PXA X N9030B

3 Hz 3.6 8.4 13.6 26.5 44 50 GHz

KEYSIGHT TECHNOLOGIES

PXA

www.keysight.com/find/pxa_specifications

PXA

PXA

510 MHz
70 dB SFDR

NFE

DDS LO,

4U
/

0

55

95% 20 30 95% 95%

2æ

20 30

80% 95%

–

– Auto Sweep Time Rules =Accy

– < 10 MHz

–

– Auto Align Normal

30 Auto Align Off Partial

Time and Temperature

Auto Align Light

1.4

dBm dBm +

dB

www.keysight.com/find/pxa_specifications

503	3 Hz 3.6 GHz	10 MHz 3.6 GHz	
508	3 Hz 8.4 GHz	10 MHz 8.4 GHz	
513	3 Hz 13.6 GHz	10 MHz 13.6 GHz	
526	3 Hz 26.5 GHz	10 MHz 26.5 GHz	
544	3 Hz 44 GHz		
550	3 Hz 50 GHz		

	N	
0	1	3 Hz 3.6 GHz
1	1	3.5 8.4 GHz
2	2	8.3 13.6 GHz
3	2	13.5 17.1 GHz
4	4	17 26.5 GHz
5	4	26.4 34.5 GHz
6	8	34.4 50 GHz

	[(x) + +]
	1×10^{-7} / 1.5×10^{-7} / 2
20 30 C	1.5×10^{-8} 5×10^{-8}
	4×10^{-8}

*		
	= 0 Hz	1 µs 6000 s
	≥ 10 Hz	1 ms 4000 s
	≥ 10 Hz	0.01%
	> 10 Hz FFT	40%
	= 0 Hz	0.01%
	1 2	
	= 0 Hz FFT	–150 +500 ms
	≥ 10 Hz	0 500 ms
		0.1 µs
	FFT	
FFT	1 µs 5.0 s	
	0 100.0 s	
	33.3 ns p-p	
*		
	1 - 40001	
RBW		
-3.01 dB	1 Hz 3 MHz 10% 4 5 6 8 MHz	
	1 Hz 100 kHz	0.5% 0.022 dB
RBW	110 kHz 1.0 MHz < 3.6 GHz CF	1.0% 0.044 dB
	1.1 2 MHz < 3.6 GHz CF	0.07 dB
	2.2 3 MHz < 3.6 GHz CF	0.10 dB
	4 8 MHz < 3.6 GHz CF	0.20 dB
–3.01 dB		
RBW	1 Hz 1.3 MHz	2%
-60 dB/-3 dB		4:1
EMI CISPR	200 Hz 9 kHz 120 kHz 1 MHz	EMC
EMI 461E	10 Hz 100 Hz 1 kHz 10 kHz 100 kHz 1 MHz	EMC
[1]		
	B25	25 MHz
	B40	40 MHz
	B85	85 MHz
	B1X	160 MHz
	B5X	510 MHz
VBW		
	1 Hz 3 MHz 10% 4 5 6 8 MHz	50 MHz
	6%	

1.

	DANL	+30 dBm
503	DANL	+30 dBm
508 513 526	DANL	+24 dBm
544 550	DANL	+20 dBm

	0 70 dB 2 dB
3 Hz 50 GHz	
EA3	
	3 Hz 3.6 GHz
	0 24 dB 1 dB
	0 94 dB 1 dB
+	
	+30 dBm 1 W
	< 10 µs < 1% ≥ 30 dB +50 dBm 100 W
	0.2 Vdc
	100 Vdc 503 508 513 526
	0.1 1 dB/ 0.1 dB
	1 20 dB/ 1 dB 10
	10
	dBm dBmV dBµV dBmA dBµA V W A

