Leakfrog - Customer Side Leakage Monitor
Quick Setup Guide

The function of the Leakfrog is to detect, store and display the maximum time between successive pulses from pulsed output meters. The maximum time between pulses is the reciprocal of minimum observable flow. **The higher the value displayed on the Leakfrog, the smaller the leak.**

▶ **After the Leakfrog is connected to the meter,** the blue button should be pressed until the unit displays the flashing " 🐸 " icon in the upper left hand corner and "0000". The operator can now leave the site.

▶ The image on the right shows the display on the Leakfrog after a period of use. The " 🐸 " icon in the upper left hand corner is flashing, indicating correct operation of the unit. The value displayed is "0006" indicating a maximum interval between pulses of 6 seconds since the unit was deployed. Assuming the meter is calibrated to 1 litre per pulse, a value of "0006" means that a litre of water is passing through the meter every 6 seconds. This equates to a minimum flow rate of approx 10 litres per minute, which indicates a significant leak.

▶ When the sensor on the meter passes directly under the sensor of the Leakfrog, a switch shaped icon " ▟ " appears on the bottom left of the Leakfrog display. **This is additional confirmation of operation and will only be seen by the operator if there is high flow when they are on site, or if the unit is placed directly over the sensor.**

▶ The value displayed is "0021" indicating a maximum interval between pulses of 21 seconds since the unit was deployed. Assuming the meter is calibrated to 1 litre per pulse, a value of "0021" means that a litre of water is passing through the meter every 21 seconds. This equates to a minimum flow rate of approx 3 litres per minute which indicates a leak.

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▶ The value displayed is "0021" indicating a maximum interval between pulses of 21 seconds since the unit was deployed. However the " ➚ " icon that has appeared in the top right hand corner indicates that a longer interval is pending, which will diminish the size of the leak indicated by the value "0021". **The operator should leave the Leakfrog in situ until a new value is displayed with no " ➚ " present on the display.**

▶ The value displayed is "9999" indicating a maximum interval between pulses of 9999 seconds or greater since the unit was deployed. 9999 seconds represents a period of nearly 3 hours. At this point the Leakfrog will stop counting and preserve battery power by leaving the "9999" on the display and ceasing the " ➷ " heartbeat display. A value of "9999" indicates no leak. The higher the value displayed on the Leakfrog, the smaller the leak. Please refer to the reference table below for minimum flow rates indicated by the number on the Leakfrog display.

Minimum Flow Rate - based on 1 pulse per litre.		
Leakfrog Display	Litres per hour	Litres per day
0000	Zero Flow	
0010	360.00	8640.00
0100	36.00	864.00
0200	18.00	432.00
0500	7.20	172.80
1000	3.60	86.40
1500	2.40	57.60
2000	1.80	43.20
2500	1.44	34.56
3000	1.20	28.80
4000	0.90	21.60
5000	0.72	17.28
6000	0.60	14.40
7000	0.51	12.34
8000	0.45	10.80
9000	0.40	9.60
9999	Timed out - no leak	

NB. Data for different meter calibration factors can be found at **www.qonnectis.com**.

NB. Before installing the Leakfrog on the meter, please wipe the meter surface and make sure that there is no grit build up around the meter pillars or Leakfrog apertures. **Dirt on the meter or the Leakfrog may adversely affect the reading.**