#### ● R3267 Specifications

#### **Frequency**

Frequency range: 100 Hz to 8 GHz

Frequency	Frequency band	Harmonic order N	
100 Hz to 3.5 GHz	0	1	
1.6 to 3.5 GHz	1	1	
3.5 to 7 GHz	2	1	
6.9 to 8 GHz	3	1	

Built-in YIG tuning pre-selector at 1.6 to 8 GHz

#### Frequency span

Range	20 Hz to 8 GHz, Zero span
Accuracy	±1%

#### Signal purity (dBc/Hz)

		Offset		
Frequency	1 kHz	10 kHz	100 kHz	1 MHz
100 Hz to 1 GHz	-100	-113	-118	-135
1 to 2.6 GHz	-100	-110	-118	-135
2.6 to 8 GHz	-98	-108	-112	-135

#### Input attenuator range

0 to 75 dB (5 dB steps)

#### **Dynamic range**

#### Average noise level

(Resolution bandwidth 100 Hz, input ATT 0 dB, video bandwidth 1 Hz)

Frequency band	Average noise level
0	-90 dBm
0	-100 dBm
0	-101 dBm
0	-125 dBm
0	- (130 - f (GHz)) dBm
1	-125 dBm
2	-125 dBm
3	-125 dBm
	0 0 0 0 0 0 1 2

#### Average noise level

(Resolution bandwidth 1 Hz (digital), input ATT 0 dB)

Frequency	Frequency band	Average noise level
10 kHz	0	-120 dBm
100 kHz	0	-121 dBm
1 MHz	0	-141 dBm
10 MHz to 3.5 GHz	0	- (150 - f (GHz)) dBm
1.6 to 3.5 GHz	1	-145 dBm
3.5 to 7 GHz	2	-145 dBm
6.9 to 8 GHz	3	-145 dBm

### 1 dB gain compression

10 to 100 MHz	-3 dBm
100 MHz to 8 GHz	0 dBm

#### Spurious response

2nd-order harmonics distortion

	Frequency	Frequency band	Mixer level
<-70 dBc	10 MHz to 3.5 GHz	0	-30 dBm
<-90 dBc	> 1.6 GHz	1, 2, 3	-10 dBm

#### 2-tone 3rd-order intermodulation distortion

(When using the digital filter, distortion measurement should be performed on condition that Df >5 kHz)

	Frequency	Frequency band	Mixer level
<-70 dBc	10 to 100 MHz	0	-30 dBm
<-80 dBc	100 MHz to 1 GHz	0	-30 dBm
<-85 dBc	1 to 3.5 GHz	0	-30 dBm
<-90 dBc	1.6 to 8 GHz	1, 2, 3	-30 dBm

#### Image/multiple/out-band response

<-70 dBc (10 MHz to 8 GHz)

Residual response (No input, input ATT 0 dB, 50  $\Omega$  termination)

<-100 dBm	1 MHz to 3.5 GHz
<-90 dBm	300 kHz to 8 GHz

#### **Amplitude accuracy**

#### Frequency response

(Input ATT 10 dB, after tuning pre-selector for bands 1 to 3)

Frequency	Frequency band	In-band flatness (relative value)
100 MHz to 3.5 GHz	0	±1.5 dB
50 MHz to 2.6 GHz	0	±1.0 dB
1.6 to 3.5 GHz	1	±1.5 dB
3.5 to 7.0 GHz	2	±1.5 dB
6.9 to 8.0 GHz	3	±1.5 dB
Additional error by band switching		±0.5 dB
Flatness with 30 MHz calibration signal as reference		±3.0 dB (100 Hz to 8.0 GHz)

#### Input ATT switching error

(Reference 10 dB at 15 to 75 dB)

Frequency range	Error
100 Hz to 8 GHz	±1.1 dB/5 dB steps, max. 2.0 dB

#### ● R3273 Specifications

#### **Frequency**

Frequency range: 100 Hz to 26.5 GHz

26.5 to 60 GHz (with external mixer; tuning

possible up to 325 GHz)

