

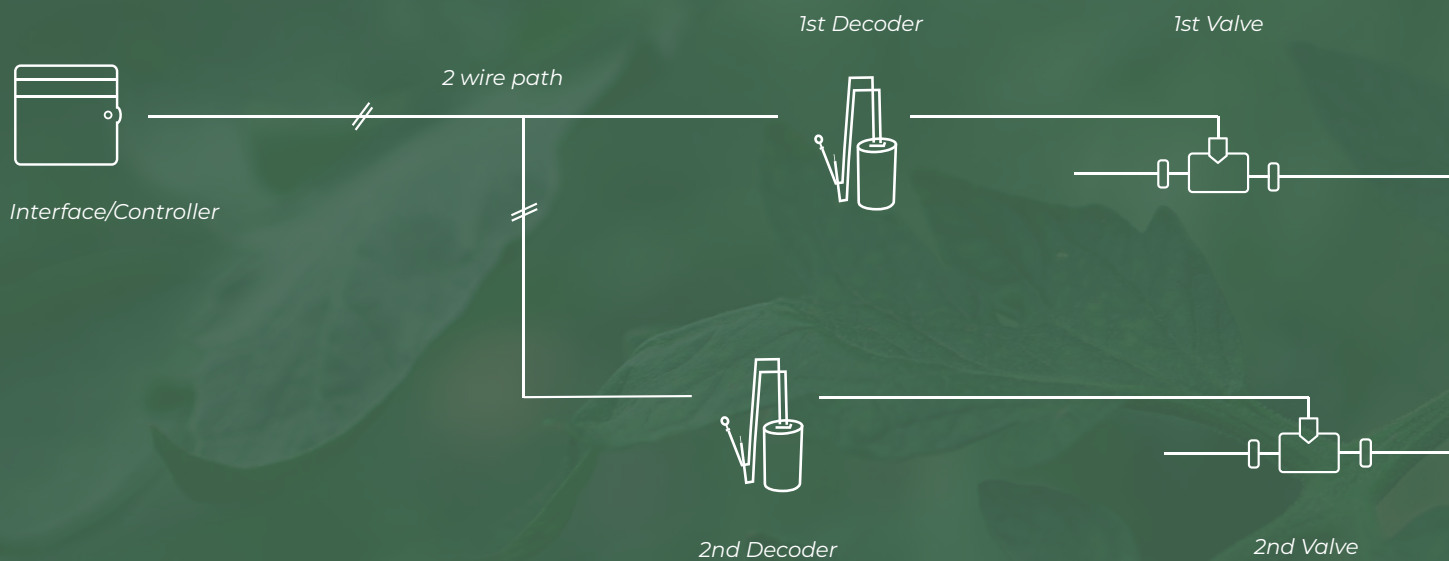
Take your irrigation solution to the next level with **groundbreaking** **MK3 technology**

Robust technology you can trust
More value added for clients
Continuous innovation

Crysberg

The 2-wire

In 1986 Crysberg developed the 2-wire technology that revolutionized the control of irrigation systems.



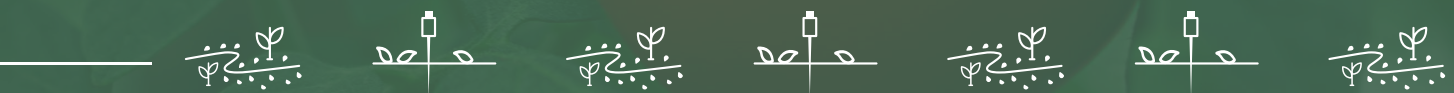
revolution

Instead of laying out cables for each and every sprinkler, nozzle, and drip valve, you simply run a single cable with two conductors, which is used for both power supply and communication.

