

1. Description

In a waste water treatment network, it is necessary to take samples to measure effluent pollutant levels. For this purpose, a portable, battery-powered sampler may be used to store samples episodically.

Some types of Data Logger (LT42, LT-US, LT-Radar) are able to drive a sampler.

2 operating modes are available:

- **Sampler (time control):** upon the appearance of logic data (DI or Threshold), the user defines the sampling period (3, 5, 10, 15, 30 or 60 minutes). For example, during an overflow, or when a high-level threshold is exceeded, to perform sampling every 10 minutes.
- **Sampler (volume control):** each time a volume of effluents has been discharged, a sample is taken; the volume is calculated based on the predefined "AI – Flow 1" conversion table.

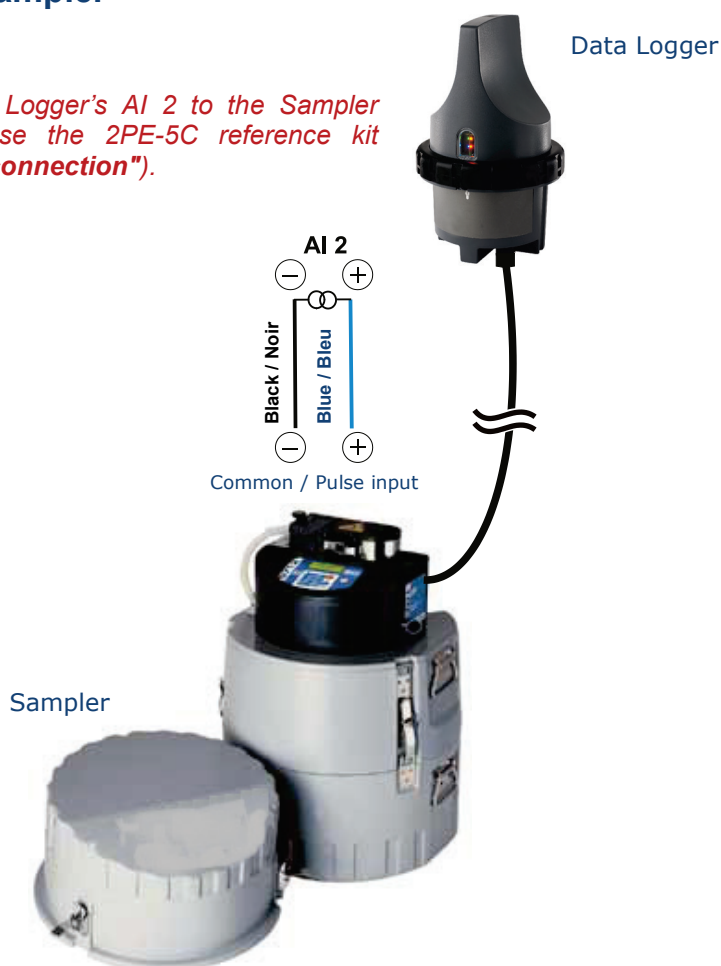
 **Example of use case with LT-Radar:** Automatically trigger a sampling in case of overflow (in stormy weather) to analyse the rejects afterwards.

2. Installation

2.1. Connection of the Sampler



Connection of the Data Logger's AI 2 to the Sampler must be waterproof. Use the 2PE-5C reference kit (see § "IP68 watertight connection").



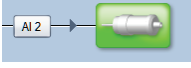
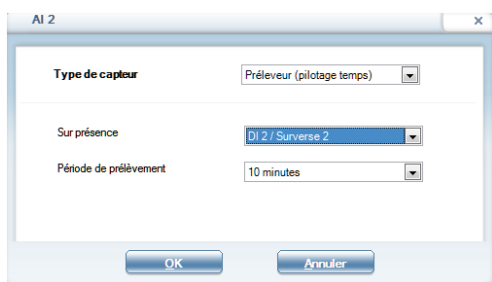
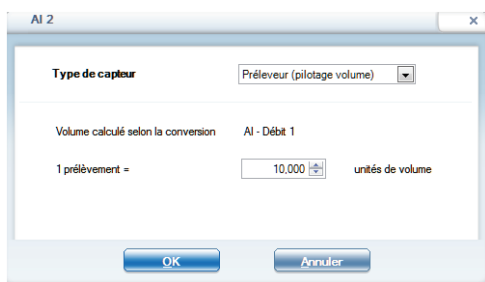
3. Settings

3.1. Configuration of the Sampler

On the AI 2, the Data Logger generates a 12V / 150ms pulse; it is necessary to configure the Sampler to take **a sample on each pulse**.

3.2. Configuration of the Data Logger

With SOFTTOOLS, it is necessary to configure:

Sampler (time control)	Sampler (volume control)
1 A DI, a threshold, or overflow information for sampling on appearance of a logical datum  Type : Capteur de surverse CSV Emission à chaque changement d'état	1 A level measurement (AI 1 or LT-US measurement)  Type : Capteur CPR (10 bars)
2 The AI 2 for control of the sampler (time control) upon presence of a logical datum and definition of the sampling period  Type : Préleveur (pilotage temps) Sur présence DI 2 / Surverse 2 Période de prélèvement 10 minutes 	3 The AI 2 for control of the sampler (volume control) and definition of the number of volume units  Type : Préleveur (pilotage volume) Volume calculé selon la conversion AI - Débit 1 1 prélèvement = 10 unités de volume 

3.3. Connection – Installation

The AI 2 information shows the total number of samples taken. The user may perform a “Sampler test” by triggering a sampling operation, which will reset this total number.

