2 A radio aerial of length *L*, when the current is *I*, emits a signal of wavelength λ and power *P*. These qualities are related by

$$P = kI^2 \left(\frac{L}{\lambda}\right)^2$$

where *k* is a constant.

What unit, if any, should be used for the constant *k*?

A volt **B** ohm **C** watt **D** no unit