

QST Magazine Product Reviews - Key Measurements Summary - HF-Transceivers or Receivers

Source: Product Review from QST Magazine - Many thanks to ARRL and QST Magazine for their very interesting reviews!

Subject of measurement, band: 14 MHz	Receiver							Transmitter			List Price USD Sept 2011	
	20 kHz blocking gain compression	2 kHz blocking gain compression	NEW: 2 kHz reciprocal mixing noise	20 kHz 3rd-order dynamic range	2 kHz 3rd-order dynamic range	20 kHz 3rd-order intercept	2 kHz 3rd-order intercept	Tx-Rx turnaround time SSB tx delay	Transmit 3rd-order IMD	Transmit 9th-order IMD		
Min/max of scale	70/140 dB	70 - 141 dB		50/110 dB	50/110 dB	-40/+35 dB	-40/+35 dB	50/10 ms	-20/-35 dB	-20/-70 dB	\$	
Transceivers/receivers sorted by 2 kHz 3rd-order dynamic range. Please take into account that there might be a difference in the numbers when comparing the older product reviews (before February 2007) compared to the later product reviews, due to changes in the testing methodology, measurements filters, etcetera.												
1	Yaesu FTdx5000D Dec 2010	136 dB *	136 dB *	-104 dBc	114 dB !	114 dB !	+41 dBm !	+40 dBm !	37 ms	-43 dB #!	-72 dB #!	\$7700
2	Elecraft K3 January 2009	142 dB !	140 dB	-86 dBc	106 dB	103 dB	+29 dBm	+28 dBm	12 ms	-29 dB	-51 dB	\$2200
3	Elecraft K3 April 2008	139 dB	139 dB	-95 dBc	103 dB	102 dB	+26 dBm	+26 dBm	22 ms	-27 dB	-53 dB	\$2200
4	Flex-5000A July 2008	123 dB	123 dB	-99 dBc	99 dB	99 dB	+35 dBm	+30 dBm	29 ms	-34 dB	-54 dB	\$2799
5	TenTec 599AT Eagle Aug 2011	136 dB	121 dB	-95 dBc	98 dB	98 dB	+22 dBm	+22 dBm	16 ms	-28 dB	-48 dB	\$1795
6	Kenwood TS-590S May 2011	141 dB !	126 dB	-91 dBc	106 dB	97 dB	+26 dBm	+22 dBm	14 ms	-29 dB	-52 dB	\$1964
7	Perseus SDR Dec 2008	129 dB	129 dB	-126 dBc	100 dB	97 dB	+35 dBm	+35 dBm	N/A	N/A	N/A	\$1000
8	IC-7700 per 2008	125 dB	102 dB	-78 dBc	106 dB	95 dB	+35 dBm	+24 dBm	15 ms	-28 dB	-53 dB	\$9150
9	TenTec Orion-II, Sept 2006	136 dB	136 dB	N/M	92 dB	95 dB	+20 dBm	+21 dBm	30 ms	-28 dB	-52 dB	\$4295
10	Flex-3000, Oct/Nov 2009	113 dB	113 dB	-112 dBc	99 dB	95 dB	+28 dBm	+26 dBm	48 ms	-30 dB	-45 dB	\$1699
11	Icom IC-7410 Oct 2011	143 dB !	111 dB	-78 dBc	106 dB	88 dB	+29 dBm	+5 dBm	45 ms	-30 dB	-61 dB	\$2475
12	Icom IC-7600 Nov 2009	122 dB	102 dB	-82 dBc	106 dB	88 dB	+31 dBm	+13 dBm	13 ms	-31 dB	-48 dB	\$4976
13	Icom IC-7800 V2 Mar 2007	144 dB !	117 dB	N/M	108 dB	86 dB	+38 dBm !	+22 dBm	15 ms	-32 dB	-52 dB	\$15956
14	Yaesu FTdx9000MP July 2010	137 dB	102 dB	-92 dBc	99 dB	85 dB	+28 dBm	+7 dBm	32 ms	-37 dB #!	>-75 dB #!	\$11749
15	TenTec R4020 QRP Feb 2011	N/M	N/M	N/M	84 dB	84 dB	-10 dB	-10 dB	N/M	N/M	N/M	\$249
16	TenTec Omni-VII July 2007	137 dB	134 dB	N/M	91 dB	82 dB	+11 dBm	+6,5 dBm	20 ms	-27 dB	-55 dB	\$2695
17	Icom IC-R9500 Jan 2008	144 dB !	109 dB	-92 dBc	5kHz/92 dB	81 dB	+32 dBm	-4dBm	N/A	N/A	N/A	\$17000
18	Yaesu FTdx9000C Mar 2006	128 dB	97 dB	N/M	101 dB	78 dB	+35 dBm	+1 dBm	35 ms	-34 dB #	-80 dB #!	\$6400
19	Yaesu FT-950 Mar 2008	128 dB	98 dB	-57 dBc	95 dB	71 dB	+21 dBm	-4 dBm	25 ms	-35 dB	-56 dB	\$2000

20	Alinco DX-SR8T June 2011	100 dB	83 dB	-60 dBc	94 dB	70 dB	+1 dB	-30 dB	50 ms	-28dB	-53 dB	\$580
21	Yaesu FT-2000D Oct 2007	136 dB	87 dB	-76 dBc	98 dB	69 dB	+26 dBm	-16 dBm	37 ms	-41 dB #!	-65 dB #	\$4800
22	Icom IC-7200 June 2009	140 dB	83 dB	-85 dBc	99 dB	67 dB	+23 dBm	-11 dBm	30 ms	-32 dB	-58 dB	\$1396
23	Yaesu FT-450 Dec 2007	134 dB	90 dB	-21 dBc	97 dB	67 dB	+13 dBm	-31 dBm	40 ms	-30 dB	-48 dB	N/A
24	Yaesu FT-2000 Feb 2007	126 dB	92 dB	N/M	95 dB	64 dB	+16 dBm	-22 dBm	27 ms	-32 dB	-60 dB	\$3900
25	Icom IC-7000 May 2006	112 dB	86 dB	N/M	89 dB	63 dB	+6 dBm	-27 dBm	12 ms	-33 dB	-58 dB	\$1699

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Min/max of scale	70/140 dB	70 - 141 dB		50/110 dB	50/110 dB	-40/+35 dB	-40/+35 dB	50/10 ms	-20/-35 dB	-20/-70 dB	\$
	Receiver							Transmitter			

* = Blocking exceeded the levels indicated

= Class A operation

! = below/above measurable levels

\$ = Listprice in US according to Elecraft, FlexRadio, TenTec and Universal Radio

N/M = Not measured

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Green = excellent
Light green = good
Yellow = average
Orange = moderate
Red = poor

v 17.SEP.2011 V6: K6JRF

Please send e-mail (hans@pa1hr.nl) if you have corrections, remarks, etc.

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