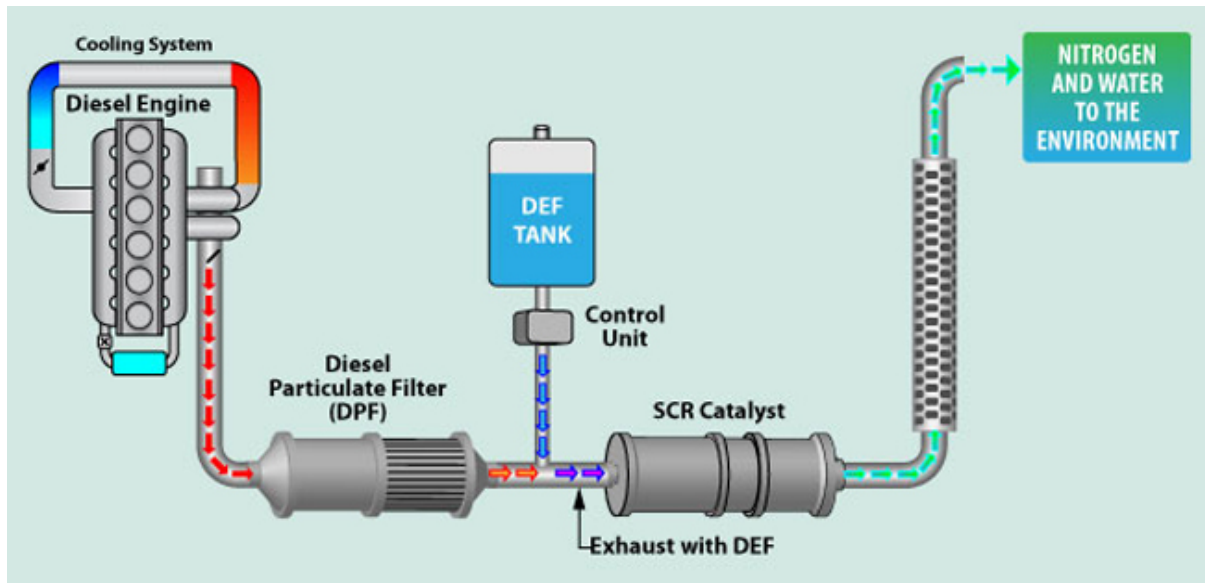


SCR (Selective Catalytic Reduction) Emissions System, what sensor do I need?



An SCR (Selective Catalytic Recovery) system is a system installed on diesel vehicles to reduce harmful Nitrous Oxide (NOx) emissions. It works by injecting an automotive grade urea, or Diesel Exhaust Fluid (DEF) through a specially designed catalyst, into the exhaust stream of a diesel engine.

The DEF sets off a chemical reaction which converts the NOx into Nitrogen, water and very small amounts of CO2. SCR technology can achieve up to 90% NOx reduction.

The technology has been around for some time and used extensively on commercial on and off-road vehicles. In addition, cargo vessels, ferries and tug boats worldwide have employed SCR technology to effectively reduce emissions.



One of the largest sectors for SCR technology is in the US. 2010 saw the introduction of the EPA diesel engine emissions standards for heavy duty commercial trucks. SCR had the added benefit of some commercial truck operators reporting 3-5% fuel economy. Such is the importance of DEF to the emissions control systems, many vehicle starting systems may be locked out if inadequate levels of DEF are onboard, preventing the vehicle from starting.

New, stringent emissions laws which are being introduced globally mean that many of our own personal diesel cars will no longer be allowed to enter some of our major Towns and Cities.

Some innovative companies have developed retro-fit SCR systems which can be installed on most modern diesel cars. SST Sensing provide liquid level switches for the DEF (or AdBlue) tanks. Our switches can trigger an audible or visual indication to the driver to alert them to low levels of DEF. Ensuring DEF levels are sufficient to allow the SCR system to operate effectively.

Suggested Sensor for Application – Optomax Digital LLC210D3SH

- Small compact sensor
- Solid-state, no moving parts. Ideal for high vibration application
- High Temperature operation up to +125°C
- Chemically resistant Polysulfone housing
- Low power, digital output

Rapid prototyping for customised sensors available;

contact technical@sstsensing.com