				95 ≈ 2
10 dB	20 30 C	3.6 GHz		
/		3 Hz 10 MHz	0.46 dB	
503 508 513 526		10 20 MHz	0.35 dB	
		20 MHz 3.6 GHz	0.35 dB	0.16 dB
		3.5 8.4 GHz	1.5 dB	0.39 dB
		8.3 13.6 GHz	2.0 dB	0.45 dB
		13.5 22.0 GHz	2.0 dB	0.62 dB
		22.0 26.5 GHz	2.5 dB	0.82 dB
		3 Hz 20 MHz	0.46 dB	
544 550		20 50 MHz	0.35 dB	0.19 dB
		50 MHz 3.6 GHz	0.35 dB	0.15 dB
		3.5 5.2 GHz	1.7 dB	0.70 dB
		5.2 8.4 GHz	1.5 dB	0.57 dB
		8.3 13.6 GHz	2.0 dB	0.54 dB
		13.5 17.1 GHz	2.0 dB	0.64 dB
		17.0 22.0 GHz	2.0 dB	0.72 dB
		22.0 26.5 GHz	2.5 dB	0.71 dB
		26.4 34.5 GHz	2.5 dB	0.93 dB
		34.4 50 GHz	3.2 dB	1.24 dB
0 dB	P03 P08 P13 P26 P44 P50			
/		9 100 kHz		0.36 dB
503 508 513 526		100 kHz 50 MHz	0.68 dB	0.26 dB
		50 MHz 3.6 GHz	0.55 dB	0.28 dB
		3.5 8.4 GHz	2.0 dB	0.64 dB
		8.3 13.6 GHz	2.3 dB	0.76 dB
		13.5 17.1 GHz	2.5 dB	0.95 dB
		17.0 22.0 GHz	3.0 dB	1.41 dB
		22.0 26.5 GHz	3.5 dB	1.61 dB

	9 100 kHz		0.40 dB
544 550	100 kHz 50 MHz	0.68 dB	0.34 dB
	50 MHz 3.6 GHz	0.60 dB	0.31 dB
	3.5 5.2 GHz	2.0 dB	0.81 dB
	5.2 8.4 GHz	2.0 dB	0.70 dB
	8.3 13.6 GHz	2.3 dB	0.79 dB
	13.5 17.1 GHz	2.5 dB	0.88 dB
	17.0 22.0 GHz	3.0 dB	1.07 dB
	22.0 26.5 GHz	3.5 dB	1.03 dB
	26.4 34.5 GHz	3.0 dB	1.35 dB
	34.4 50 GHz	4.1 dB	1.69 dB

10 dB

50 MHz	12 40 dB	0.14 dB	0.03 dB
	2 8 dB	0.18 dB	0.05 dB
	0 dB		0.05 dB

> 2 dB

3 Hz 3.6 GHz	0.3 dB
3.5 8.4 GHz	0.5 dB
8.3 13.6 GHz	0.7 dB
13.5 26.5 GHz	0.7 dB
26.4 50 GHz	1.0 dB

10 dB 20 30 C **1 Hz ≤ RBW ≤ 1 MHz** – 10 – 50 dBm Auto Swp Time = Accy

æ =

	50 MHz	0.24 dB
		0.24 dB +
	10 Hz 3.6 GHz	0.19 dB 95 2

0.36 dB +

P03 P08 P13 P26 P44 P50

VSWR

		503 508 513 526	544 550
10 dB	50 MHz	1.07	1.025
	10 MHz 3.6 GHz	1.139 95%	1.134 95%
	3.5 8.4 GHz	1.290 95%	1.152 95%
	8.3 13.6 GHz	1.388 95%	1.178 95%
	13.5 17.1 GHz	1.41 95%	1.204 95%
	17.0 26.5 GHz	1.48 95%	1.331 95%
	26.4 34.5 GHz		1.321 95%
	34.4 50 GHz		1.378 95%
0 dB	10 MHz 3.6 GHz	1.45 95%	1.393
(P03 P08 P13 P26 P44 P50	3.5 8.4 GHz	1.54 95%	1.50 95%
	8.3 13.6 GHz	1.57 95%	1.310 95%
	13.5 17.1 GHz	1.48 95%	1.330 95%
	17.0 26.5 GHz	1.54 95%	1.339 95%
	26.4 34.5 GHz		1.41 95%
	34.4 50 GHz		1.42 95%

	30 kHz RBW		
1 Hz 1.5 MHz RBW		0.03 dB	
1.6 MHz 2.7 MHz RBW		0.05 dB	
3 MHz RBW		0.10 dB	
4 5 6 8 MHz RBW		0.30 dB	
		-170 +30 dBm 0.01 dB 707 pV 7.07 V 0.11% 0.01 dB	
		0 dB	
		0 dB	
/		0 dB	
–10 dBm	-18 dBm	0.10 dB	0.04 dB
-18 dBm		0.07 dB	0.02 dB
		RMS	
[1]		P03 P08 P13 P26 P44 P50	9 kHz 3.6 GHz 9 kHz 8.4 GHz 9 kHz 13.6 GHz 9 kHz 26.5 GHz 9 kHz 44 GHz 9 kHz 50 GHz
		9 kHz 3.6 GHz 3.6 26.5 GHz 26.5 50 GHz	+20 dB +35 dB +40 dB

