

Groundwater centre pivot irrigation monitoring

Most irrigation enterprises have ground water extraction points that require accurate flow metering. These extraction points may discharge into open channels for further network distribution or directly into irrigation implements such as lateral move irrigators or centre pivots.

As water resources become less secure, the importance of accurate flow measurement increases. In the past, groundwater was not deemed necessary to monitor as it was thought that it was a completely “renewable” resource from season to season. However, the lack of aquifer regeneration during times of drought and excess surface-water usage has made the groundwater resource even more important to meter, ensuring equitable distribution.

The MACE AgriFlo XCI provides an extremely accurate and inexpensive solution for these types of applications. By using a MACE insertion electromagnetic flow sensor, the MACE AgriFlo can be used in pipes from 50 mm to 1 m (2 in. to 40 in.) in diameter. Because the MACE insertion electromagnetic sensor provides very little obstruction to the flow and has no moving parts, the whole system is virtually maintenance free. Furthermore, when monitoring flow into centre pivot or lateral move irrigators, the AgriFlo XCI also has suitable inputs to monitor other parameters such as pressure and temperature.

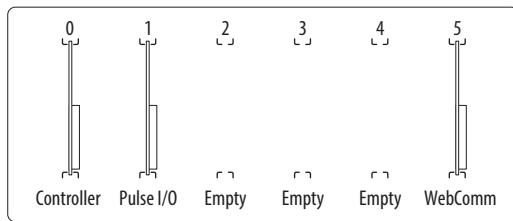
In the example shown, the AgriFlo XCI is measuring the flow of groundwater that is being directly discharged into a centre pivot irrigator. With a MACE WebComm card installed, these readings are available 24/7 on the MACE website, as well as having the ability to be alarmed via SMS/email to any mobile phone.



AGRIFLO XCI



CARD SLOT CONFIGURATION



SENSORS/PERIPHERALS

