# Logic Controller
## Contamination Control System (CCS) gold

**Developed for aviation refuelling applications**

Fully automatic touchscreen controller for use in combination with the AFGUARD®
Electronic Water Sensor. The Contamination Control System (CCS) provides an easy to
use interface that is constantly processing the actual water content in aviation fuels. The
CCS is designed to process a warning/alarm signal if free water reaches a critical level.

The logic controller is compliant to JIG Technical Bulletin No. 110 regarding alert, alarm
and data storage requirements.

There are two versions of the CCS available, entitled gold or silver version depending on
the requirement. The CCS gold has a configurable colour touch screen that can display
the actual water content. Connected to a flashing lamp it will provide an alert through
sensor measurings. The CCS silver version is designed to be integrated into third party
PLCs that are AFGUARD®-ready, and fully configurable to customer needs.

## Application Area

- To process the actual water content during into-plane fuelling

## Technical Data

| | |
|---|---|
| • Power supply: | 24 V DC ±10% |
| • Degree of protection: | IP65 |
| • Signal transfer: | Ethernet, LAN, WIFI |
| • Connections: | 8 digital input: 24 V DC ±10% |
| | 4 digital output: 24 V DC |
| | 4 analog input: 0...20 mA |
| | 3 relay output |
| • Communication protocol: | Modbus TCP |
| • Operating temperature range: | -30°C (-22°F) to + 60 °C (140°F) |

## Features

The CCS provides alarm indication when water content reaches a critical level. It offers close range connectivity via
Ethernet and WiFi connection for longer range connectivity.

## Connection

- Communciation to smartphones and tablets with Android or IOS operating system
- Connection of up to two AFGUARD®
- dP-Transmitter with a signal output of 4...20 mA
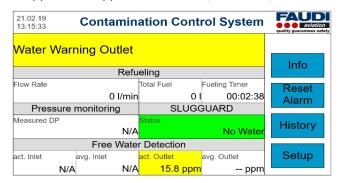- Connection of registers and other flowsignals (pulsed on 4 ... 30 mA)

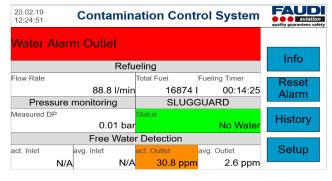## Diagnostics

- Status: O.K.



- Status: Warning

Sensor indication between 15 ppm and 30 ppm of free water (Alert Level)



- Status: Alarm

Sensor indication at or above 30 ppm of free water (Alarm Level), giving a different flashing lamp indication from Alert Level **or**

An Alarm Level will be activated for sensor indications at or above 50 ppm of free water for >5 sec