1. 100 kHz 95% 2 æ

1 dB		
1 kHz RBW 100 kHz 20 30 C		
20 40 MHz	-3 dBm	0 dBm
40 200 MHz	+1 dBm	+3 dBm
200 MHz 3.6 GHz	+3 dBm	+5 dBm
3.6 16 GHz	+1 dBm	+4 dBm
16 26.5 GHz	-1 dBm	+2 dBm
26.5 50 GHz		0 dBm
10 MHz 3.6 GHz		-14 dBm
P03 P08 P13 P26 P44 3.6 26.5 GHz		
P50 100 kHz 20 MHz		-28 dBm
> 70 MHz		
≤ 526		-10 dBm
> 526		-20 dBm
26.5 50 GHz		-30 dBm

DANL		
, = Log 0 dB	= 1 Hz RBW 20 30 C	
/ 503 508 513 526	1/ LNP[2]	1/ LNP[2]
3 Hz 9 kHz		-100 dBm/
9 100 kHz	-146 dBm/	-152 dBm/
100 kHz 1 MHz	-150 dBm/	-156 dBm/
1 10 MHz	-155 dBm/	-158 dBm/
10 MHz 1.2 GHz	-155 dBm/	-157 dBm/
1.2 2.1 GHz	-153 dBm/	-155 dBm/
2.1 3.0 GHz	-152 dBm/	-154 dBm/
3.0 3.6 GHz	-151 dBm/	-153 dBm/
3.5 4.2 GHz	-147 dBm/-153 dBm	-150 dBm/-156 dBm
4.2 8.4 GHz	-150 dBm/-155 dBm	-152 dBm/-157 dBm
8.3 13.6 GHz	-149 dBm/-155 dBm	-151 dBm/-157 dBm
13.5 16.9 GHz	-145 dBm/-152 dBm	-147 dBm/-155 dBm
16.9 20.0 GHz	-143 dBm/-151 dBm	-145 dBm/-153 dBm
20.0 26.5 GHz	-137 dBm/-150 dBm	-140 dBm/-152 dBm
P03 P08 P13 P26[3] 100 200 kHz	-157 dBm/	-160 dBm/
200 500 kHz	-160 dBm/	-163 dBm/
0.5 1 MHz	-164 dBm/	-166 dBm/
1 10 MHz	-164 dBm/	-167 dBm/
10 MHz 2.1 GHz	-165 dBm/	-166 dBm/
2.1 3.6 GHz	-163 dBm/	-164 dBm/
3.5 8.4 GHz	-164 dBm/	-166 dBm/
8.3 13.6 GHz	-163 dBm/	-165 dBm/
13.5 16.9 GHz	-161 dBm/	-162 dBm/
16.9 20.0 GHz	-159 dBm/	-161 dBm/
20.0 26.5 GHz	-155 dBm/	-157 dBm/

NFE DANL	95%		
/ 503 508 513 526			LNP [2] [3]
0 f > 20 MHz	9 dB	10 dB	
1	10 dB	9 dB	10 dB
2	10 dB	10 dB	10 dB
3	9 dB	10 dB	10 dB
4	10 dB	8 dB	10 dB

DANL 20 30 C		LNP [2] [3]	
0 1.8 GHz	-161 dBm	-171 dBm	
1 5.95 GHz	-158 dBm	-172 dBm	-162 dBm
2 10.95 GHz	-159 dBm	-168 dBm	-162 dBm
3 15.3 GHz	-152 dBm	-165 dBm	-160 dBm
4 21.75 GHz	-149 dBm	-160 dBm	-160 dBm

1. NFE
2. LNP LNP
3. 3.6 GHz LNP LNP

NFE 95%
DANL

LNP [1] [2]

544 550

0	f > 20 MHz	10 dB	9 dB	
1		9 dB	9 dB	10 dB
2		9 dB	8 dB	9 dB
3		9 dB	8 dB	10 dB
4		10 dB	9 dB	11 dB
5		11 dB	9 dB	12 dB
6		11 dB	8 dB	11 dB

DANL LNP [1] [2]

