

규격서

장비명	Item No.	정부물품 분류번호 (10자리)	품 명	단 위	수 량
스펙트럼분석기	1	4111530301	스펙트럼분석기(5G휴대)	대	00

I. End-user's Use

본 장비는 무선국검사를 정밀하게 측정하기 위한 장비로서 각종 RF 장비를 측정·분석 평가하고, "무선국 및 전파응용설비의 검사업무 처리기준" 등에서 정한 무선국 검사업무에 적합하여야 한다.

II. Configurations of Goods

1. Main body

1.1. Spectrum Analyzer

2. Accessories

2.1. DC Adapter

2.2. 5G NR Test Application

2.2.1 5G NR FR1(3.5 GHz band), FR2(28 GHz band)

2.3. LTE Test Application

2.4. GPS Antenna

2.5. Case bag (soft)

2.6. Harmonic mixer(일체형 일 경우 제외 가능)

2.7. RF 5G(3.5 GHz, 28 GHz band) cable : 1EA

2.8. 예비 배터리 : 1EA

III. Performance and Specification

A. Features and configurations

1. System check : Self Test

2. Usable Interface : more than USB 2.0 2 ports, WIFI, Ethernet

3. Total Weight : Less than 5.5 kg(With Battery)

- 4. Display Size : more than 6 inch(640x480 resolution)
- 5. Operation Temperature : more than -10°C to +55°C
- 6. Power Supply : more than 110 V ~ 220 V AC, 60 Hz

B. Specifications

1. Frequency Specification

- 1.1. Frequency Range : 30 kHz ~ 32 GHz(Mixer 사용 가능) or more
- 1.2. Frequency Aging Rate/Year : $\pm 1 \times 10^{-6}$ or less
 - 1.2.1 Frequency Reference Accuracy : ± 0.7 ppm (25°C \pm 25°C)+aging or less
 - 1.2.2 GPS Reference Accuracy : $< \pm 0.025$ ppm (GPS on) or less
- 1.3. FFT mode
- 1.4. Max Demodulation Bandwidth : 100 MHz or more
- 1.5. Resolution bandwidth(RBW) : 10 Hz ~ 5 MHz or more
- 1.6. Video bandwidth(VBW) : 1 Hz ~ 5 MHz or more
- 1.7. SSB Phase Noise : @Fc = 1 GHz, RMS Detector(typ)

10 kHz < -106 dBc/Hz

100 kHz < -110 dBc/Hz

1 MHz < -116 dBc/Hz

2. Measurement Specification

- 2.1. Measurement range : DANL ~ +20 dBm or more
- 2.2. Measurement Level Accuracy : ± 2 dB (± 0.5 dB typ) or less

3. Amplitude Specifications

- 3.1. Amplitude Accuracy : ± 1 dB(typ.) or less
- 3.2. Absolute amplitude accuracy(@ 50 MHz) : ± 0.5 dB(typ.) or less

4. Intermodulation

- 4.1. Second harmonic distortion : -54 dBc @ 50 MHz or less
 - 60 dBc or less @ ≤ 4 GHz
 - 75 dBc or less @ ≤ 26 GHz

- 4.2. TOI(Third-order intercept point) : +8.5 dBm (typ) or more @ ≤ 26 GHz
- 5. DANL(Display average noise level) : -142 dBm(typ) or less @ 10 MHz to 4 GHz
 - 139 dBm(typ) @ 4 GHz to 14 GHz or less
 - 138 dBm(typ) @ 14 GHz to 20 GHz or less
 - 132 dBm (typ) (with mixer) @ < 32 GHz or less
- 5.1 Preamp on : -160 dBm(typ) @ 10 MHz to 4 GHz or less
 - 159 dBm(typ) @ 4 GHz to 14 GHz or less
 - 157 dBm(typ) @ 14 GHz to 20 GHz or less
 - 140 dBm(typ) (with mixer) @ < 32 GHz or less
- 6. Attenuator Range : (0 ~ 40) dB or more , 5 dB Step or less
- 7. Reference level Range : -150 dBm ~ +30 dBm or more
- 8. RF Input
 - 8.1. Maximum Continuous Input : +27 dBm or more
 - 8.2. VSWR : 1.7 : 1 or less (10 MHz to 20 GHz), 2.1 : 1 or less (> 20 GHz)
 - 8.3 input type : 2.92 mm or 3.5 mm
- 9. Battery Operation : 2 hrs or more
- 10. Sweep Time : 1 μ s to 60 ms or more
 - 10.1. Sweep Trigger : Free run, External, Video, GPS or more