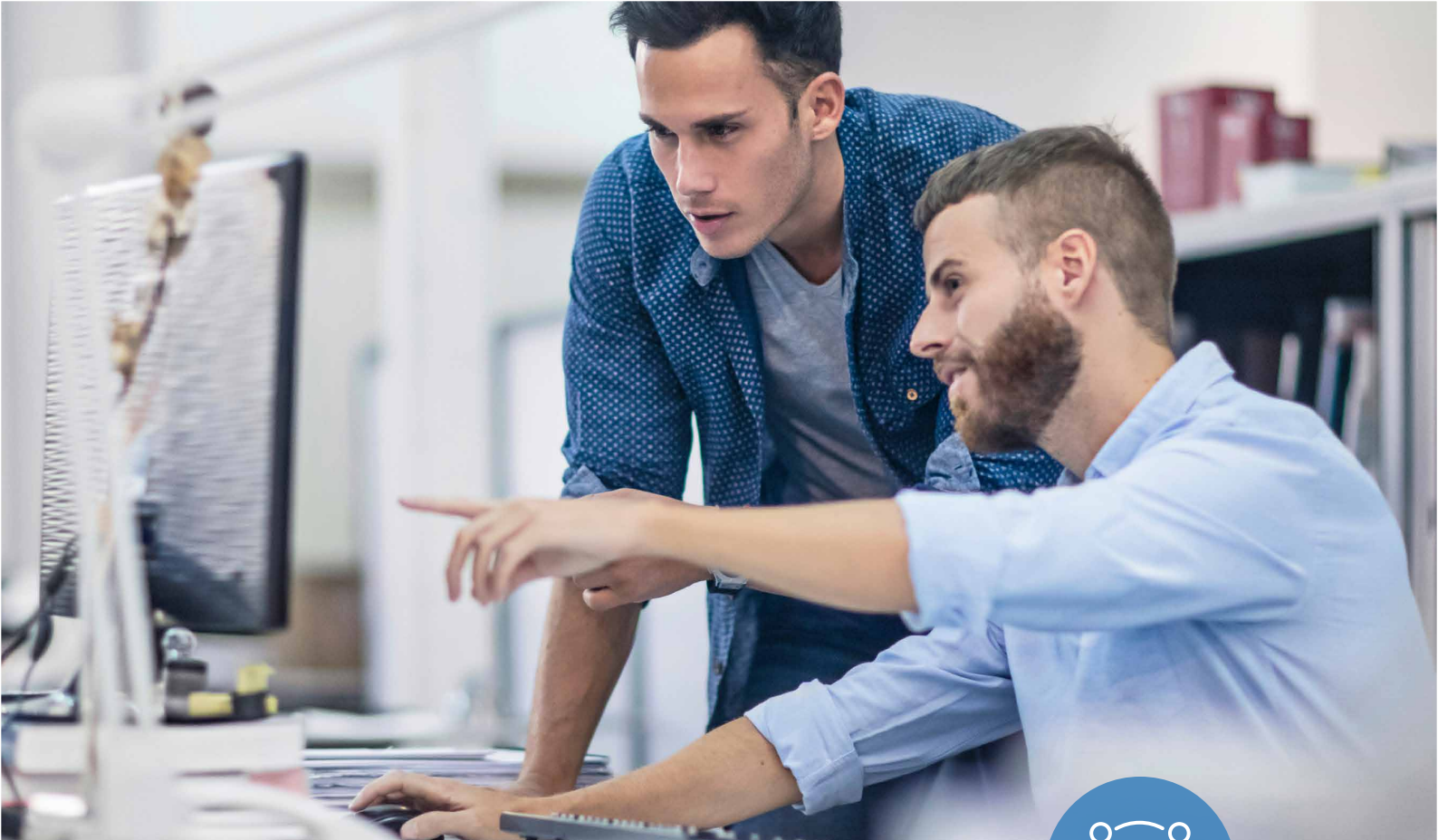
More than 120 input decoders and 500 output decoders can be connected to a single cable. Crysberg's decoders are compatible with all sprinklers. There can be 100 active units at the same time.



Drip valves and sensors



Sprinklers and sensors



OEM Partnership

The thunder is yours

At Crysberg we know that a strong partnership is the key to success. But we have also taken a deliberate choice NOT to be visible towards the end-user.

Crysberg has a 100% indirect business model, and only sells through partners, also known as OEM (Original Equipment Manufacturer) partners.

We work behind the scenes and focus on providing you as an OEM partner with a state-of-the-art decoder and interface technology you can count on. Robust products which will work under harsh conditions and still work flawlessly for decades.

With our new technology, Crysberg partners are able to boost their solutions by activating more valves and reading more sensors with less cabling. This not only provides significant savings, but also helps your business grow.

That's a promise.



Experience our **Interface solution** based on our new **MK3 technology**

Connect your controller to our robust technology.

You bring your controller or PLC, and we bring the MK3 technology.
Our Rest/JSON (cbor) API facilitates fast and easy integration between the controller or PLC and the interface.

MK3 technology enables you to run your network farther, expand the system as necessary, and save money whether you want to run 2 valves or 500 valves in a field.

- Connect more than 120 sensor decoders, 500 output decoders, or a mixture of the two on each 2-wire path
- Run 100 active at the same time
- Encrypted communication between controller – interface – decoders
- API-based. Easy integration with 3rd party products
- True 2-way communication
- Advanced diagnostics
- Plug-n-play function



