

# Output decoders for irrigation



## Specification for FD TECH+ 101, 201, 401 and 601

Crysberg's output decoders are built for irrigation and the challenging environment with their watertight design, perfect for direct burial and protection against rodents.

These decoders come in models that allow the control of multiple valves from a single location, facilitating an easier setup with an auto-discover feature for quick installation. Available in 1, 2, 4, and 6 output models, they offer sophisticated bi-directional communication for efficient configuration.

Capable of supporting up to 500 output decoders on each 2-wire path, Crysberg provides versatile, scalable solutions for irrigation management. Activation is simple: the controller signals the specific decoder to power the solenoid, effectively controlling water flow.

	FD TECH+ 101	FD TECH+ 201	FD TECH+ 401	FD TECH+ 601
<b>Electric input</b>				
Nominal voltage	40V peak from 2-wire			
Minimum voltage	21V peak from 2-wire			
Standby current	0.3mA @ nominal voltage			
Wire size	1.5mm <sup>2</sup> solid copper			
Insulation	PVC			
Built-in heavy-duty lightning protection	No	Yes		
Wire size	2	3		
<b>Electrical output</b>				
Number of outputs	1	2	4	6
Number of solenoids per output	1	1	1	1
Max voltage	42VDC switching			
Max Current	600mA per output			
<b>Output control</b>				
· Inrush voltage	0-42VDC switching. Configurable per output			
· Inrush frequency	100Hz to 10kHz. Default 1kHz. Configurable per decoder			
· Inrush time	1 to 250msec configurable per output			
· Holding voltage	0-42VDC switching. Configurable per output			
· Holding time	Self-holding 1-240 seconds or external control of stop			
Wires	2	4	8	12
Wire size	1.5mm <sup>2</sup> solid copper			
Insulation	PVC			
Isolation	Output must be floating, i.e., not connected to GND			



Environment	
Operation	0 up to 60°C / 32 to 140°F
Storage	-20 to 70°C / -4 to 158°F
Humidity	100%
Features	
Addresses	32 bit (unique)
Installation	Plug & play recognition of decoder
Communication	Fast MK3 protocol and backward compatible with MK2. Full communication to/from controller/interface including interrupt alerts in case of errors
Feedback	Acknowledge (positive/negative) on solenoid activation
Supervision	Solenoid degradation check and reporting
Temperature	Built-in internal temperature sensor for possible measuring soil temperature
2-wire supervision	Possibility to measure the 2-wire voltage and report upon request

