

## AP 20 CAN-CNA

$$1) \text{ sensibilit\`a} = \frac{\Delta i}{\Delta m} = \frac{16}{4095} = \underline{0,00391 \text{ mA/kg}}$$

$$2) \underline{I = 4 + 3,91 \cdot 10^{-3} \cdot m}$$

$$3) I = 4 + 3,91 \cdot 10^{-3} \cdot 1600 = \underline{10,3 \text{ mA}}$$

$$4) N_{\text{max}} = 2^{16} - 1 = \underline{65535} = \underline{(FFFF)_{16}}$$

$$5) q = \frac{V_{PE}}{2^n} = \frac{16}{2^{16}} = \underline{2,44 \cdot 10^{-4} \text{ mA}}$$

$$6) \text{ resolution} = \frac{q}{\text{sensibilit\`a}} = \frac{2,44 \cdot 10^{-4}}{3,91 \cdot 10^{-3}} = 0,0624 \text{ kg}$$

$$\underline{m = 62,4 \text{ g}}$$

$$7) N = \frac{1600 \cdot 10^3}{62,4} = (25641)_{10}$$

$$\Rightarrow (0110 \ 0100 \ 0010 \ 1001)_2$$

$$\Rightarrow (6 \ 4 \ 2 \ 9)_{16}$$

$$8) (1010 \ 1100 \ 1101 \ 0011)_2 \rightarrow (44243)_{10}$$

$$9) m = 62,4 \times 44243 = 2,761 \text{ Mg} = \underline{2760 \text{ kg}}$$

$$10) I = 4 + (3,91 \cdot 10^{-3} \cdot 2760) = \underline{14,8 \text{ mA}}$$