20 30 C

0	1.8 GHz	-160 dBm	-172 dBm	
1	5.95 GHz	-154 dBm	-164 dBm	-157 dBm
2	10.95 GHz	-155 dBm	-167 dBm	-157 dBm
3	15.3 GHz	-154 dBm	-167 dBm	-157 dBm
4	21.75 GHz	-152 dBm	-165 dBm	-157 dBm
5	30.4 GHz	-148 dBm	-160 dBm	-157 dBm
6	42.7 GHz	-143 dBm	-156 dBm	-150 dBm

1. LNP LNP
2. 3.6 GHz LNP LNP

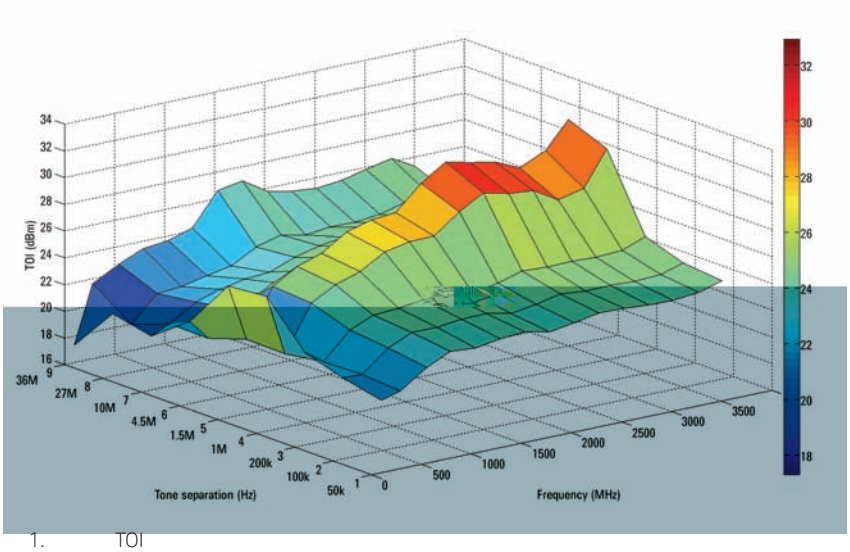
	200 kHz 8.4 GHz	-100 dBm		
0 dB	FFT	-100 dBm		
	f			
-10 dBm	10 MHz 26.5 GHz	f+45 MHz	-80 dBc	-118 dBc
	10 MHz 3.6 GHz	f+10,245 MHz	-80 dBc	-112 dBc
	10 MHz 3.6 GHz	f+645 MHz	-80 dBc	-101 dBc
	3.5 13.6 GHz	f+645 MHz	-78 dBc	-87 dBc
	13.5 17.1 GHz	f+645 MHz	-74 dBc	-84 dBc
	17.0 22 GHz	f+645 MHz	-70 dBc	-82 dBc
	22 26.5 GHz	f+645 MHz	-68 dBc	-79 dBc
-30 dBm	26.5 34.5 GHz	f+645 MHz	-68 dBc	-84 dBc
	34.4 44 GHz	f+645 MHz	-57 dBc	-79 dBc
	44 50 GHz	f+645 MHz		-75 dBc
≤ 26.5 GHz				
	-10 dBm	–80 dBc + 20log(N [1])		
f ≥ 10 MHz		–80 dBc + 20log(N [1])		
	-40 dBm			
f ≥ 10 MHz				
> 26.5 GHz		-90 dBc		
	-30 dBm			
f ≥ 10 MHz		-90 dBc		
	-30 dBm			
f ≥ 10 MHz				
LO	-10 dBm	–68 dBc [2] + 20log(N [1])		
200 Hz ≤ f < 10 MHz				
		–73 dBc [2]+ 20log N [1]		
SHI				
			[3]	SHI [3]
/	10 100 MHz	-15 dBm	-57 dBm/	+42 dBm/
503 508 513 526	0.1 1.8 GHz	-15 dBm	-60 dBm/	+45 dBm/
	1.75 2.5 GHz	-15 dBm	-77 dBc/-95 dBc	+62 dBm/+80 dBm
	2.5 4 GHz	-15 dBm	-77 dBc/-101 dBc	+62 dBm/+86 dBm
	4 6.5 GHz	-15 dBm	-77 dBc/-105 dBc	+62 dBm/+90 dBm
	6.5 10 GHz	-15 dBm	-70 dBc/-105 dBc	+55 dBm/+90 dBm
	10 13.25 GHz	-15 dBm	-62 dBc/-105 dBc	+47 dBm/+90 dBm
	10 100MHz	-15 dBm	-57 dBm/	+42 dBm/
544 550	100 MHz 1.8 GHz	-15 dBm	-60 dBm/	+45 dBm/
	1.8 2.5 GHz	-15 dBm	-72 dBc/-95 dBc	+57 dBm/+80 dBm
	2.5 3 GHz	-15 dBm	-72 dBc/-99 dBc	+57 dBm/+84 dBm
	3 5 GHz	-15 dBm	-77 dBc/-99 dBc	+62 dBm/+84 dBm
	5 6.5 GHz	-15 dBm	-77 dBc/-105 dBc	+62 dBm/+90 dBm
	6.5 10 GHz	-15 dBm	-70 dBc/-105 dBc	+55 dBm/+90 dBm
	10 13.25 GHz	-15 dBm	-62 dBc/-105 dBc	+47 dBm/+90 dBm
	13.25 25 GHz	-15 dBm	–65 dBc/–105 dBc ( )	+50 dBm/+90 dBm ( )
				SHI
	10 MHz 1.8 GHz	-45 dBm	-78 dBc	+33 dBm
(P03 P08 P13 P26 P44 P50	1.8 13.25 GHz	-50 dBm	-60 dBc	+10 dBm
	13.25 25 GHz	-50 dBm	-50 dBm	0 dBm

