

A beginners guide to buying a Hydrogen Maser

AHM	PHM
Not so rugged Not portable High stability but be careful- look at the temperature coefficient	Rugged Portable Stability is so high that few labs can measure the difference (maybe ~10?)
90-250kg Large size	55kg About ¼ of size (soon to be smaller)
\$250,000	Low cost \$50....65k
Brand 'X' 1E-14/°C	Kvarz-Quartzlock 1E-15/°C
	5....10 times more stable than Cesium at the same price with a very good temperature coefficient

If **Active Hydrogen Maser** Performance is your requirement than compare the specification of the CH1-75:

- ✓ Lower weight (90kg cf. 250kg)
- ✓ Lower cost (~\$180,000 cf. \$250,000)
- ✓ Much better temperature coefficient and therefore easier to achieve stated performance (1E-15/°C cf. 1E-14/°C)

It is not possible to achieve the stated stability of an **Active Hydrogen Maser** if the lab temperature must be +/- 0.1°C.

For more information of which maser is best for your application please contact Quartzlock. We will be happy to assist you make an informed choice.

Remember Kvarz-Quartzlock is the only company able to offer both Active and Passive Hydrogen Masers