Frequency	Frequency band	Harmonic order N
100 Hz to 3.5 GHz	0	1
3.5 to 7.5 GHz	1	1
7.4 to 15.4 GHz	2	2
15.2 to 26.5 GHz	3	4

Built-in YIG tuning pre-selector at 3.5 to 26.5 GHz

#### Frequency span

Range	20 Hz to 26.5 GHz, Zero span
Accuracy	±1%

#### Signal purity (dBc/Hz)

	Offset			
Frequency	1 kHz	10 kHz	100 kHz	1 MHz
100 Hz to 1 GHz	-100	-113	-118	-135
1 to 2.6 GHz	-100	-110	-118	-135
2.6 to 7.5 GHz	-98	-108	-112	-135
7.4 to 15.4 GHz	-89	-102	-106	-129
15.2 to 26.5 GHz	-83	-96	-100	-123

#### **Input ATT range**

0 to 70 dB (10 dB steps)

#### **Dynamic range**

#### Average noise level

(Resolution bandwidth 100 Hz, input ATT 0 dB, video bandwidth 1 Hz)

Frequency	Frequency band	Average noise level
1 kHz	0	-90 dBm
10 kHz	0	-100 dBm
100 kHz	0	-101 dBm
1 MHz	0	-125 dBm
10 MHz to 3.5 GHz	0	- (130 - f (GHz)) dBm
3.5 to 7.5 GHz	1	-125 dBm
7.4 to 15.4 GHz	2	-122 dBm
15.2 to 22.0 GHz	3	-120 dBm
22.0 to 26.5 GHz	3	-117 dBm

#### Average noise level

(Resolution bandwidth 1 Hz (digital), input ATT 0 dB)

Frequency	Frequency band	Average noise level
10 kHz	0	-120 dBm
100 kHz	0	-121 dBm
1 MHz	0	-141 dBm
10 MHz to 3.5 GHz	0	- (150 - f (GHz)) dBm
3.5 to 7.5 GHz	1	-145 dBm
7.4 to 15.4 GHz	2	-142 dBm
15.2 to 22.0 GHz	3	-140 dBm
22.0 to 26.5 GHz	3	-137 dBm

#### 1 dB gain compression

10 to 100 MHz 100 MHz to 3.5 GHz	-3 dBm 0 dBm	
3.5 to 7.5 GHz	-10 dBm	
7.5 to 26.5 GHz	-3 dBm	

#### Spurious response

2nd-order harmonics distortion

	Frequency range	Frequency band	Mixer level
<-70 dBc	10 MHz to 3.5 GHz	0	-30 dBm
<-100 dBc	>3.5 GHz	1, 2, 3	-10 dBm

#### 2-tone 3rd-order intermodulation distortion

(When using the digital filter, distortion measurement should be performed on condition that Df >5 kHz)

	Frequency range	Frequency band	Mixer level
<-70 dBc	10 to 100 MHz	0	-30 dBm
<-80 dBc	100 MHz to 1 GHz	0	-30 dBm
<-85 dBc	1 to 3.5 GHz	0	-30 dBm
<-70 dBc	3.5 to 7.5 GHz	1	-30 dBm
<-75 dBc	7.5 to 26.5 GHz	2, 3	-30 dBm

#### Image/multiple/out-band response

- <-70 dBc (10 MHz to 18 GHz)
- <-60 dBc (10 MHz to 23 GHz) <-50 dBc (10 MHz to 26.5 GHz)

#### Residual response (No input, input ATT 0 dB, 50 $\Omega$ termination)

	The state of the s
<-100 dBm	1 MHz to 3.5 GHz
<-90 dBm	300 kHz to 26.5 GHz

#### **Amplitude accuracy**

Frequency response (Input ATT 10 dB, after tuning pre-selector, for bands 1 to 3)