1.N 4 N

2. 0.38 rms 0.21 g rms –40 dBc

3. /LNP LNP

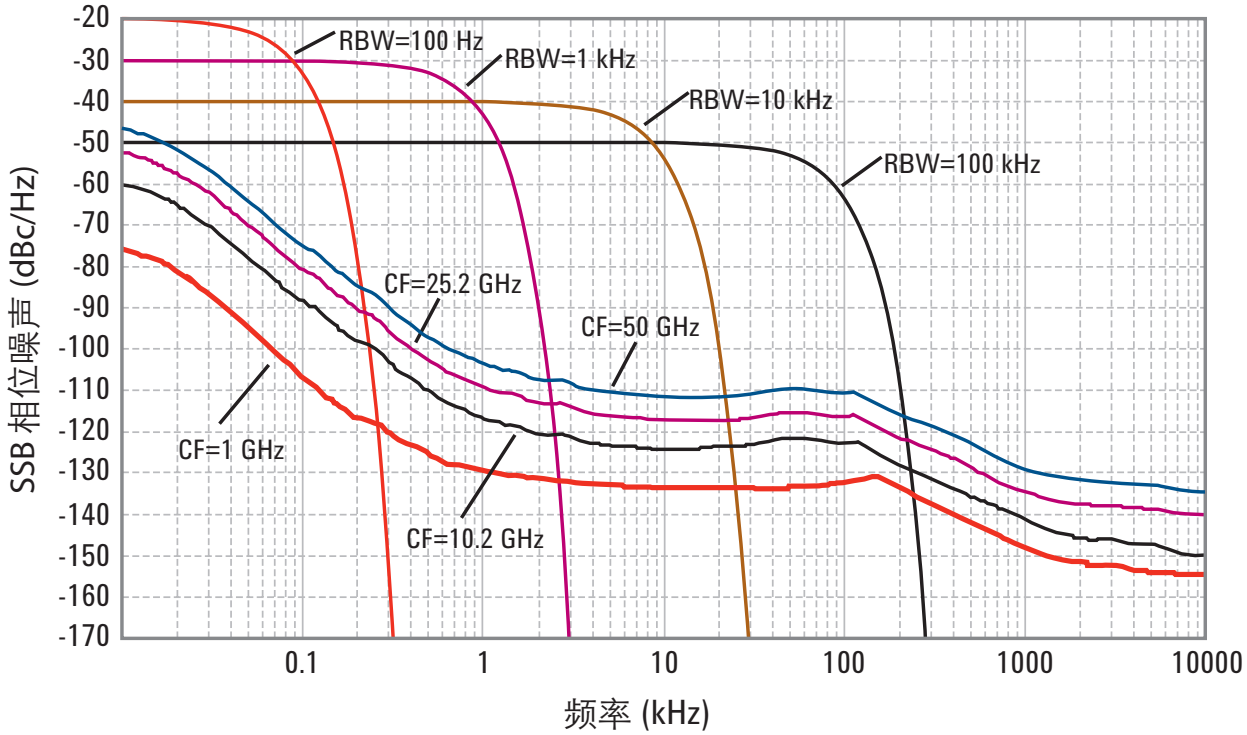
TOI				
	-16 dBm	> 5	20 30 C	
		10 150 MHz	+13 dBm	+16 dBm
503 508 513 526 544 550		150 600 MHz	+18 dBm	+21 dBm
		0.6 1.1 GHz	+20 dBm	+22 dBm
		1.1 3.6 GHz	+21 dBm	+23 dBm
/		3.5 8.4 GHz	+17 dBm	+23 dBm
503 508 513 526		8.3 13.6 GHz	+17 dBm	+23 dBm
		13.5 17.1 GHz	+15 dBm	+20 dBm
		17.0 26.5 GHz	+16 dBm	+22 dBm
		3.5 8.4 GHz	+16 dBm	+23 dBm
544 550		8.3 13.6 GHz	+16 dBm	+23 dBm
		13.5 17.1 GHz	+13 dBm	+17 dBm
		17.0 26.5 GHz	+13 dBm	+20 dBm
		26.5 50 GHz		+13 dBm
P03 P08 P13 P26 P44 P50				
-45 dBm		10 500 MHz		+4 dBm
-45 dBm		500 MHz 3.6 GHz		+4.5 dBm
-50 dBm		3.6 26.5 GHz		-15 dBm



