



K-Line™ G-Set™: The biggest innovation since K-Line™

New Zealand's new, low maintenance, permanent irrigation solution.

What is G-Set™ irrigation?

The original idea originated from Kerry Turner of Grafton Irrigation, who came to RX Plastics with the concept of a new irrigation system. From this original idea RX Plastics has worked to develop the idea and commercialised a cost effective product for New Zealand farmers. This innovative, collaborative approach have resulted in the development of the K-Line™ G-Set™, a low-maintenance irrigation system that has quickly received attention and acclaim both locally and abroad. Perfect for use on awkward-shaped terrains and steep hills, the G-Set™ is an alternative to post solid set irrigation systems. The system is capable of operating in many environments where terrain or field shape are a problem to traditional systems. Consideration was made to the operating pressure of the system, to durability in the field and to protecting expensive valve, control and sprinklers from stock damage. Consideration was also made on control systems implemented. The result is the development of a solar charged battery control system. With that in mind we developed both with Baccara and QTech new control systems that meet this design challenge.

The Baccara is fully independent and the QTech is able to be updated from a distance by the use of a sophisticated mesh network enabling updates over difficult terrain to all devices.

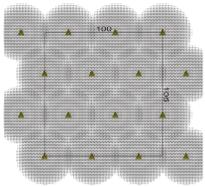
How does it work?

A polythene sub-lateral (ring main) pipe ploughed into the ground, with G-Sets attached by a tapping saddle. Buried in the ground, the durable G-Set™ enjoys excellent hold and stability thanks to the unique ribbing on its surface. The G-Set™ is high enough above the soil surface to get good performance from the sprinklers, but low enough so as not to have damage from stock rubbing, also for dairy cows, it is high enough that they don't step into G-Set™, protecting your investment.

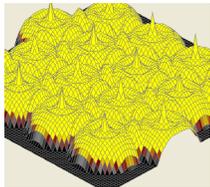
Advantages of G-Set™

- Variable installation depth – minimising installation labour
- No shifting required
- Perfect for steeply contoured ground
- Operation can be adjusted daily to account for seasonal requirements, stock location, fertiliser application etc.
- Low to the ground and visually less obtrusive
- Permanent irrigation assets enhance land value
- Custom system design and installation available from irrigation design companies
- Can be designed to fit almost all terrain, shape or geographic obstacles
- Single nozzle sprinkler to maximise distance and minimise wind drift
- Keeps sprinklers as low as possible to ground to minimise losses to the atmosphere
- Emphasis has been placed on selecting the sprinkler to operate at low pressure, minimising production of small water droplets that are highly wind affected and minimising energy use on farm

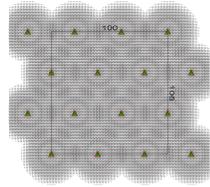
Senninger 8025 delivering high uniformity close to the ground (450mm).



2.8 BAR OPERATING



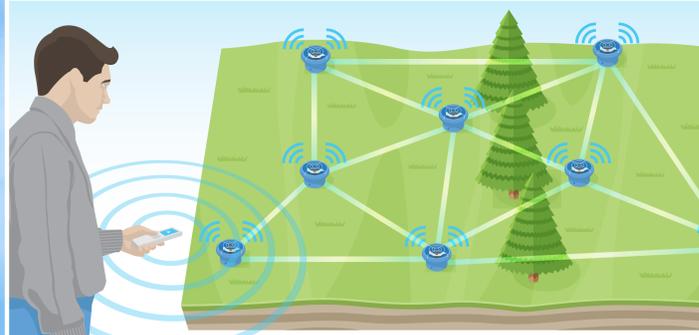
Displaying DU of 83% and a CU of 89%, with an average precipitation of 9.6mm/hr



