

# REQUIREMENTS SPECIFICATION



**2200i™**



**1100i™**



**600i™**



SECURED IN SECONDS

# Fog Cannons - General Information

## 1. Device requirement:

- The device in question is a fog cannon that must fill a \_\_\_\_\_ m<sup>3</sup> room with fog in less than one minute in accordance with EN 50131-8/IEC 62642-8.
- Points 2, 3, 5, 7 are minimum requirements!

## 2. Function:

- Fog output in 1 minute \_\_\_\_\_ m<sup>3</sup> with the option of a pulse function to guarantee longer coverage of the primary area
- The fog cannon must be able to emit several times (> 3)
- The fog cannon must be tested in accordance with EN and / or VDS
- No pressurised tank (explosion protection)
- Doesn't contain ethanol (solvent)
- No fan (noise pollution)

## 3. Mechanics:

- Length = \_\_\_\_\_ width = \_\_\_\_\_ height = \_\_\_\_\_ mm
- Operational weight: \_\_\_\_\_ kg
- The housing/cabinet must be made of steel
- It must be possible to install it at a height, in any position (protection pls. ad: apart from upside down against vandalism)
- A suitable tool must be provided when installed overhead on the ceiling, (accident prevention regulations risk area 1)
- It must be possible to install several different nozzles with varying output directions

## 4. Options for mechanical system:

- A nozzle extension is required to enable fog to be emitted through a wall
- Protection against vandalizing the nozzle is required

## 5. Electronics:

- The inputs and outputs must be galvanically isolated (min. 600V) (fire hazard)
- A power supply of at least 9V for consumers (short-circuit proof) for at least 100mA (for remote detectors) must be available
- A battery monitor is required (test every 24h) and in the event of a fault it must also be transmitted to an output (relay or transistor output)
- It must be possible to display the status of the device for monitoring purposes via software or the internet
- It must be possible to update the firmware without changing the chip
- A status display must be visible on the circuit board. Any fault is specifically described on the display or different LEDs
- The device must have a CE marking
- It must be possible to replace the entire electronics without dismantling the device on site (potential follow-up costs in operation)
- It must be possible to integrate the signals of a fire alarm system
- It must be possible to pass on any activation to the fire alarm system
- There must be an event log (comprising at least the last 50 events)
- There must be mechanical protection against overheating that cannot reset itself (fire hazard)
- The electronics must be upgradable (to protect future investments)

## 6. Electronics options:

- There must be an optional IP input
- There must be an optional separate overflow input
- Different emission times must be possible via separate inputs
- It must be possible to display several fault-specific outputs
- It must be possible to integrate optional artificial DNA (tag the offender)
- It must be possible to connect the devices in series, with a central display in plain text in the event of a fault so that a security officer can respond
- Optional RS485 card to enable simplified connection to an alarm system

## 7. Software:

- It must be possible to read out all parameters to evaluate the status of the device
- It should be possible to read out the following: Operating status of inputs, battery status, operating time, temperature of heater, power consumption of external consumers (if at the limit of the power supply)
- Display of event log including time and date

## 8. Optional software:

- It must be possible to read out status both uni-directionally and bi-directionally via IP uni-directionally is only possible when a "cloud" is available or supplied
- With bi-directional data transmission, everything must be readable as if on site. This of course includes testing from a distance
- With a cloud solution (uni-directional), the device cannot be addressed from outside. Therefore, the following must be possible in the cloud: An email to several people must be generated whenever a status changes, there must be a type of "map" for technicians, everything must be documented and protected with different passwords according to level
- The IP must be API-approved (after NDA signature)

## 9. Connectivity options

- It must be possible to connect up to 16 devices in series via a central unit or wirelessly
- This central unit should also be able to make different group allocations
- The unit must have plain text in order to inform a responsible person on site
- A wired/wireless combination must be possible
- The unit must have galvanically isolated inputs
- The outputs must also be galvanically isolated
- An IP interface for new communication channels is important
- It must have menu-driven software that can display device faults individually
- It must have its own realtime clock
- The connected devices must be easy to read in and easy to delete
- It must be possible to transmit an acoustic alarm (beeper)
- Remote access must be password protected
- It must be possible to briefly trigger the units individually on site or via a network for a test
- It must be possible to control the machine's relay outputs individually for test purposes
- It must be possible to centrally lock the connected devices for servicing purposes using this unit (no inadvertent activation)
- The IP must be selectable, static or DHCP

