



Protect the environment  
and  
save valuable time



## Overfill Prevention Control System provides a secure and effective unloading of tank trucks to fuel tanks.

The Overfill Prevention Control System (OPC) provides a secure means of protecting the environment. Tanker trucks will effectively be stopped in overfilling underground or above ground tanks. The system is a self-checking security device that prevents overfilling of up to 8 tanks simultaneously, which means that on most petrol stations, all tanks can be filled at the same time. The in-truck OPC System (option) is also able to provide the truck driver with information of the ullage of each tank via the tank level gauge system and the truck driver does not need to gauge each tank manually. These features not only give a very secure system but also optimize the unloading process of the tank trucks, with several minutes saved at each petrol station. Every time.

### The function of the system is simple:

Thermistors from all tanks are connected to the OPC 224 installed on the petrol station. The OPC 225 is mounted on each tank truck and controls the bottom valves of the truck. By connecting the OPC 224 with OPC 225 (a 2-poled male connection) the overfill prevention control system is enabled and unloading of the truck can begin. If the fluid level in the monitored tanks rises to the thermistors the OPC prevents overfills by shutting down the bottom valves of the tank truck.

4tech cooperates with the leading manufacturers of overfill prevention solutions to protect the environment. 4tech provides the ATGS and the probes (which can easily be retrofitted to existing installations) to constitute a complete system for surveillance and protection.

We make it easy.





<b>Product:</b>	<b>OPC 224-001</b>	<b>Intrinsically safe controller for overfill prevention in fuel tanks</b>
<b>Communication standard:</b>		Ullage port: RS485 / RS232
<b>Environment:</b>		-10 to +50 °C. ATEX (IP20)
<b>Installation:</b>		Wall mount
<b>Grounding:</b>		Separate IS- ground terminal
<b>Dimensions (W x H x D):</b>		Approx: 30,5 cm x 23,2 cm x 6,5 cm
<b>CE norms:</b>		EN 50014, EN50020, EN 13616, EN50081-1, EN50082-2
<b>Type of sensors element used:</b>		PTC thermistor element within tank installed at overfill level.
<b>Measuring principle:</b>		Heating PTC element, detects cooling by fluid via loop current.
<b>Power supply:</b>		230V AC(+10/-15%) 25VA mains powered (built-in)
<b>Output voltage to PTC:</b>		19V / 20V (setting by switch)
<b>Trigger levels PTC Hot/Cold:</b>		36mA / 40 mA
<b>Trigger levels Truck interface Hot/Cold:</b>		22,5mA / 58,5 mA
<b>Firmware upload capability:</b>		Via JTAG dongle
<b>ATEX notification body number:</b>		0539 DEMKO
<b>Explosion category:</b>		[EEx ia] IIB
<b>Gas group:</b>		II (1) G
<b>EC type Examination certificate:</b>		DEMKO04ATEX136404
<b>Safety limits (Truck A/B):</b>		$U_i \leq 30V$ , $I_i \leq 200$ mA, $P_i \leq 1,5W$ , $L_o = 1mH$ , $C_o = 200nF$
<b>Safety limits (Thermistor connection 1-8):</b>		$U_o \leq 24,4V$ , $I_o \leq 160mA$ , $P_o \leq 1,0W$ $L_o = 1mH$ , $C_o = 100nF$
<b>Connection of thermistor</b>		Cable length max 400 meters (wire 1,0mm <sup>2</sup> ) Cable length max 200 meters (wire 0,5mm <sup>2</sup> )