1. TOI

		10 Hz		-80 dBc/Hz
20	30	C CF = 1 GHz	100 Hz	–94 dBc/Hz	-100 dBc/Hz
			1 kHz	–121 dBc/Hz	-125 dBc/Hz
			10 kHz	–129 dBc/Hz	-132 dBc/Hz
			30 kHz	–130 dBc/Hz	-132 dBc/Hz
			100 kHz	–129 dBc/Hz	-131 dBc/Hz
			1 MHz	–145 dBc/Hz	-146 dBc/Hz
			10 MHz	–155 dBc/Hz	-158 dBc/Hz

不同中心频率上的标称相位噪声，包括 RBW
选择曲线及优化的相位噪声随频偏的变化



3. PXA

MPB	[1]	
N9030B-508	3.6	8.4 GHz
N9030B-513	3.6	13.6 GHz
N9030B-526	3.6	26.5 GHz
N9030B-544	3.6	44 GHz
N9030B-550	.6	50 GHz

1. MPB PXA

PowerSuite

■			
W-CDMA IS95 20 30 C = 10 dB		0.61 dB	95% 0.19 dB
		[/1000]	
■			
3GPP W-CDMA ACLR ACLR			
MS (UE)		0.09 dB 0.18 dB	0.16 dB 0.31 dB
		-81.5 dB -82.5 dB	-87 dB -88 dB
		1 - 6	
ACP			
3GPP W-CDMA ACPR 4 5 MHz BTS UUT ACPR –42 –48 dB –21 dBm		0.13 dB	
		12	
■ CCDF			
		0.01 dB	
		10	
		dBm	dBc %
TOI			
■			
3GPP W-CDMA			
1 3.6 GHz 1 3.6 GHz		97.1 dB -86.4 dBm	101.9 dB -90.4 dBm
SEM			
cdma2000® 750 kHz		81.6 dB -101.7 dBm 0.08 dB	86.4 dB -105.7 dBm
3GPP W-CDMA 2.515 MHz		85.4 dB -101.7 dBm 0.08 dB	89.8 dB -105.7 dBm

	0 55 C -40 +70 C
	4,500 15,000

EMC

EMC

- IEC/EN 61326-1
- CISPR Pub 11 1 A
- AS/NZS CISPR 11
- ICES/NMB-001

ISM ICES-001
ISM NMB-001

A EMC

A

A ( ) (A) ,

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- IEC/EN 61010-1
- CSA C22.2 No. 61010-1
- UL std no. 61010-1

LpA < 70 dB

ISO 7779

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ISO 7779

< 40 C	55 dBA	55 dBA
≥ 40 C	65 dBA	65 dBA

	IEC 60068-2 MIL-PRF-28800F 3
	100 120 V 50/60/400 Hz 220 240 V 50/60 Hz
	630 W 40 W

1. N9030B CISPR 11 A N9030B CISPR 11 B N9030B B

	1280 x 768
	269 10.6
	80 GB
	USB 2.0
	22 kg 48
	34 kg 75
	177 mm 7.0
	426 mm 16.8
	556 mm 21.9
PXA	

