

## Fuel Conditioning Unit

Designed to maintain diesel fuel quality in storage tanks up to **40,000 litres**, particularly for standby and backup generator installations subject to long storage periods.

### Fuel Quality & Filtration Performance

- Multi-pass filtration to **ISO 14/13/11**
- Laboratory-verified water removal to **< 60 ppm**
- Integrated magnetic conditioning to break down microbial sludge ("diesel bug")
- Prevents injector, pump, and engine damage caused by water and particulate contamination

### System Components

- **Piusi Panther 56** fuel transfer pump
- **Dual Cim-Tek Ultimate Defense®** particulate and water filters
- Magnetic fuel conditioning module

### Control & Intelligence

- Microcontroller-based control system with **touchscreen HMI**
- Real-time monitoring of:
  - Filter condition and blockage
  - Flow rate and filter life trends
  - Run status and scheduled cycles
- Event and alarm logging for maintenance diagnostics
- Predictive filter replacement to reduce unplanned downtime



### Safety & Integration

- Inputs for fuel level alarm/gauge and leak detection probe Automatic pump shutdown on low level or leak detection
- Dual passive **BMS outputs** for remote alarm signalling:
  - Filter blockage
  - Low fuel level / leak condition

### Operating Logic

- Automatic run-time scheduling based on tank volume
- Operates **Mon–Fri, 09:00–17:00**
- Conditions approximately **1.5 × tank capacity per month**

### System Variants

- Standard configuration
- Gauge version (integrated fuel level display in litres and bar graph)
- Modbus version (system status and alarms via Modbus protocol)
- Combined gauge + Modbus version

Part Number	Description
<b>LK1082</b>	DN25 Fuel Conditioning Unit with Gauge 230v/50Hz
<b>LK1083</b>	DN25 Fuel Conditioning Unit with Modbus & Gauge 230v/50Hz