



## Calibration Costs: Equipment Rent vs. Buy Analysis

By Bill Hedrick, President INSTRUMENT RENTAL LABS, Broomfield, Colorado.  
31st May 2010

### Consider:

Cost of ownership expense of an accredited Fluke 5520A SC1100 calibrator rental cost \$9995.00 for five years. Cost to own and maintain for five years \$65,160.00. The decision of buy/rent for calibration equipment includes the original acquisition cost and maintenance expense including calibration + repair costs.

For example a multifunction calibrator such as the Fluke 5520B with the scope option costs around \$43,000.00 list. If you have to borrow the money to pay for it say over a five year period and your company has good credit you can finance it for about 6.0%/yr. Without working out the declining balance interest expense it could be estimated to be about half that on average for the 5 year period or  $.03 \times \$43,000 \times 5 = \$6450.00$ . So just purchasing and financing the unit is going to cost you \$49,500.00.

The calibrator will only be useful if you have get the unit calibrated annually by an 17025 accredited lab which has the scope of capability to calibrate all of the features in the unit. The calibration cost is around \$2100.00 per cal for an accredited cal from the manufacturer but they give you a break the if you buy a new one at a mere additional \$870.00 the first year. So we are up to approximately \$49,500 plus the first year accredited cal or \$50,320.00 just to get it in the door ready to use.

Now the annual Maintenance contract including an accredited calibration is going to cost you \$3710.00 for repair and calibration coverage for the additional 4 years of the equipment life, or  $4 \times \$3710.00$  or another \$14,840.00. If you want to take the repair risk on yourself if the unit fails, figure  $\$2100.00 \times 4$  years or \$8400.00.

You are now committed to spending around \$65,160.00 or at a minimum (if your repair luck holds) of \$58,720.00.

### Rent versus buy analysis:

Alternatively you could rent the calibrator for a full month and calibrate all the equipment you could cal with this calibrator at your facility on-site using your existing personnel for a annual cost of \$1795.00.

Compared the same five year period illustrated above for a total five year accredited calibrator expense of \$8975.00. If you get the higher frequency SC1100 model you can rent an accredited calibrator for the five year period for \$9995.00.

Therefore it would seem better, unless you need the unit on a daily or weekly basis, to rent the calibrator if there is any way you could group your calibration activities to one or even two months in the year.

Even if you squeeze the useful life of 10 years out of the unit you will still pay more for the annual maintenance from the factory or third party cal lab than for the rental.

**Now available! Fluke 5520A SC1100 Calibrator!**

[WWW.INSTRUMENTRENTALLABS.COM](http://WWW.INSTRUMENTRENTALLABS.COM) SALES@INSTRUMENTRENTALLABS.COM