Frequency	Frequency band	In-band flatness (correlation value)
100 Hz to 3.5 GHz	0	±1.5 dB
50 MHz to 2.6 GHz	0	±1.0 dB
3.5 to 7.5 GHz	1	±1.5 dB
7.4 to 15.4 GHz	2	±3.5 dB
15.4 to 26.5 GHz	3	±4.0 dB
Additional error by bar	nd switching	±0.5 dB
Flatness with 30 MHz calibration signal as reference		±5.0 dB (100 Hz to 26.5 GH:

#### Input ATT switching error (Reference 10 dB, at 20 to 70 dB range)

Frequency range	Error
100 Hz to 12.4 GHz	±1.1/10 dB steps, max. 2.0 dB
12.4 to 18 GHz	±1.3/10 dB steps, max. 2.5 dB
18 to 26.5 GHz	±1.8/10 dB steps, max. 3.5 dB

#### ●R3267/3273 Common Specifications

#### Frequency read accuracy

± (Reading of Frequency x Frequency reference accuracy + Span x Span accuracy + 0.15 x Resolution bandwidth + 10 Hz)

#### Marker frequency counter (SPAN <1 GHz)

Marker frequency counter (SPAN < 1 GHZ)	
Resolution	1 Hz to 1 kHz
Accuracy (S/N >25 dB)	± (Marker frequency x Frequency reference accuracy + 5 Hz x N + 1LSD)
Delta counter	± (∆ Frequency x Frequency reference accuracy + 10 Hz x N + 2LSD)

Frequency reference source	
Stability  Temperature stability	Aging/day: ±3 x 10 <sup>8</sup> , Aging/year: ±1 x 10 <sup>-7</sup> Warm up (nominal) 3 minutes, ±5 x 10 <sup>8</sup> (Reference: after 60 minutes) ±1 x 10 <sup>-7</sup> (0 to 40 °C) (with reference to the frequency when temperature is 25 °C ±2 °C)
OPT.21 Stability Temperature stability	Aging/day: ±5 x 10 <sup>-3</sup> , Aging/year: ±8 x 10 <sup>-8</sup> Warm up (nominal) 3 minutes, ±5 x 10 <sup>-8</sup> (Reference: after 60 minutes) ±5 x 10 <sup>-8</sup> (0 to 40°C) (with reference to the frequency when temperature is 25°C ±2°C)
OPT.22* <sup>1</sup> Stability  Temperature stability	Aging/day: ±3 x 10 <sup>-10</sup> , Aging/year: ±2 x 10 <sup>-8</sup> ±1 x 10 <sup>-8</sup> /30 minutes, ±5 x 10 <sup>-9</sup> /60 minutes warm up (nominal) (Reference: after 24 hours) ±5 x 10 <sup>-9</sup> (0 to 50°C) (with reference to the frequency when temperature is +25°C)
OPT.23 <sup>*1</sup> Stability  Temperature stability  Warm-up	(Rubidium frequency reference source) Frequency accuracy: ±5 x 10°, Aging/month: ±1 x 10°° ±1 x 10° (0 to 40°C, with reference to the frequency when temperature is +25°C) ±1 x 10°/15 minutes

<sup>\*1</sup> Probe power cannot be used when installing OPT.22 and OPT.23.

#### Frequency stability

	<3 Hz x Np-p/0.1 sec. Same as reference value	N: Harmonics order
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(After 60 minute warm-up)

#### Resolution bandwidth (3 dB)

Range	1 Hz to 10 MHz (1, 3, 10 sequences), 5 MHz
Accuracy	±25%: RBW = 3 MHz, 5 MHz ±15%: RBW = 100 Hz to 1 MHz ±25%(25 °C ±10 °C): RBW = 30 Hz ±10%: RBW = 1 to 100 Hz (digital filter)
Selectivity	<15:1 (RBW = 100 Hz to 5 MHz) <20:1 (RBW = 30 Hz) <5:1 (RBW = 1 to 100 Hz, digital filter)
Video bandwidth	
Range	1 Hz to 10 MHz (1, 3, 10 sequences), 5 MHz

