

Manufacturer: TEXA S.p.A.

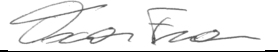
Name: Oscar Frau

Product: TMD MK5

Title: Project handler

FCC ID: T8R-TMDFPT

Signature:



## MPE limits (§1.1310)

| Mode              | Frequency | Duty Cycle | Antenna |      | EIRP <sup>1</sup> | EIRP | Distance |                 | PD Limit <sup>3</sup> | Margin | 2.1091 EIRP | 2.1091 EIRP | PD/PD Limit | Worst PD/PD values<br>to be considered |
|-------------------|-----------|------------|---------|------|-------------------|------|----------|-----------------|-----------------------|--------|-------------|-------------|-------------|----------------------------------------|
|                   |           |            | Power   | Gain |                   |      | D        | PD <sup>2</sup> |                       |        | Limit       | Margin      |             |                                        |
|                   | MHz       | %          | dBm     | dBi  | dBm               | mW   | cm       | mW/cm^2         | mW/cm^2               | dB     | mW          | dB          |             |                                        |
| BT <sup>6</sup>   | 2441      | 100        | 3,50    | 4    | 7,5               | 6    | 20       | 0,001           | 1,00                  | 29,51  | N/A         | N/A         | 0,00112     | 0,00406                                |
| BLE <sup>7</sup>  | 2480      | 100        | 9,10    | 4    | 13,1              | 20   | 20       | 0,004           | 1,00                  | 23,91  | N/A         | N/A         | 0,00406     |                                        |
| GSM 850           | 825       | 100        | 23,97   | 0,5  | 24,5              | 280  | 20       | 0,056           | 0,55                  | 9,95   | 2455        | 9,43        | 0,10124     |                                        |
| GSM 1900          | 1850      | 100        | 20,97   | 3,7  | 24,7              | 293  | 20       | 0,058           | 1,00                  | 12,34  | 4910        | 12,24       | 0,05831     |                                        |
| LTE Band 2        | 1850      | 100        | 24,00   | 3,7  | 27,7              | 589  | 20       | 0,117           | 1,00                  | 9,31   | 4910        | 9,21        | 0,11715     |                                        |
| LTE Band 4        | 1710      | 100        | 23,00   | 3,7  | 26,7              | 468  | 20       | 0,093           | 1,00                  | 10,31  | 4910        | 10,21       | 0,09305     | 0,15019                                |
| LTE Band 5        | 825       | 100        | 24,00   | 0,5  | 24,5              | 282  | 20       | 0,056           | 0,55                  | 9,92   | 2455        | 9,40        | 0,10195     |                                        |
| LTE Band 12       | 705       | 100        | 24,00   | 0,5  | 24,5              | 282  | 20       | 0,056           | 0,47                  | 9,23   | 2455        | 9,40        | 0,11930     |                                        |
| LTE Band 13       | 780       | 100        | 24,00   | 0,5  | 24,5              | 282  | 20       | 0,056           | 0,52                  | 9,67   | 2455        | 9,40        | 0,10783     |                                        |
| LTE Band 25       | 1850      | 100        | 25,00   | 3,7  | 28,7              | 741  | 20       | 0,147           | 1,00                  | 8,31   | 4910        | 8,21        | 0,14748     |                                        |
| NB-IoT Band 2     | 1850      | 100        | 25,00   | 3,7  | 28,7              | 741  | 20       | 0,147           | 1,00                  | 8,31   | 4910        | 8,21        | 0,14748     |                                        |
| NB-IoT Band 4     | 1710      | 100        | 25,00   | 3,7  | 28,7              | 741  | 20       | 0,147           | 1,00                  | 8,31   | 4910        | 8,21        | 0,14748     |                                        |
| NB-IoT Band 5     | 825       | 100        | 25,00   | 0,5  | 25,5              | 355  | 20       | 0,071           | 0,55                  | 8,92   | 2455        | 8,40        | 0,12834     |                                        |
| NB-IoT Band 12    | 705       | 100        | 25,00   | 0,5  | 25,5              | 355  | 20       | 0,071           | 0,47                  | 8,23   | 2455        | 8,40        | 0,15019     |                                        |
| NB-IoT Band 13    | 780       | 100        | 25,00   | 0,5  | 25,5              | 355  | 20       | 0,071           | 0,52                  | 8,67   | 2455        | 8,40        | 0,13575     |                                        |
| NB-IoT Band 25    | 1850      | 100        | 25,00   | 3,7  | 28,7              | 741  | 20       | 0,147           | 1,00                  | 8,31   | 4910        | 8,21        | 0,14748     |                                        |
| FCC Co-Location = |           |            | 0,15425 | < 1  |                   |      |          |                 |                       |        |             |             |             |                                        |

<sup>1</sup>EIRP = ( Power dBm + Antenna Gain dBi ) + 10 x Log ( Duty Cycle % / 100 )

<sup>2</sup>PD = EIRP / (4xπxD<sup>2</sup>)

<sup>3</sup>CFR 47 Part 1, §1.1310(e), table 1

<sup>6</sup>Test Report n. 431857-2TRFWL, p. 45

<sup>7</sup>Test Report n. 431857-1TRFWL, p. 29

GSM, LTE RF module: Quectel BG96, FCC ID: XMR201707BG96; IC: 10224A-201709BG96 (see MPE calculation "5 - R2007A0435-M1 BG96 BG96MINI FCC")

Antenna BT/BLE: Ceramic Chip Ant., type CW3043, gain 4 dBi (see datasheet "PULSE-CW3043")

Antenna GSM, LTE: Molex SMD, type 1462000011, gain 0.5 dBi (698 - 960 MHz) and 3.7 dBi (1710 - 2700 MHz) (see operational description (p.3) and antenna datasheet (p.4))