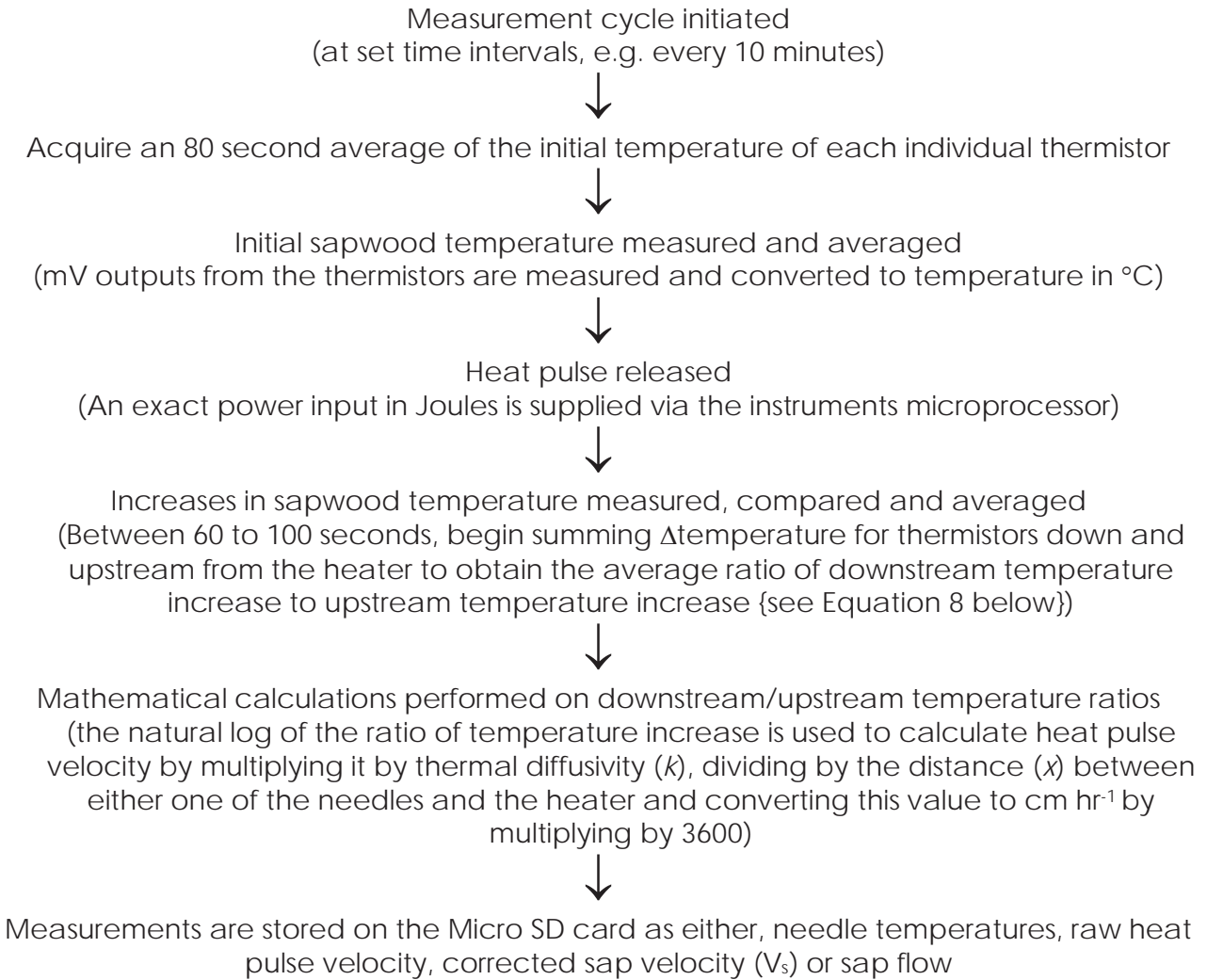


7 Measurement Cycle and Process

The measurement cycle is outlined below:



The integrated microprocessor of the SFM1 implements the measurement cycle outlined above. The exact algorithm for the Heat Ratio Method automatically performed by the microprocessor is outlined as follows:

$$V_h = \frac{k}{x} \ln\left(\frac{v_1}{v_2}\right) \times 3600 \text{ cm h}^{-1} \quad \text{Equation 2}$$

Where: k is the thermal diffusivity of wet wood, x the distance between the heat source (heater) and temperature sensors, and v_1 and v_2 are the increases in temperature (from ambient) at equidistant points downstream and upstream, respectively, x cm from the heater.