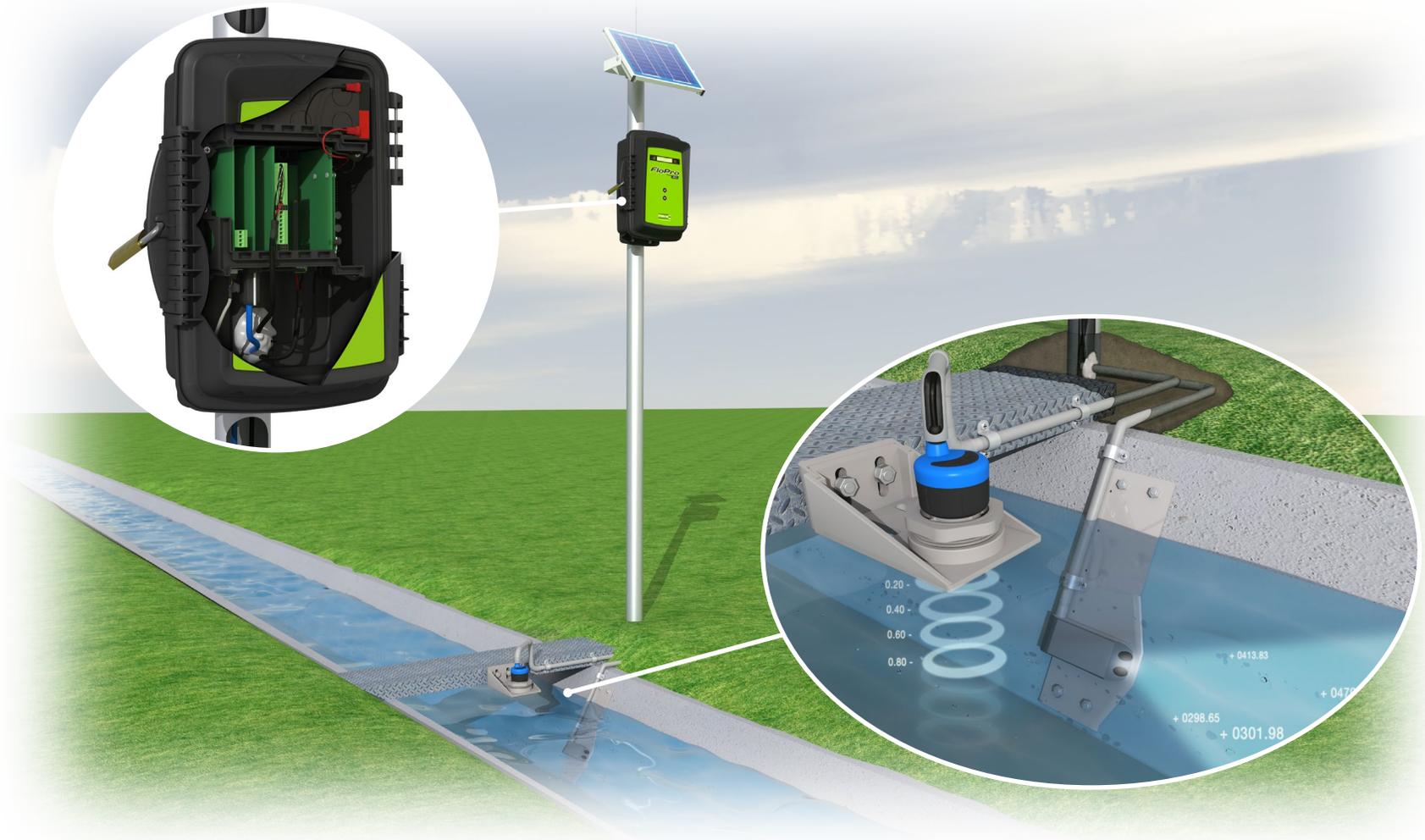


## Open channel flow measurement

Historically, the measurement of flow in open channels has been undertaken using civil structures such as flumes and weirs. Whilst these structures do provide a reasonably accurate measure of the stream flow, in practice, flumes and weirs often suffer from neglect over time and provide less than favourable conditions for flow measurement with stage measurements and rating tables. This may be particularly the case for structures that are several years (if not decades) old, and were designed for measuring different flow rates than may exist today.

The use of "area-velocity" methods, such as that provided by the Doppler ultrasonic MACE FloPro XCI to measure flow in open channels, not only negates the need for costly civil structures, but also increases the overall accuracy of the measurement. Furthermore, with a MACE FloPro, it is possible to measure flow in open channels of an irregular shape, such as earthen channels or those cast *in situ*. Where sites exist that have less than favourable hydraulics for accurate flow measurement, the MACE FloPro can be calibrated with FloCom+ software for even greater accuracy.

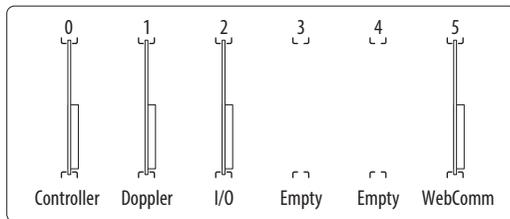
In the example shown, the FloPro XCI is measuring the velocity of the stream with a MACE Doppler velocity sensor and a MACE EchoFlo depth sensor is providing the measurement of the level. With a MACE WebComm card installed, these readings are available 24/7 on the MACE website, as well as having the ability to be alarmed via SMS/email to any mobile phone.



### FLOPRO XCI



### CARD SLOT CONFIGURATION



### SENSORS/PERIPHERALS



GSM Antenna



MACE EchoFlo Ultrasonic Depth Sensor



MACE Doppler Ultrasonic Velocity Sensor