

en notation complexe : $\begin{cases} \hat{v} = V e^{j\omega t} \\ \hat{i} = I e^{j(\omega t + \varphi)} \end{cases}$ Amplitudes max

$$P_c = \frac{1}{2} \hat{v} \hat{i}^* = \frac{1}{2} V \cdot I e^{-j\varphi} = \frac{1}{2} VI (\cos\varphi - j \sin\varphi)$$

$$P_{active} = \frac{1}{2} \mathcal{R}(\hat{v} \hat{i}^*)$$