

## Guide to Wideband CDMA Terminal Certification in Indonesia

### Certification in Indonesia

Certificate of approval is required for every telecommunication and ITE equipment entering Indonesian territory. The certificate of approval is issued by Directorate General of Resources and Equipment Standardization for Post and Informatics (SDPPI). Certifications are granted at the system (host) level. The certificate is valid for each type or model number of equipment while product or model series certificate or type approval is not acceptable.

### In-Country Testing

In-Country testing is required prior to certificate issuance by SDPPI. RF / Telecom Test is mandatory while EMC and safety is voluntary. The test will require 2 (two) samples of equipment and it will be conducted by local laboratories which appointed by SDPPI.

### Applicable Standards in Indonesia

Approval test will be based on national standards: KEPDIRJEN No. 173/DIRJEN/2009. The key parameters are as follows:

#### • GENERAL REQUIREMENT

Frequency Range	1920 – 1980 MHz (Uplink) 2110 – 2170 MHz (Downlink)
Tx-Rx Separation	190 MHz
Channel Spacing / Raster	5 MHz / 200 kHz
Maximum Channel Power (* measured on multi-code DPDCH transmission mode)	+33 dBm (+1/-3 dBm) for Power Class 1 +27 dBm (+1/-3 dBm) for Power Class 2 +24 dBm (+1/-3 dBm) for Power Class 3 n.a (n.a) for Power Class 4 +21 dBm (+2/-2 dBm) for Power Class 5
Frequency Error	± 0.1 ppm (device against node B in interval 3904 chip or 25 μS)

- **TRANSMITTER**

#### Adjacent Channel Leakage Power Ratio

Power Class	Adjacent Channel frequency relative to assigned channel frequency	ACRL limit
3	+5 MHz or -5 MHz	33 dB
3	+10 MHz or -10 MHz	43 dB
4	+5 MHz or -5 MHz	33 dB
4	+10 MHz or -10 MHz	43 dB

#### Spurious

Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
$9 \text{ kHz} \leq f < 150 \text{ kHz}$	1 kHz	-36 dBm
$150 \text{ kHz} \leq f < 30 \text{ MHz}$	10 kHz	-36 dBm
$30 \text{ MHz} \leq f < 1000 \text{ MHz}$	100 kHz	-36 dBm
$1 \text{ GHz} \leq f < 12.75 \text{ GHz}$	1 MHz	-30 dBm

#### Intermodulation

Interference signal frequency offset	5 MHz	10 MHz
Interference CW signal level	-40 dBc	
Intermodulation product	-31 dBc	-41 dBc

#### Error Vector Magnitude & Peak Code Domain Error

EVM	< 17.5%
PCDE	< -15dB

- **RECEIVER**

Sensitivity measurement shall be conducted on reference level of -106.7 dBm and allowable maximum BER is 0.001%

Operating Band	Unit	DPCH_Ec<REFSENS>	<REFI <sub>or</sub> >
I	dBm/3.84 MHz	-117	-106.7

NOTE 1 For Power class 3 and 3bis shall be at the maximum output power  
NOTE 2 For Power class 4 this shall be at the maximum output power

### Documentations Requirements

1. Completed Application Forms: Application Form (FR.PM.5), Inspection Form (FR.PM.4), Power of Attorney to *TEKNOKRAT* Indonesia
2. Technical Constructive File: General information, Installation guide, User manual, BOM, Hardware description, Block diagram, Assembly Top/Bottom, Conducted test report (RF / Telecom and EMC & Safety test)
3. Copy of Certificates of Compliance (from other country)

TEKNOKRAT's services have been specifically designed to support manufacturers, test laboratories and consultants seeking type approval in Indonesia for telecommunications equipment and other ITE. The world's leading telecommunications equipment vendors already recognize the value in our service and entrust their approvals in Indonesia to us. We would be delighted to have the opportunity to support your telecom approvals.

further information please contact: [customer@typeapproval.or.id](mailto:customer@typeapproval.or.id)