

Input decoder SD TECH+ 110



SD TECH+ 110 Specification

The Crysberg Sensor Decoder (SD Tech+ 110), configurable for diverse inputs, ensures swift and dependable communication across various sensor types, manual switches, timers, and more, over extended wire lengths.

With the capacity to integrate up to 120 sensor decoders on each 2-wire path, it complements any sprinkler system, supporting 100 active units simultaneously. This versatility enhances valve control, making it a robust solution for managing intricate irrigation systems and maximizing efficiency.

| | SD TECH+ 110 |
|------------------------------------------|---------------------------------------------------|
| Electric input (2-wire) | |
| Nominal voltage | 40V peak from 2-wire |
| Minimum voltage | 21V peak from 2-wire |
| Standby current | 0.6mA @ nominal voltage (40V), no sensor sourcing |
| Max current | 12 mA @ nominal voltage (40V) |
| Wires | 2 |
| Wire size | 1.5mm ² solid copper |
| Insulation | PVC |
| Built-in heavy-duty lightning protection | No |

| Electrical input (measuring) | |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Number of inputs | 1 |
| Input methods | Pulse count, Pulse distance, 4-20mA, 0-10VDC or 0-xVDC. Configurable |
| Pulse count mode | Used for flow rate meters (fast pulses) |
| · Frequency | 0-1000Hz with 50/50% duty cycle |
| · Count period | Configurable, 1-250 seconds |
| · Min pulse width | 0.4ms |
| · Sourcing | Sensor Decoder sources with 6.5, 9.5, 13.5 or 16.5VDC. Configurable. Default 13.5VDC |
| · Trigger level | Default 5VDC with 4k7Ω pull-up for 12VDC sourcing. Configurable trigger level and hysteresis in steps of 10mV. |
| Pulse distance mode | Used for volume meters (slow pulses) |
| · Resolution | 1ms to 1s |
| · Range | 1ms to 10 hours between pulses |
| · Min pulse width | 0.4ms |
| · Sourcing | Sensor Decoder sources with 6.5, 9.5, 13.5 or 16.5VDC. Configurable. Default 13.5VDC |
| · Trigger level | Default 5VDC with 4k7Ω pull-up for 13.5VDC sourcing. Configurable trigger level and hysteresis in steps of 10mV. |



| | |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| 4-20mA mode | Used for analog measurements |
| · Power Source | Sensor decoder or external. Configurable |
| · Voltage | Sensor Decoder sources with 6.5, 9.5, 13.5 or 16.5VDC. Configurable. Default 13.5VDC. External sourcing: Max 20VDC |
| · Sourcing | Constant (default) or intelligent |
| · Resolution | 50 μ A |
| 0-10VDC mode | Used for analog measurements |
| · Power Source | Sensor decoder. See electrical output (drive) |
| · Sourcing | Constant (default) or intelligent |
| · Measurement | Absolute or potentiometric (relative) |
| · Resolution | 10mV |
| 0-xVDC mode | Used for analog measurements |
| · Power Source | External |
| · Voltage | External sourcing: Max 20VDC |
| · Sourcing | N/A |
| · Measurement | Absolute |
| · Resolution | 20/10mV |
| Wires | 2 |
| Wire size | 1.5mm ² solid copper |
| Insulation | PVC |
| Galvanic Isolation | No. Input 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 sensor decoder |
| Communication | Fast protocol |
| Data acquisition | Poll or Interrupt. |
| Current measurements | Intelligent drive of measurement to reduce current consumption from 2-wire |
| Registers | Non-volatile 32-bit registers for pulse counting, volume counting, time between pulses |
| Temperature | Built-in temperature sensor |