Calculations

Glucose MW:
$$180.16 \frac{g}{mol}$$
Acetate MW: $59.04 \frac{g}{mol}$
Carbon MW: $12 \frac{g}{mol}$
Glucose NC: 6
Acetate NC: 2
biomass: $X \frac{g}{I}$

1.2 % Glucose:

$$\frac{1.2}{100} = 0.012 \frac{g}{ml}$$

$$0.012 \frac{g}{ml} * 1000 = 12 \frac{g}{L}$$

$$\frac{\frac{g}{L}}{\frac{g}{mol}} = \frac{g}{L} * \frac{mol}{g}$$

$$\frac{12\frac{g}{L}}{180.16\frac{g}{mol}} = 0.0666074600355\frac{mol}{L}$$

$$0.0666074600355 \frac{\text{mol}}{\text{L}} * 6 = 0.399642 \frac{\text{carbonmol}}{\text{L}} = 399.6 \frac{\text{cmmol}}{\text{L}}$$