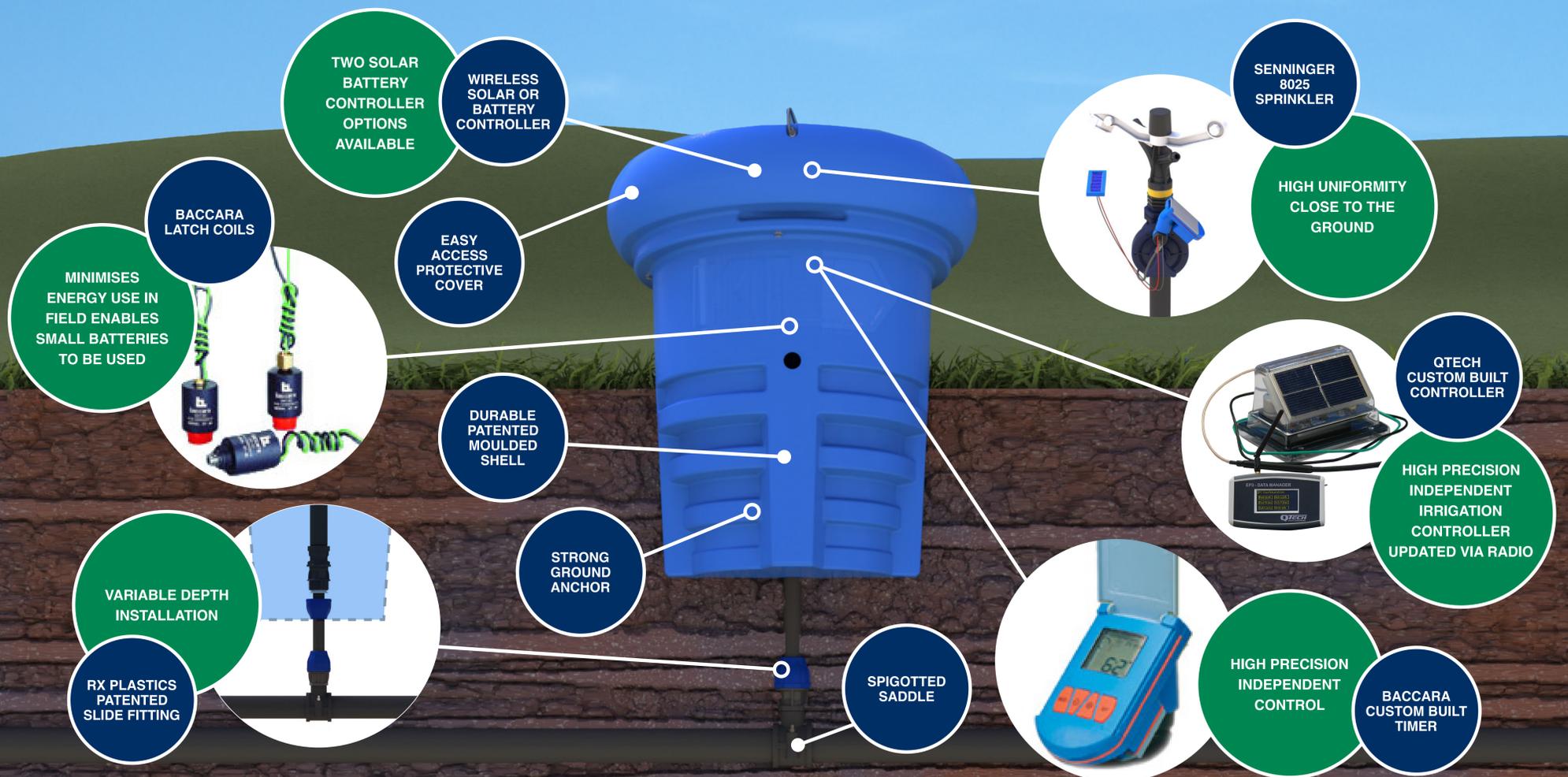
3.45 BAR OPERATING

Displaying DU of 87% and a CU of 91% with an average precipitation of 10.8mm/hr

Wireless radio system.



The G-Set's QTech intelligent mesh radio system has been custom-developed to provide quick and easy wireless communication. All G-Set™ units communicate with each other so all units get all intended messages.



Designed, manufactured and tested in New Zealand.

With thanks to contributing companies; Grafton Irrigation (conceptual idea and collaborative partner), Baccara (valve manufacturer), Senninger (sprinkler) and QTech (radio development).