#### Frequency sweep

Sweep time	Zero span: 1 µs to 1000 s Span >0 Hz: 20 ms to 1000 s
Accuracy	±3% (When using the digital filter, dynamic range measurement is not available)
Trigger	Free run, line, video, external, IF

#### **Gated sweep**

-	
Gate position/resolution	100 ns to 1 s/100 ns
Gate value/resolution	1 μs to 1 s/100 ns
Trigger	IF (Mixer input -40 dBm or more), external trigger, external gate

#### Delayed sweep

Delay time/resolution	100 ns to 1 s/100 ns

#### **Amplitude range**

#### Measurement range

+30 dBm, to average noise level

#### **Maximum safety input**

Average continuous power (input ATT > 10 dB)	+30 dBm (1 W)
	0 V

#### Display range: 10 x 10 div.

Log mode	10, 5, 2, 1, 0.5 dB/div
Linear mode	10% of the reference level/div.

#### Reference level range

Log	-140 to +60 dBm (0.1 dB steps)
Linear	22.4 nV to 223 V
	(steps of about 1% of the full scale)

#### Calibration signal accuracy (30 MHz)

-10 dBm ±0.3 dB

#### IF gain error

 (After auto calibration)

 0 to -50 dBm
 ±0.5 dB

 0 to -80 dBm
 ±0.7 dB

#### Scale display accuracy

(After automatic calibration)

Log	0 to -90 dB Max. ±0.85 dB ±0.2 /1 dB
Linear	±5% of reference level

#### Resolution bandwidth switching error

(Reference: RBW 300 kHz, after automatic calibration)

<±0.3 dB (RBW = 100 Hz to 5 MHz) <±1.0 dB (RBW = 30 Hz) <±0.5 dB (RBW = 1 to 100 Hz, digital filter)

#### Total level accuracy

Accuracy (typ.)	±1.0 dB Frequency range: 50 MHz to 2.6 GHz (frequency band 0) Resolution bandwidth: 3 kHz to 1 MHz Frequency span: <resolution -50="" 0="" 10="" 20="" 30="" ambient="" att:="" bandwidth="" db="" dbm="" detection="" display:="" input="" level:="" log="" mode:="" reference="" sample="" scale="" temperature:="" th="" to="" x="" °c<=""></resolution>
	S/N: 20 dB or more

nput/Output	
RF input	
Connector	N-type female (R3273 only: SMA convertible)
Impedance	50 $\Omega$ (nominal)
VSWR (Input ATT >10 dB, with set frequency)	<1.5:1 (<3.5 GHz) (nominal) <2.1:1 (>3.5 GHz) (nominal)
Calibration signal output	
Connector	BNC female, front panel
Frequency	30 MHz x (1 ± Frequency reference
Impedance	determined) 50 $\Omega$ (nominal)
Amplitude	-10 dBm ±0.3 dB
10 MHz frequency referen	ce output
Connector	BNC female, rear panel
Output impedance	50 $\Omega$ (nominal)
Output frequency accuracy	10 MHz x Frequency reference accuracy
Output amplitude range	0 dBm ±5 dB
10 MHz frequency referen	ce input
Connector	BNC female, rear panel
Input impedance	50 $\Omega$ (nominal) -5 to +5 dBm
Input amplitude range	-5 tO +5 QBM
Probe power supply	
±12.6 V (100 mA) (nominal)	
21.4 MHz IF output	
Connector	BNC female, rear panel
Impedance	50 $\Omega$ (nominal)
421.4 MHz IF output	
Connector	BNC female, rear panel
Impedance	50 Ω (nominal)
1st LO output (R3273 only	)
Connector	SMA female, front panel
Video output	
Connector	VGA (15-pin, female), rear panel,
l	Equivalent to 640 x 480 dot VGA
X-axis output	
Connector	BNC female, rear panel
Connector Impedance	1 k $\Omega$ (nominal), DC-coupled
Connector Impedance Amplitude	•
Connector Impedance Amplitude Y-axis output	1 kΩ (nominal), DC-coupled Approx5 to +5 V
Connector Impedance Amplitude  Y-axis output Connector	1 kΩ (nominal), DC-coupled Approx5 to +5 V  BNC female, rear panel
Connector Impedance Amplitude  Y-axis output  Connector Impedance	1 k $\Omega$ (nominal), DC-coupled Approx5 to +5 V BNC female, rear panel 220 $\Omega$ (nominal)
Connector Impedance Amplitude  Y-axis output Connector	1 kΩ (nominal), DC-coupled Approx5 to +5 V  BNC female, rear panel
Connector Impedance Amplitude  Y-axis output  Connector Impedance	1 k $\Omega$ (nominal), DC-coupled Approx5 to +5 V  BNC female, rear panel 220 $\Omega$ (nominal) Approx. 2 V for full scale
Connector Impedance Amplitude  Y-axis output  Connector Impedance Amplitude	1 k $\Omega$ (nominal), DC-coupled Approx5 to +5 V  BNC female, rear panel 220 $\Omega$ (nominal) Approx. 2 V for full scale
Connector Impedance Amplitude  Y-axis output  Connector Impedance Amplitude  External trigger input	1 k $\Omega$ (nominal), DC-coupled Approx5 to +5 V  BNC female, rear panel 220 $\Omega$ (nominal) Approx. 2 V for full scale (with 10 dB/div.)

