

**Manufacturer:** Eurotech S.p.A.

**Name:** Oscar Frau

**Product:** DYGATE-20-30

**Title:** Project handler

**FCC ID:** UKMDG2030

**Signature:**



## MPE limits (§1.1310)

| Mode                       | Frequency<br>MHz | Duty Cycle<br>% | Power<br>dBm | Antenna<br>Gain <sup>10, 11</sup> |  | EIRP <sup>1</sup><br>dBm | EIRP<br>mW | Distance |                                       | PD Limit <sup>3</sup><br>mW/cm <sup>2</sup> | Margin<br>dB | 2.1091 EIRP | 2.1091 EIRP  | PD/PD Limit | Worst PD/PD values<br>to be considered |
|----------------------------|------------------|-----------------|--------------|-----------------------------------|--|--------------------------|------------|----------|---------------------------------------|---------------------------------------------|--------------|-------------|--------------|-------------|----------------------------------------|
|                            |                  |                 |              | dBi                               |  |                          |            | D<br>cm  | PD <sup>2</sup><br>mW/cm <sup>2</sup> |                                             |              | Limit<br>mW | Margin<br>dB |             |                                        |
| BT <sup>9</sup>            | 2402             | 100             | 11,76        | 1,70                              |  | 13,46                    | 22         | 20       | 0,004                                 | 1,000                                       | 23,55        | N/A         | N/A          | 0,00441     | 0,02284                                |
| WiFi 2.4 GHz <sup>6</sup>  | 2462             | 100             | 18,90        | 1,70                              |  | 20,60                    | 115        | 20       | 0,023                                 | 1,000                                       | 16,41        | N/A         | N/A          | 0,02284     |                                        |
| WiFi 5 GHz <sup>7</sup>    | 5180             | 100             | 19,50        | 2,30                              |  | 21,80                    | 151        | 20       | 0,030                                 | 1,000                                       | 15,21        | N/A         | N/A          | 0,03011     | 0,03011                                |
| WiFi 5 GHz <sup>7</sup>    | 5320             | 100             | 19,20        | 2,30                              |  | 21,50                    | 141        | 20       | 0,028                                 | 1,000                                       | 15,51        | N/A         | N/A          | 0,02810     |                                        |
| WiFi 5 GHz <sup>7</sup>    | 5500             | 100             | 19,00        | 2,30                              |  | 21,30                    | 135        | 20       | 0,027                                 | 1,000                                       | 15,71        | N/A         | N/A          | 0,02684     |                                        |
| WiFi 5 GHz <sup>7</sup>    | 5825             | 100             | 18,10        | 2,30                              |  | 20,40                    | 110        | 20       | 0,022                                 | 1,000                                       | 16,61        | N/A         | N/A          | 0,02181     |                                        |
| GSM850 <sup>8</sup>        | 824,2            | 100             | 25,95        | 1,71                              |  | 27,66                    | 583        | 20       | 0,116                                 | 0,549                                       | 6,75         | 2460        | 6,25         | 0,21125     | 0,21965                                |
| WCDMA band IV <sup>8</sup> | 1712,4           | 100             | 27,00        | 3,43                              |  | 30,43                    | 1104       | 20       | 0,220                                 | 1,000                                       | 6,58         | 4920        | 6,49         | 0,21965     |                                        |
| LTE band 7 <sup>8</sup>    | 2502,5           | 100             | 28,00        | 1,67                              |  | 29,67                    | 927        | 20       | 0,184                                 | 1,000                                       | 7,34         | 4920        | 7,25         | 0,18439     |                                        |
| FCC Co-Location =          |                  |                 | 0,27260      | < 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>WiFi 2.4 GHz: Test Report n. 392986-2TRFWL, p. 25

<sup>7</sup>WiFi 5 GHz: Test Report n. 392986-3TRFWL, p. 6, 91, 92

<sup>8</sup>4G (2G/3G fallback) EG25-G module: FCC ID: XMR201903EG25G, IC: 10224A-201903EG25G (the worst case for each band is listed in the table, referring to the RF exposure of the EG25-G)

<sup>9</sup>BT Eurotech DG2030 module: FCC ID: UKMDG2030, IC: 21442-DG2030

<sup>10</sup>Antenna 2.4/5 GHz: type 2J6302MP, gain shown on p.2 of the datasheet "2J6302MP.pdf"

<sup>11</sup>Antenna 4G (2G/3G fallback): type GSA.8827.A.101111, gain shown on p.3 of the datasheet "GSA.8827.A.101111.pdf"