About the value of Envelope Crossing Threshold

Question 1)

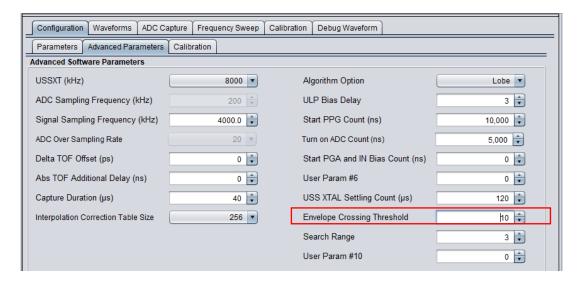
ADCcapture waveforms as shown on the right were obtained with the sensor currently planned to be used.

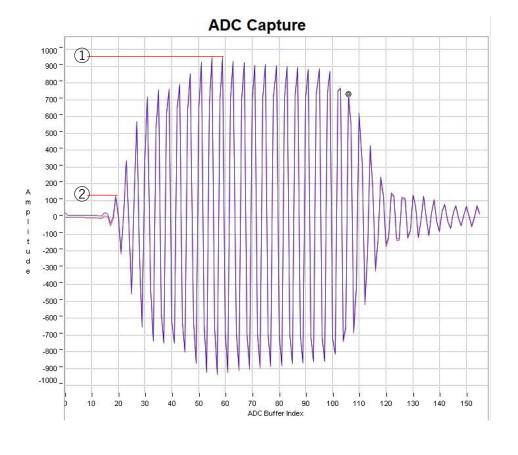
- (1) Amplitude is about 960 at peak
- (2) The first wave is about 120

In this case, when determining the threshold in conjunction with the wave in ②, ② is 12.5% of ③.

The value of Envelope Crossing Threshold is less than 12.5, and furthermore, considering the variation of the sensor, we set the value to 10.

Is this concept correct?





Question 2)

- ① is an ACDcapture with a flow rate of 1200 l/h.
- ② is ACDcapture with a flow rate of 0 l/h.

At 0 l/h, there is no difference in amplitude peak between UP and DOWN.

However, at 1200 l/h, there is a large difference in amplitude peak between UP and DOWN.

Is this correct?

I am concerned that if there is a difference in the peak between UP and DOWN, there will be a difference in the threshold position, and therefore the Absolute TOF value will not be correct.

Please let me know your opinion.

