(2) of the R&TTE directive

### EN 301 091

Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range.

### EN 300 440-2

Electromagnetic compatibility and Radio spectrum Matters (ERM) — Short range devices - Radio equipment to be used in the 1 GHz to 40 GHz frequency range - Part 2: Harmonized EN covering essential requirements of Article 3(2) of the R&TTE directive.

### **EN 305 550**

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 40 GHz to 246 GHz frequency range.

### **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 301 489-3**

Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz

If no issue or revision number is quoted along with the title of a technical specification, the latest published version should be used.

### **General**

In addition to meeting the above requirements, all equipment must comply with the requirement of CITC specification GEN001, be safe and must not adversely affect other electrical equipment.

## **Additional requirements**

A licence must be obtained before equipment of this type can be used.

## **Obtaining technical standards**

ETSI technical standards may be obtained free of charge for individual use from the ETSI website [www.etsi.org](http://www.etsi.org).

## **Network information (only for network interfaces)**

Further information on the characteristics and presentation of network interfaces can be found by visiting operator's website.

## **Document history**

| Description | Status  | Date         |
|-------------|---------|--------------|
|             | Issue 1 | 11/03/2006 G |
|             | Issue 2 | 29/09/2008 G |
|             | Issue 3 | 15/12/2018 G |
|             | Issue 4 | 15/07/2019 G |