The MK3 Interface



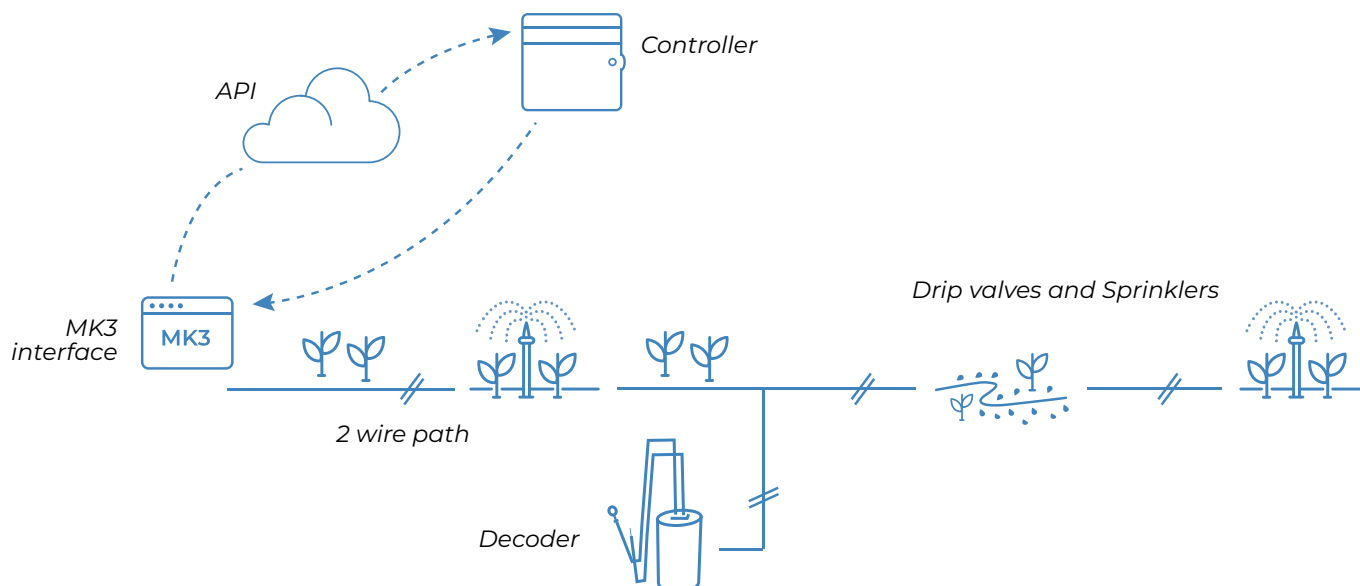


Crysberg's 2-wire technology enables you to activate more valves and read more sensors with less cabling!

The 2-wire technology allows you:

- **Minimize labor** - less wire, equals less labor
- **Minimize materials** - less wire, less copper costs
- **Minimize operating costs** - minimum maintenance cost and optimum repair cost

Incorporate MK3 into your system for reliable communication, better monitoring of your system, and most importantly, peace of mind.



MK3 technology offers true 2-way communication and diagnostic capabilities to identify:

- Plunger movement and "stay in hold position" detection
- Solenoid degradation
- Leakage detection on 2-wire as well as solenoids
- Auto detection and run optimization of solenoids
- 2-wire resistance
- 2-wire low voltage detection

World class **decoders** from Crysberg

Crysberg's decoders are the most popular and reliable in the world, based on robust electronics, and are easy to install.

What is a decoder?

A decoder is an advanced switch, that acts as an interpreter for each output or input a system has. Each decoder has a unique address that acts as a telephone number. Thus, whenever there is the need to operate a valve, the controller/ PLC calls the specific decoder to send power to the solenoid to turn on the valve. The same applies to sensors.

All electronic components are fully sealed within a watertight enclosure and will endure being buried underground, protected against damage from floods, frost or rodents.

Combined with your solution through our API and interface or controller you will be able to significantly reduce cost and complexity.

- Up to 500 decoders per 2-wire/interface
- Up to 100 active
- More than 120 sensor decoders
- Wire run up to 3 km/10.000 ft star
12 km/40.000 ft loop
- True two way communication
- Comprehensive diagnostic capabilities

Types of decoders



The light surge protection decoder

The sensor decoder

The output decoders come with 1, 2, 4 and 6 outputs



Crysberg is the irrigation industry's leading business partner

Crysberg has more than 30 years of experience in the development and production of high-quality irrigation controllers, interfaces, web-solutions, and decoders for 2-wire solutions.

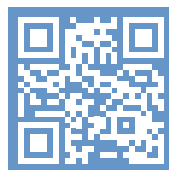
Back in the 1980's we developed the technology of letting decoders control sprinklers, drip irrigation, valves, and nozzles. A technology we now take to the next level.

We are proudly based in Denmark and have our production facility in Kvistgaard – just outside Copenhagen. Crysberg is owned 100% by Indutrade, an international private equity group listed on the stock exchange in Stockholm, Sweden.

At Crysberg we focus on protecting the environment. Our products are designed for saving water and optimizing irrigation. During our production process we constantly aim at using parts and components which can be recycled and are sustainable. We have carefully selected 5 UN Goals which have our full attention. Those are:



If you want to hear more about Crysberg's solutions and the new ground-breaking MK3 technology, please contact us.



Scan the QR code or go to crysberg.com