Physics-Inspired Black-Scholes Greeks Calculator

Compute Black-Scholes option prices and Greeks using a **finite-difference sensitivity approach**, similar to perturbation methods in physics simulations.

Spot Price (S)

100.00 − +

Risk-Free Rate (r)

0.05 − +

Strike Price (K)

100.00 − +

Volatility (σ)

0.20 − +

Time to Maturity (T, in years)

1.00 − +

Dividend Yield (q)

0.00 − +

Option Type

Put

Results

Option Price: 5.573526

Greeks

Delta: -0.363169

Theta: 1.657880

Gamma: 0.018762

Rho: -41.890462

Vega: 37.524034

Greeks computed via central finite differences for stability and physical interpretability.