



$$i_{IN} = \frac{e_{IN} - e_{OUT}}{R_F} = \frac{e_{IN} - (1-\text{delta}) * e_{IN}}{R_F} = \frac{\text{delta} * e_{IN}}{R_F}$$

$$Z_{IN} = \frac{e_{IN}}{i_{IN}}$$

$$Z_{IN} = \frac{e_{IN} * R_F}{\text{delta} * e_{IN}} = \frac{R_F}{\text{delta}} \quad \leftarrow$$

for yucks, take $\text{delta} = 0.1$

$$Z_{IN} = \frac{R_F}{0.1} = 10 * R_F$$

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