

Hints and Tips on How to Set-up a Xemtec Comet using the FCT Software Tool

Some key Definitions and Points when using Comet for Pulse Output:

- Try to use "Install Unknown Meter".
- Throughput – This means the maximum amount of gas or energy (Max Delta) that can be put through the meter in 1 hour. Usually printed on most gas meters as QMax and will be in ft³/hr or m³/hr etc. Enter exactly what is printed on meter e.g. 2296 ft/hr.
- Resolution – the least significant digit that you will be doing OCR on, has a value of what? What units is it measuring in? E.g. 1kWh or 100ft³

Definition: ROI – Means "Region of Interest" and OCR means "Optical Character Recognition".

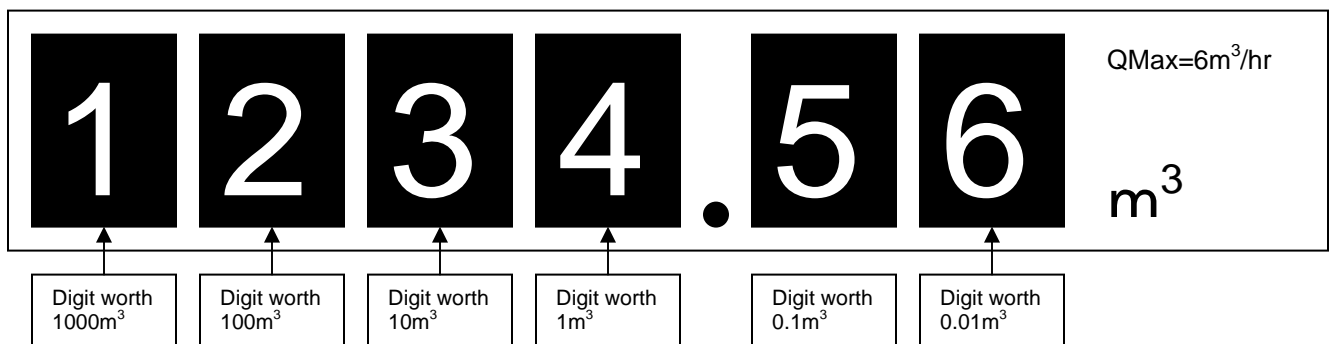
Tip: When Positioning ROIs add more ROIs for better for detection of weightset.
Weightset means the "Font" that is printed on the meter. Different meters have different "fonts".

Tip: Confidence level - >50 is OK. The maximum is 100

Tip: Better to make the ROI's slightly taller than the digits NOT Wider

- Sampling Period - best set to 6 mins for most effective battery consumption.
- Billing Digits – (For Info Only) – i.e. no of rollers on the meter
- Non – Billing Digits – (For Info Only) – no of static rollers/digits on meter
- Pulse ROIs (VERY IMPORTANT) – The number of ROIs you want to do OCR on. This is NOT the total number of rolling digits. **Suggested this is set to the Max Delta + 1 digit.**

E.g. 1 - On the meter below with max delta of 6m³/hr, the least significant OCR roller is worth 0.01m³, max delta that the comet would see (ignoring the decimal place) will be 600 per hour. There are 3 digits in 600 so add 1 more ROI. i.e. Pulse ROI's =4

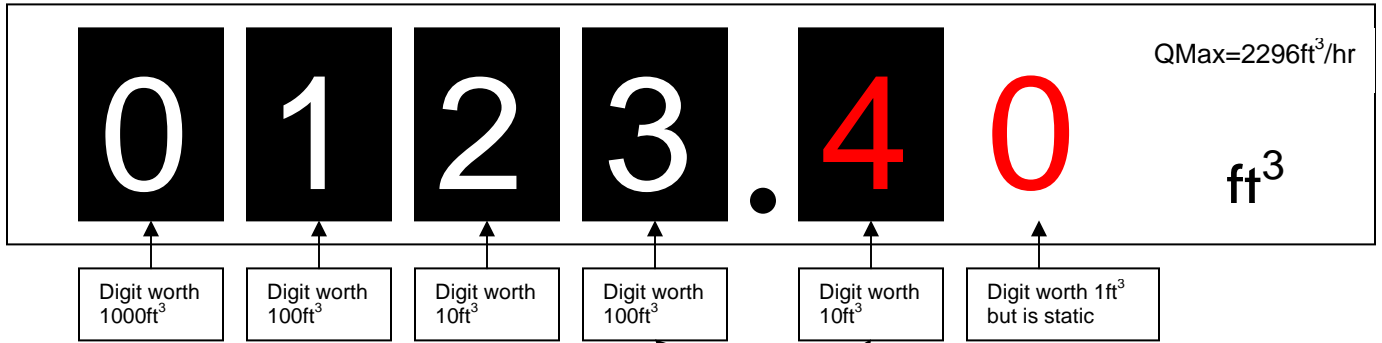


If we perform OCR on these 3 rollers, and the Max Delta Throughput of the meter is 6m³/hr. Then the maximum value the comet will see in 1 hour is 600 as it ignores decimal places.

So in 1 hours time, the maximum that the meter could be reading is 1240.56 as it can have increased by 6m³.

600 has 3 digits in it, so pulse ROIs 3+1 =4.

E.g. 2 - On meter with max delta of 2296 ft³/hr and the least significant OCR roller is worth 100ft³, max delta would be 22.96 (rounded up to 23) per hour. There are 2 digits in 23 so add 1 more ROI. i.e. Pulse ROI's =3



If we perform OCR on these 2 rollers, and the Max Delta Throughput of the meter is 2296ft³/hr. Then the maximum value the meter can have incremented by in 1 hour is 22.96 (rounded up to 23) as it ignores decimal places. The maximum reading that the 3 and 4 reading here could go to in 1 hour is 34 + 23 = 57.

So in 1hours time, the maximum that the meter could be reading is 0125.70 as it can have increased by 2296ft³.

23 has 2 digits in it, so pulse ROI's 2+1 =3.