JRC

CDMA/AMPS MOBILE STATION TESTER

NJZ-1800BJ

Numerous product features ——

very affordable test set for
mobile-phone service and repair

- Complete CDMA and CDMA2000 1x coverage to be able to test CDMA mobile phones no matter where you are in single test set with upgrade capabilities for 1xEV-DO testing
- Get high-performance, consistent,and reliable test results comparable to a manufacturing test solution, with signal-level and power-measurement accuracy of ±0.6dB
- Perform variety of automated and manual service tasks, from automated go/no-go verification testing to module level repair and calibration
- All at a great price — best performance in its price class

JRC Japan Radio Co., Ltd.

Specifications Summary

- **CDMA Cellular (US, Korea, and Japan), CDMA PCS (US and Korea), and AMPS Cellular coverage in one instrument.**
- **Built-in automatic test : 3 channels tests at a radio system and automatic handoff from CDMA to AMPS (Option)**

CDMA call processing functionality :

Radio system support :
IS-2000(US, Korea, and Japan), IS-95A(CellIr/IS95A), TSB-74(CellIr/TSB74), ARIB T53 (CellIr/T53), J-STD-008 (PCS US, PCS Korea P0, and PCS Korea P1)

Handoff support :
Softer handoff between two sectors A and B
Hard handoff between any two RF channels
Multi-mode hard handoff between CellIr/IS95A and PCS US, between CellIr/TSB74 and PCS US, and from IS-2000 to IS95A.

CDMA signal generator

Frequency Range :
869MHz to 894MHz (CellIr/IS95A and CellIr/TSB74), 832MHz to 834MHz, 843MHz to 846MHz, and 860MHz to 870MHz (CellIr/T53), 1805MHz to 1870MHz (PCS Korea P0 and P1), 1930MHz to 1990MHz (PCS US)
Accuracy : Same as reference oscillator

Amplitude :
Range : -110dBm to -20dBm
Accuracy : ±1.0dB at < = -50dBm
±2.0dB at > -50dBm
Resolution : 0.1dB

CDMA modulation :
Type : QPSK based on IS-95A and cdma2000
Residual rho : > = 0.912 (typically > 0.95)
Data generation patterns : PN9 for loopback, Single Byte Pattern for TDSO
Power control bit : Always up, Always down, Open loop

CDMA analyzer

Input frequency range :
824MHz to 849MHz (CellIr/IS95A and CellIr/TSB74), 887MHz to 889MHz, 898MHz to 901MHz, and 915MHz to 925MHz (CellIr/T53), 1715MHz to 1780MHz (PCS Korea P0 and P1), 1850MHz to 1910MHz (PCS US)

CDMA power measurement :
Range : -60dBm to +39dBm
Accuracy :
±1dB (typically ±0.6dB) at > = 0dBm
±2dB (typically ±1.2dB) at > = -40dBm and < 0dBm
±3dB (typically ±1.8dB) at < -40dBm
Resolution : 0.2dB

CDMA modulation measurement
Input range : -20dBm to +39dBm
Modulation type : OQPSK based on IS-95A
Rho measurement :
Single Code Rho : IS-95 and cdma2000 RC1,2
Multi Code Rho : cdma2000 RC3,4
Range : 0.9 to 1.0
Accuracy : ±0.01 at > = 0.95
±0.02 at < 0.95
Resolution : 0.001

Frequency error measurement:
Range : ±10kHz
Accuracy :
±(30Hz + frequency reference accuracy) at average of 4 measurements
Resolution : 1Hz

CDMA frame error rate measurement (loopoback)
Method :
Data loop back at full rate per service option 002 or Service Option 009 supporting confidence limits (95% or off) as outlined in TIA/EIA-98A Appendix A.1.
Range : 0% to 100%
Resolution : 0.00001%
Displayed results : Measured FER, number of errors, number of frames tested, and one of the following: pass, fail, or ---- (pass/fail not applicable)

CDMA frame error rate measurement (TDSO) :
Method : Test Data Service Option per Service Option 32 supporting confidence limits (95% or off)
Range : 0% to 100%

DC power supply :

Range : 3VDC to 12VDC at 0.1VDC step , (Max. 1A)

DC current measurement :

Range : 0mA to 1000mA in 1mA Resolution
Accuracy : ±3mA at < = 100mA , ±30mA at > 100mA

RF Input/Output

Maximum safe reverse power : +41dBm (12.6W, CW; supplemental characteristic)
Impedance : 50 ohm nominal, Input SWR : < 1.5:1
Connector : N-type (f)

Reference oscillator :

Frequency : 10MHz
Frequency accuracy : ±[(Time since calibration × Aging rate) + Temperature effects + Accuracy of calibration]
Aging rate : ±0.1 ppm per year
Temperature stability : ±0.1 ppm at 0℃ to 40℃
Reference output level : +3dBm, 50 ohm, supplemental characteristic
Reference input level : 0dBm to 10dBm, 50 ohm, supplemental characteristic
Connector : BNC (f) connector

General specifications

Size : 350(W) × 150(H) × 400(D)mm
Weight : < 15kg
Operating temperature : 0℃ to +40℃
Storage temperature : -20℃ to +60℃
Operating humidity : 15 %RH to 95 %RH @ +40℃
Power : 88VAC to 264VAC, 47Hz to 63Hz, < 250VA
Safety : European Council Directive 73/23/EEC
IEC 61010-1 : 1990+A1+A2 / EN 61010-1 : 1993+A2
CAN/CSA C22.2 No. 1010.1-92
EMC : European Council Directive 89/336/EEC
EN 61326-1 : 1997 + A1
CISPR 11 : 1997+A1 / EN 55011 : 1998 Group 1, Class A
Altitude : < 2000 meters

- Specifications may be subject to change without notice

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