



# PT. DIMULTI PILAR NARMADI

Villa Andalusia No. 09, Jl. Swatantra V Pondok Benda  
RT 08 RW 03 Jatirasa, Jatiasih, Bekasi Selatan 17424  
Indonesia  
Telp: +62 21 8430 5011  
Fax : +62 21 2285 3790  
E-mail : [info@typeapprovalindonesia.com](mailto:info@typeapprovalindonesia.com)  
[www.dimulti.co.id](http://www.dimulti.co.id)

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## Applicable GSM Device in Indonesia

### 1. General Requirements:

#### A. General

- a) PGSM
  1. Canal Space : 200 KHz
  2. Canal number :  $1 < n < 124$  canals
  3. Duplex Separation : 45 MHz
  4. Modulation Type : TDMA
  5. Impedance : 50 Ohm
- b) DCS
  1. Canal Space : 200 KHz
  2. Canal number :  $512 \leq n \leq 885$  canals
  - 3.
  4. Duplex Separation : 95 MHz
  5. Modulation Type : TDMA
  6. Impedance : 50 Ohm

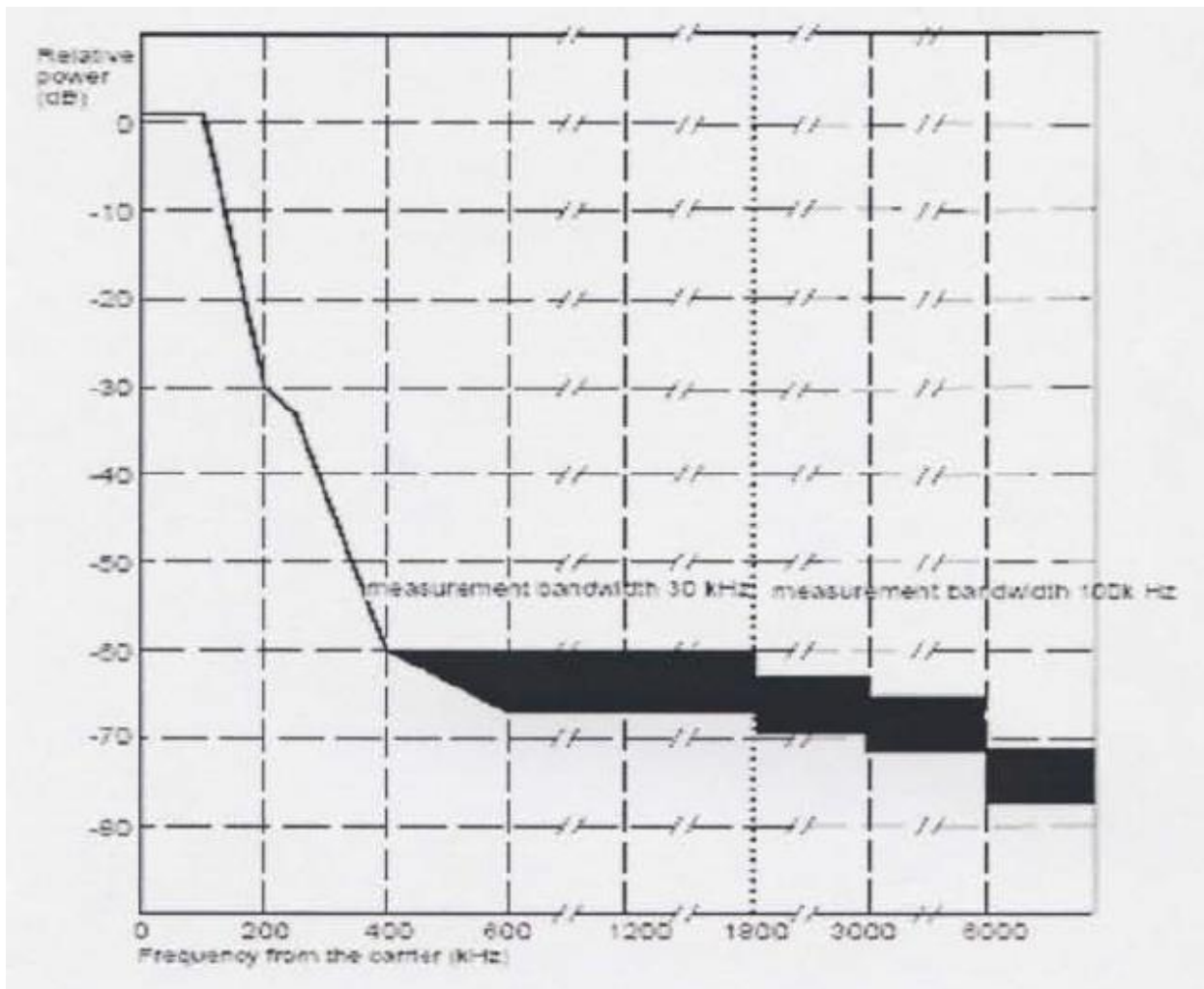
#### B. Transmitter

- a) PGSM
  1. Transmission Power
    - a. Class 1 : -
    - b. Class 2 : 8 Watt =  $(39 \pm 2)$  dBm
    - c. Class 3 : 5 Watt =  $(37 \pm 2)$  dBm
    - d. Class 4 : 2 Watt =  $(33 \pm 2)$  dBm
    - e. Class 5 : 0.5 Watt =  $(29 \pm 2)$  dBm
    - f. Frequency Band : 890 – 915 MHz
    - g. Frequency Stability :  $\pm 0.05$  ppm



- h. Spurious Emission :
  - i. < 600 KHz = - 36 dBm
  - ii. ≥ 600 kHz, < 1800 kHz = - 56 dBm
  - iii. ≥ 1800 kHz = - 51 dBm
- i. Frequency Deviation : ± (0.05 ppm x frequency canal)
- j. Output Radio Frequency Spectrum

~	100	200	250	400
≥ 39 dBm	+ 0,5	- 30	- 33	- 60
37 dBm	+ 0,5	- 30	- 33	- 60
35 dBm	+ 0,5	- 30	- 33	- 60
≤ 33 dBm	+ 0,5	- 30	- 33	- 60



Picture 1.1: Output Radio Frequency spectrum GSM 1800 MHz with GMSK modulation



### C. Receiver

- a) PGSM
  - 1. RF Level Sensitivity : - 102 dBm