503 508 513 526	N 50
C35 526	APC 3.5 mm 50
544,550	2.4 mm 50
IQ BBA [1]	
I Q I-Bar Q-Bar	BNC
	1 kHz 250 kHz
4 I Q I- Q- [2]	50 1 M
	1130A 1131A 1132A 1134A 1161A
50	-5 dB (0 10 MHz) -0 dB (10 40 MHz)
/	+15 Vdc 150 mA 7%
	-12.6 Vdc 150 mA 10%
USB 3	
	USB 2.0
	USB A
	1.2 A
	0.5 A

EXM	
	SMA 50 Þ
	10 mA 10 uA
	322.5 MHz 250.0 MHz 300 MHz 3.75 14.0 GHz
10 MHz	
	BNC 50 ≥ 0 dBm 10 MHz + (10 MHz x)
	BNC 50 -5 10 dBm 1 50 MHz 1 Hz 2 x 10^{-6}
1 2	
	BNC > 10 k –5 +5 V TTL
1 2	
	BNC 50 Þ 0 5 V CMOS
	BNC
	VGA 15 D-SUB XGA 60 Hz RGB 1024 x 768
+ 28 V	
	BNC 28.0 0.1 V 60 mA < 1 V
SNS	Keysight SNS
	MDR-80

	BNC
USB	
	2 USB 3.0 USB A 0.9 A 1 LAN USB 2.0 USB A 0.5 A USB 3.0 USB B
GPIB	
GPIB GPIB	IEEE-488 SH1 AH1 T6 SR1 RL1 PP0 DC1 C1 C2 C3 C28 DT1 L4 C0
LAN TCP/IP	
	1000Base-T RJ45 Ethertwist
	SMA CR3 CRP ALV 50 Þ
CR3	
SA I/Q ≤ 25 MHz B40 B85/B1X	322.5 MHz 250 MHz 300 MHz
	160 MHz 700 MHz 900 MHz
CRP	
	10 75 MHz 0.5 MHz
	-1 +4 dB
70 MHz	100 MHz
	≤ –88 dBm

1.

ALV

	SMA
	50 Þ
	1.6 V –10 dBm
	25 1 mV/dB
	49 dB 1 GHz
	1.0 dB
	15 ns
1-4 MPB	40 ns

YAV Y

	BNC
	50 Þ
	Lin
	0.1 20 dB/
	0 1.0 V
	1%
	1%
	71.7 µs + 2.56/RBW + 0.159/ VBW
50	
	1.0 V –10 dBm
	1 V/192.66 dB
	RBW
	= Swept
AM	
50	
	1.0 V
	0 V
	/ 200%
	/ 100%
	RBW
	= Swept

I/Q

B25	10 Hz 25 MHz
B40	10 Hz 40 MHz
B85	10 Hz 85 MHz
B1X	10 Hz 160 MHz
B5X	10Hz 510MHz

= 1 MHz	100 mHz 3 MHz
= 10 kHz	50 Hz 3 MHz
= 100 Hz	1 Hz 10 kHz
	100 mHz 100 Hz

- -

K-B 70 dB K-B 90 dB K-B 110 dB

B25	10 Hz 25 MHz
B40	10 Hz 40 MHz
B85	10 Hz 85 MHz
B1X	10 Hz 160 MHz
B5X	10Hz 510 MHz

10 MHz

- FFT

GHz	MHz				dB/MHz 95%	95%	RMS
≤ 3.6	≤ 10		0.20 dB	0.12 dB	0.10 dB	0.02 dB	
3.6 - 26.5	≤ 10					0.23 dB	
3.6 - 26.5	≤ 10	[1]	0.25 dB	0.12 dB	0.10 dB	0.02 dB	
26.5 - 50	≤ 10					0.12 dB	
26.5 - 50	≤ 10	[1]	0.30 dB	0.12 dB	0.10 dB	0.024 dB	

1. MPB

I/Q

	GHz	MHz		RMS
≥ 0.02	< 3.6	≤ 10	0.06	0.012
≥ 3.6	≤ 26.5	≤ 10 [1]	0.10	0.022
≥ 3.6		≤ 10	0.11	0.024