External gate input	
Connector	BNC female, rear panel
Impedance	10 kΩ (nominal), DC-coupled
Sweep stop	During LOW on TTL level
Sweep	During HIGH on TTL level
Trigger output	
Connector	BNC female, rear panel
Amplitude	TTL level
I/O	
GPIB	IEEE-488 bus connector, rear panel
RS232	D-SUB 9-pin, rear panel
Printer	D-SUB 25-pin, rear panel
Extended I/O port	D-SUB 25-pin, rear panel
FDD	3.5-inch floppy disk drive
Direct print	
Output by ESC/P, PCL,	or ESC/P raster commands
General Specificat	ions
Temperature	

	Te	mp	er	atu	re
--	----	----	----	-----	----

Operating temperature	0 to 50°C
Storage temperature	-20 to +60°C
Humidity	85% RH or less (no condensation)

#### Power supply: Automatically selects between 100 VAC and 220 VAC

	100 VAC	220 VAC
Voltage	100 V - 120 V	220 V - 240 V
Power consumption	300 VA or less	300 VA or less
Frequency	50/60 Hz	50/60 Hz

#### Mass

18 kg or less (excluding options, front cover, and accessories)

#### Dimensions

Approx. 177 (H) x 350 (W) x 420 (D) mm (without handle, feet, and front cover)

#### Accessories

Product name	Model name	
Power cable Input cable	A01412 A01036-0150	
Converter adapter	JUG-201A/U	
Power fuse Front cover	T6.3A/250V	

