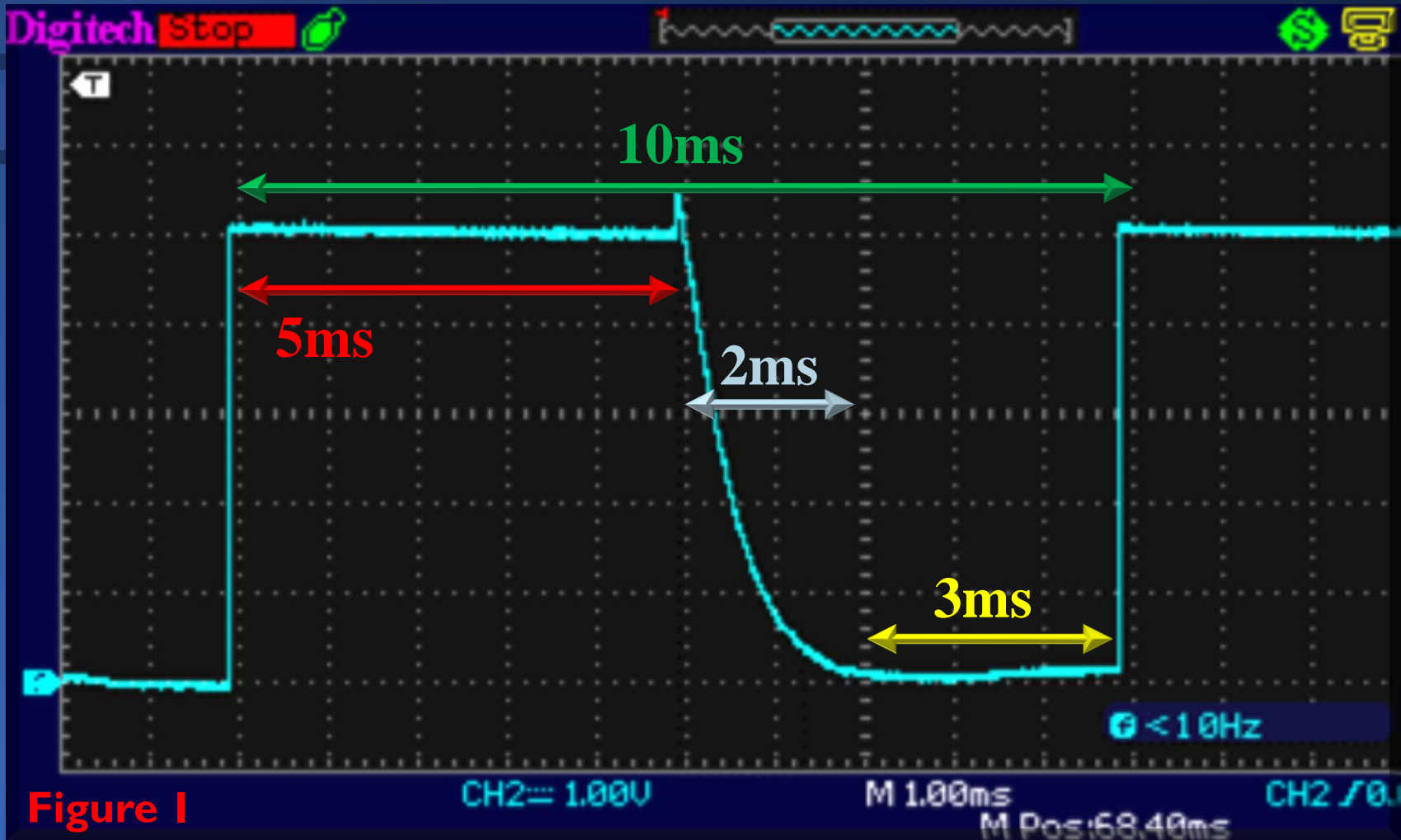




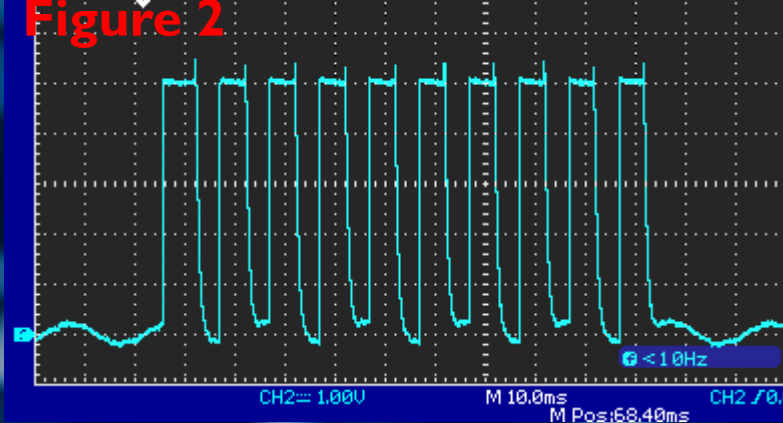
MRT FLOWMETER PULSE OUTPUT

OUTPUT TYPE EXPLANATION

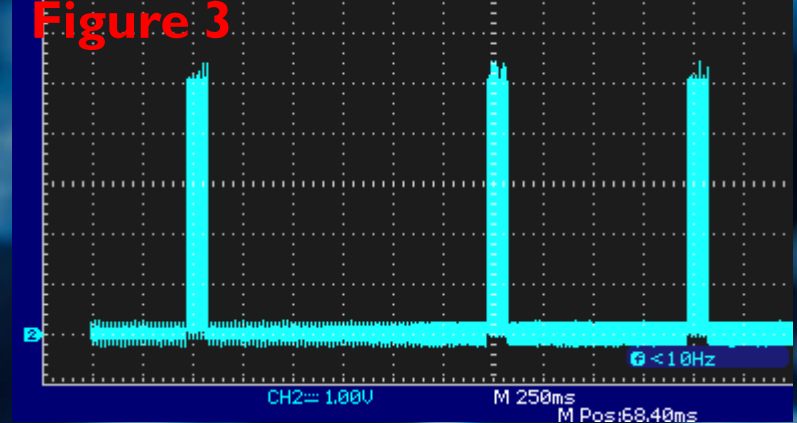


The output from MRT boards is not a consistent square wave proportional to the flowrate as usually seen on magnetic flowmeter.

As shown in the figure above, The pulse output have a fixed “positive pulse width” of 5ms and Total duration is 10ms (50% duty cycle). So regardless of the flowrate the output will always have a fixed frequency of 100Hz.



10ms division



250ms division

Pictures above indicate an MRTU4 unit with 10ppl output. For every 1 litre detected it generates 10 pulses (5ms long each) and waits until next detection.

Limitations:

- 1) Any indicator/PLC that requires lower frequency or wider pulses needs a UIC card in between. As shown in figure 1 the transition from high to low takes about 2ms (known as fall time) so ideally the receiving equipment must be fast enough to be able to detect changes in 3ms intervals.
- 2) For flowrates above 600L/M we can't offer 10ppl.

Specification:

Fixed 100Hz, 5ms pulse width, 50% duty cycle, open drain dry contact
Maximum switching capacity 100Vdc, 1.7A.