10 MHz

	≥ 20 MHz	
=	-10 dBm	-8 dBm
=	-20 dBm	-17.5 dBm
	(DANL +) + 2.25 dB	

10 MHz

IQ	4,000,000 IQ			
	32		64	89600 VSA
IQ	536 MSa	2^{29} Sa	268 MSa	2^{28} Sa 2 GB
	/	IQ		
IQ	x 1.25			
ADC	16			

1. MPB

I/Q

		25 MHz					
		FFT					
						dB/MHz	RMS
GHz		MHz			95%	95%	
< 3.6		10	≤ 25	0.30 dB	0.12 dB	0.05 dB	0.02 dB
3.6	26.5	10	≤ 25				0.50 dB
3.6	26.5	10	≤ 25 [1]	0.40 dB			0.03 dB
26.5	50	10	≤ 25				0.31 dB
26.5	50	10	≤ 25 [1]	0.40 dB			0.02 dB

					RMS
GHz		MHz			
≥ 0.02	< 3.6	≤ 25		0.48	0.12
≥ 3.6		≤ 25	[1]	0.85	0.20

		25 MHz					
		ADC					
		CF					
		=					
	0		-8 dBm				
	1	4	-7 dBm				
		CF					
		=					
	0		-18 dBm				
	1	4	-17 dBm				
		CF	3 dB				
		25 MHz					

IQ		4,000,000 IQ					
							89600 VSA
		32		64			
	IQ	536 MSa	2^{29} Sa	268 MSa	2^{28} Sa	2 GB	
		/	IQ				

IQ		x 1.25					
ADC		16					

1. MPB

I/Q

B40 40 MHz B40 B85 B1X

40 MHz						
GHz		MHz				RMS
≥ 0.03	< 3.6	≤ 40		0.4 dB	0.25 dB	0.05 dB
≥ 3.6	< 8.4	≤ 40	[1]	0.4 dB	0.16 dB	0.05 dB
≥ 8.4	< 26.5	≤ 40	[1]	0.7 dB	0.20 dB	0.05 dB
≥ 26.5	< 34.4	≤ 40	[1]	0.8 dB	0.25 dB	0.1 dB
≥ 34.4	< 50	≤ 40	[1]	1.0 dB	0.35 dB	0.1 dB

GHz		MHz				RMS
≥ 0.03	< 3.6	≤ 40			0.16	0.041
≥ 3.6		≤ 40	[1]		1.5	0.35

EVM	802.11g OFDM	EVM	89600		EQ
2.4 GHz			-52.0 dB	0.25%	
5.8 GHz	MPB		-49.1 dB	0.35%	

40 MHz		
SFDR		
12 MHz		-80 dBc
18 MHz		-79 dBc
		-77 dBc

ADC		
CF		
=	= 0 dB	
0		-8 dBm
1 4		-7 dBm

CF		
=		
0		-18 dBm
1 4		-17 dBm

CF	3 dB

1. MPB

I/Q

B40 40 MHz

40 MHz			
IQ	4,000,000 IQ		
	32	64	89600 VSA
IQ	536 MSa 2		

1. MPB

I/Q

B85 85 MHz B1X 160 MHz

	85 160 MHz				
SFDR					
	12 MHz		**-75 dBc**		
	63 MHz		**-74 dBc**		
			-72 dBc		
	ADC				
	CF				
	=	= 0 dB			
	0		**-8 dBm**		
	1 4		**-7 dBm**		
	CF				
	=				
	0		**-18 dBm**		
	1 4		**-17 dBm**		
	CF		3 dB		
	85 160 MHz				
IQ			4,000,000 IQ		
			32	64	89600 VSA
	IQ		536 MSa 2^{29} Sa	268 MSa 2^{28} Sa	2 GB
			/ IQ		
IQ			**x 1.25**		
ADC			14		

RTSA [1]

RT1 RT2

RT1	510 MHz
RT2	510 MHz

	> 60 dB StM [2]
RT1	11.42 ns
RT2	5.0 ns

	100% POI	FMT
RT1	17.3 µs	
RT2	3.57 µs	

	100 µs
FFT	292,969 /

RTS

I/Q [3]	
	16- I + jQ
IQ	510 MHz
	LVDS
	RTSA

IQ B1X		
	510 MHz	200 Msa/s

	X-COM IQC5160B
	510 MHz 3
	IRIG-B GPS

1. RTSA PXA RT1/RT2
2. StM
3. X-COM IQC5160B PXA

Keysight PXA	
	5992-1316EN
	5992-1318EN