Options		OPT.10 Level tuning (for PDC-B	S)
OPT.02 Memory card drive		Calibration frequency range:	810 to 959.45 MHz
Memory card drive:	(Exchangeable with floppy disk drive) 2-slot, front panel Connector; JEIDA-Ver. 4.2/PCMCIA2.1	Level measurement range: Level measurement accuracy Calibration error: Measurement error:	1420 to 1518 MHz +15 to -30 dBm ±0.2 dB or less ±0.3 dB or less
OPT.08 Rx control When connected to the R3560		Wedsurement error.	(at 1 dB, 2 dB/DIV, 25°C, Input ATT 30 dB, RBW 30 kHz, 100 kHz
Signal source parameter settings:	Output frequency, output level, output On-Off, modulation parameters	During average power	ZERO SPAN mode, TOTAL GAIN after automatic calibration)
BER measurement & parameter set	<u> </u>	measurement mode: Temperature-induced	±0.5 dB or less (5 dB, 10 dB/DIV, 25°C)
BER measurement:	Average frequency, bit length, clock polarity, data polarity, measurement interval, TCH frame timing signal	TOTAL GAIN calibration error: Calibration cycle:	0.015 dB/°C 6 months
Receiver sensitivity measurement 8		OPT.11 3GPP level calibration (	
Receiver sensitivity measurement		Calibration frequency range: Level measurement range: Level measurement accuracy	1848.3 to 2171.7 MHz +25 to -60 dBm
When connected to the R3561		Measurement error:	±0.4 dB or less (+25 to -50 dBm) ±0.6 dB or less (-50 to -60 dBm)
Signal source parameter settings:	Output frequency, output level, output On-Off, modulation On-Off, modulation parameters, I/O clock	Measurement linearity: Temperature-induced	(at 25°C, after GAIN CAL, ATT = AUTO, Min ATT = ON) ±0.2 dB or less (0 to -30 dB)
CAL/ADJ function:	AWGN CAL execution, modulator CAL execution,	GAIN CAL error: Calibration cycle:	0.015 dB/°C 1 year
Self Test:	10 MHz Ref Adjust value setting Self Test execution	OPT.16/17 External mixer OPT3273+16	
When connected to the R3562		1 dB gain compression:	26.5 to 40 GHz; 0 dBm (typ.)
Signal source parameter settings:	Output frequency, output level, output On-Off, modulation On-Off, modulation parameters, I/O clock	Max. input level: Frequency response:	26.5 to 40 GHz; +15 dBm (typ.) 26.5 to 40 GHz; ±3 dB (typ.) (after reading frequency response compensated data)
BER measurement &	· · · · · · · · · · · · · · · · · · ·	Average display noise level:	26.5 to 40 GHz; -90 dBm (typ.) (RBW 1 kHz, VIDEO BW 10 Hz)
parameter settings:	BER settings, data, bit length, clock polarity, data polarity	OPT3273+17	
CAL/ADJ function:	Modulator CAL execution, 10 MHz Ref Adjust value setting	1 dB gain compression: Max. input level: Frequency response:	40 to 60 GHz; 0 dBm (typ.) 40 to 60 GHz; +15 dBm (typ.) 40 to 60 GHz; ±5 dB (typ.)
Self Test:	Self Test execution	quandy responden	(after reading frequency response compensated data)
OPT.09 CDMA test source control R3561L parameter setting	ol (for R3267)	Average display noise level:	40 to 60 GHz; -90 dBm (typ.) (RBW 1 kHz, VIDEO BW 10 Hz)
Output level setting:	Range; 10 to 2300 MHz, Resolution; 1 Hz	OPT.25 Reference Converter	
Output level setting:  Modulation:	Output; ON/OFF, Range; -125 to +6 dBm Resolution; 0.1 dB, unit; dBm, dBµ ON/OFF	10MHz frequency reference input Frequency: Input amplitude range:	10 MHz, 15 MHz, 19.6608 MHz -5 to +5 dBm
	Reverse/Forward Link switching, Data rate switching; 9600/4800/2400/	OPT.74 Tracking generator	
	1200/14400/7200/3600/1800 bps Data source switching;	Output frequency:	100 kHz to 3.6 GHz (START FREQ <3.5 GHz)
	ZEROS/RANDOM/RANDERR/USER (*Written by user via GPIB)	Output level	
	PN offset; 0 to 511 (x 64 chips)	Setting range: Setting resolution:	0 to -50 dBm 0.1 dB
	Burst; ON/OFF Even Second In; ENABLE/DISABLE	Output level flatness:	<±3 dB
Reference standard:	Equalizing Filter; ON/OFF Synthe reference input switching;	Output level accuracy:	(100 kHz to 3.6 GHz, relative value) <±1 dB (30 MHz, -10 dBm, 25 ±10°C)
	19.6608/15/10/9.8304/5/4.9152/ 2.4576/2/1.2288/1 MHz	Vernier accuracy: Level sweep width	<0.5 dB/1 dB
	CDMA Time Base input switching; 19.6608/15/10/9.8304/5/4.9152/ 2.4576/2/1.2288/1 MHz/INTERNAL	setting range:	(0 to -10 dBm) - ATT (ATT = 0 to 40 dB/10 dB Step)
Save/recall function: External interface: 1st local output:	Max. 10 setting GPIB 4241.4 to 6531.4 MHz, 0 dBm or more	Spurious output Harmonic: Non-harmonic:	<-15 dBc (at 0 dBm output) <-25 dBc (at 0 dBm output)
* 21.4 MHz IF output terminal is erased	SMA connector	TG Leakage 100 kHz to 3.0 GHz: 3.0 to 3.6 GHz:	<-110 dBm <-100 dBm
		TG Output Impedance:	50 Ω (nominal)
		VSWR (at -10 dBm output, nominal):	<1.5 (100 kHz to 3.6 GHz)

