

1-DOF Parameters	Definition	Units	Identification Strategy
Λ_i	Logarithmic Decrement	-	$\Lambda_i = \frac{1}{N} \ln\left(\frac{y_i}{y_{i+N}}\right)$
ζ_i	Damping Ratio	-	$\zeta_i = \frac{\Lambda_i}{2\pi}$
T_D	Period of damped Oscillation	s	$T_D = \frac{x_{i+N} - x_i}{N}$
ω_D	Damped Natural frequency	rads ⁻¹	$\omega_D = \frac{2\pi}{T_D}$
ω_0	Undamped Natural Frequency	rads ⁻¹	$\omega_0 = \frac{\omega_D}{\sqrt{1 - \zeta_i^2}}$