

The Receiver uses an amplifier-sequenced hybrid (ASH) receiver which is based on several leading edge technologies that allow outstanding performance in a small and simple-to-apply module. Two surface-acoustic-wave (SAW) devices are employed. Front-end filtering by a low-loss coupled-resonator SAW filter provides excellent selectivity. Typical sensitivity of –80dBm is achieved with no RF oscillating or regenerative circuits. This results in virtually no RF spurious emissions. A low-loss SAW delay line provides the time delay necessary to sequence the two RF amplifiers. Time sequencing of the RF gain eliminates the need for frequency conversion prior to AM detection.

Below is the data taken in an anechoic shield room at an antenna distance of 1 meter. Data was taken at EUT orientations of 0, 90, 180, and 270 degrees from the antenna. The receiver was stimulated with a 917 Mhz signal to ensure the device was operating.

FCC Part 15.109 limits								
Freq (Mhz)	dBuV	Cable Corr Fac	Antenna Fac	Corrected Data	Limit @ 10 meters	Limit @ 3 meters	Limit @ 1 meters	Margin
88.28	42.05	0.46	7.1	49.61	43.5	53.5	63.5	-13.89
106.8	29.18	0.62	7.6	37.4	43.5	53.5	63.5	-26.1
109.5	29.76	0.62	7.3	37.68	43.5	53.5	63.5	-25.82
143.5	30.86	0.66	7.6	39.12	43.5	53.5	63.5	-24.38
155	41.89	0.66	10	52.55	43.5	53.5	63.5	-10.95
160	29.78	0.66	12.1	42.54	43.5	53.5	63.5	-20.96
193.8	29.87	0.84	10.09	40.8	43.5	53.5	63.5	-22.7
200	30.18	0.8	10.4	41.38	43.5	53.5	63.5	-22.12
386	38.03	1.36	15.29	54.68	46.4	56.4	66.4	-11.72
387.8	35.74	1.36	15.33	52.43	46.4	56.4	66.4	-13.97
388.8	36.71	1.36	15.35	53.42	46.4	56.4	66.4	-12.98
894	34.3	2.18	22.58	59.06	46.4	56.4	66.4	-7.34
917	35.78	2.24	22.91	60.93	46.4	56.4	66.4	-5.47
931	32.66	2.34	23.16	58.16	46.4	56.4	66.4	-8.24

917 Mhz is the driven signal which was applied to the receiver to ensure the receiver was operating.