

Guide to Radio Frequency Identification (RFID) 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

RFID approval test will be based on national standard: KEPDIRJEN No. 214/DIRJEN/2005 for RFID operated in 13.56 MHz, with the key parameters are as follows:

- Radiated Emission Limits

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measuring Distance (m)
13.567 – 30.0	□5	10

- Error Frequency shall be below 50 KHz
- The transmission power shall be below 10 mW (ERP)

Another kind of RFID approval test will be based on national standard: KEPDIRJEN No. 221/DIRJEN/2007 for RFID operated in 923 – 925 MHz, with the key parameters are as follows:

- Radiated Emission Limits

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measuring Distance (m)
923 – 925	500	1

- Tag utilized shall be passive tags
- Total bandwidth utilization shall be 2 MHz with maximum hopping channel 500 kHz

- The transmission power shall be below 2000 mW (ERP)
- Modulation technique: Frequency Hopping Spread Spectrum (FHSS)
- Transmitter antenna shall be embedded with +/- 6 dBi, 5 Ω
- Error frequency: +/- 20 ppm from center frequency
- Communication ports: UART, RS-232, RS-485, USB, Serial, Parallel, LAN, WLAN, WAN
- Receiver Sensitivity: max 28 dB μ V/m or -96 dBm, with impedance input 50 Ω

Documentations Requirements

1. Completed Application: 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, Test report conducted in any ISO/IEC 17025 accredited lab (RF or Telecom, EMC and Safety test report, either EU and FCC based are acceptable)
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.

for further information please contact: customer@typeapproval.or.id