<1.5 (100 kHz to 3.6 GHz)

(at -10 dBm output, nominal):

Main units	
R3267	Spectrum Analyzer
R3273	Spectrum Analyzer
Options	
OPT.01	Digital Modulation Analysis Option
OPT.61	cdmaOne (IS-95) Analysis Software
OPT.62	W-CDMA (3GPP) Analysis Software
OPT.63	GSM/DECT Analysis Software
OPT.64	PDC/PHS/IS-136 Analysis Software
OPT.65	cdma2000 Analysis Software
OPT.66	Bluetooth Analysis Software
OPT.73	AMPS/JTACS/NTACS Analysis Software
OPT.02	Memory Card Drive
OPT.08	Rx Control (for R3560/3561/3562)
OPT.09	CDMA Test Source Control
	(for R3561L and R3267 only)
OPT.10	Level Tuning (for PDC-BS)
OPT.11	3GPP Level Calibration (Power Meter Function)
OPT.16	External Mixer (26.5 to 40GHz, R3273 only)
OPT.17	External Mixer (40 to 60GHz, R3273 only)
OPT.21	High Stability Frequency Reference Source
	(±5 x 10 <sup>-9</sup> /day)
OPT.22	High Stability Frequency Reference Source
	(±3 x 10 <sup>-10</sup> /day)
OPT.23	Rubidium Frequency Reference Source
	(±1 x 10 <sup>-10</sup> /month)
OPT.25	Reference Converter
OPT.74	Tracking Generator
Accessories	
R16081	Transit Case

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Specifications may change without notification.



Rear view for R3267/3273

# For Receiver Characteristics Tests of W-CDMA (3GPP)/cdma2000 (3GPP2) Base and Mobile Stations (User Equipment)

#### **R3562 Receiver Test Source**



#### **Features**

- Covers wide frequency band (Cellular, PCS, and IMT-2000) with a single unit
- Generates radio frame by real-time coder
- •Bit error rate (BER) counter is provided as standard
- GPIB interface is provided as standard
- An option (OPT.08) is available to control all functions of the R3562 from the R3267/3273 main unit

#### 3GPP

- Compatible with the reference measurement channel (12.2/64/144/384 kbps) with real-time coder
- Transmission power control signal (TPC) output available

#### cdma2000 (OPT.65)

- All data rate output for forward link (RC1 to RC5) and reverse link (RC1 to RC4) possible
- Several receiver characteristics tests are possible using the built-in AWGN source

## For Pre-production Lines/Maintenance of Mobile Phones (MS/UE)

#### **R3132/3162 series Spectrum Analyzers**



#### Wide frequency bandwidth

R3132: 9 kHz to 3 GHz R3162: 9 kHz to 8 GHz

- High stability/wide dynamic range power measurement
- High sensitivity measurement (Pre-amp. as standard)
   -144 dBm/30 Hz RBW (option) (Typ.,f = 1 GHz, Pre-amp. ON)
- •Wide dynamic range

3GPP ACLR measurement dynamic range:

-67 dBc (Typ., Mix input = -14 dBm)

3rd distortion: -80 dBc (f ≥200 MHz, Mix input = -30 dBm)

- Channel input/single button (quick) measurement
- High throughput/high speed measurement with GPIB Trace speed: 20 traces/sec (typical)