  - 2. Frequency Band : 935 – 960 MHz
  - 3. Bit Error Rate (100 k bits) : 2%
  - 4. Rec. Sensitivity :  $\leq 0.5$  Mv
  - 5. Selectivity :  $\geq 70$  Db
  - 6. Frequency Stability :  $\pm 5$  ppm
  - 7. Spurious Response :  $\geq 70$  dB
- b) DCS
  - 1. Sensitivity RF Level
    - a. Power Class 1 : -100 dBm
    - b. Power Class 2 : - 102 dBm
    - c. Power Class 3 : -102 dBm
    - d. Frequency Band : 1805 – 1900 mHz
    - e. Bit Error Rate (100 k bits) : 2%
    - f. Rec. Sensitivity :  $\leq 0.5$   $\mu$ v
    - g. Selectivity :  $\geq 70$  dB
    - h. Frequency Stability :  $\pm 5$  ppm
    - i. Spurious Response :  $\geq 70$  dB
    - j. Output Radio Frequency Spectrum

### D. Voice Canal

- a) Frequency Response : -1 sd. 3 dB  
6 dB Octave 0,3 – 3 kHz
- b) Bite Rate : 13 kbps
- c) Bite Rate and FAC Encoding : 22.8 kbps

### E. Canal Control

- a) Modulation : GMSK
- b) Deviation :  $\pm 8$  kHz
- c) Transmission Rate : 10 Kbit/s



## 2. Facility Requirements:

### A. Using IMEI as safety code

This IMEI should be complied with the format 3GPPP TS. 23.003. This is the format that consists of 15 digits decimal number to identify the device if it is used on the GSM/UMTS network. The IMEI should be unique and there is no duplication of it.

IMEI Structure should be:

AA-BBBBBB-CCCCCC-D

AA-BBBBBB : TAC (Type Allocation Code) number

CCCCCC : Serial number

D : Optional or Software version

### B. Have roaming facility

## 3. Requirements to Apply SDPPI Type Approval Certification for GSM:

- A. Technical specification of the products with photo
- B. Test instruction/test SoP+Test mode
- C. Power of Attorney to us
- D. Application document FR.PM4 and FR.PM5
- E. RF and EMC Test report
- F. User manual

