

# Platform Integration - LCD 4™

## MODULAR CHEMICAL DETECTION FOR PLATFORM INTEGRATION



### Feature Highlights

- Core integration via PCA
- Continuous real-time monitoring
- Optional AIM for automated operation
- Flexible deployment: vehicle-mounted, fixed, or dismounted use
- Operates from vehicle power with automatic battery backup
- Proven IMS technology with no radioactive source
- Qualified to MIL-STD environmental and EMC standards

### System Components

- LCD 4 Detector – IMS-based chemical detection (CWAs & TICs)
- Power & Communications Adapter (PCA) – platform interface for power, communications and mounting
- Auto Inlet Module (AIM) (Optional) – remote and automated operation system interfacing

The LCD 4 Platform Integration System enables seamless integration of advanced chemical detection into vehicle and platform environments, delivering continuous monitoring and early warning of chemical warfare agents and toxic industrial chemical threats.

At the core of the system is the Power & Communications Adapter (PCA), which provides power conditioning, communications, and secure mounting for full platform integration.

Supporting vehicle power operation from 8–32V DC, the PCA automatically switches to internal batteries when required and enables integration with vehicle systems through RS422 and USB communications. The system also supports remote alarm output and system control, allowing operators to maintain situational awareness and respond rapidly to potential threats.

For enhanced operational flexibility, the LCD 4 can be installed or removed to support multi-role deployment across a range of mission requirements. The system can be further enhanced with the optional Auto Inlet Module (AIM), enabling automated and remote sampling.

Designed for reliability in demanding operational environments, the LCD 4 Platform Integration System requires no calibration or scheduled maintenance and remains fully operable in extreme conditions from -32°C to +52°C.

## General Specifications

|                 |                                                                                                                               |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Power</b>    | 8-32VDC (qualified against MIL-STD-1275)<br>4 x AA lithium ion or 4 x AA alkaline manganese dioxide batteries                 |
| <b>Comms</b>    | RS422 & USB data interface                                                                                                    |
| <b>Size</b>     | LCD 4, PCA & AIM inlet – 11.5 x 24.4 x 8.8 cm (4.5 x 4.84 x 1.9in) / LCD 4 & PCA: 11.5 x 19.6 x 8.4 cm                        |
| <b>Weight</b>   | LCD 4, PCA & AIM inlet – 1.25 kg (2.76 lbs)* AIM control unit – 0.77 kg (1.70 lbs) / Weight - LCD 4 & PCA 1.00 kg (2.20 lbs)* |
| <b>Temp</b>     | Operational -32° C to +52°C, Storage -39° C to +70°C                                                                          |
| <b>Humidity</b> | 0 to 100% RH                                                                                                                  |

\* excludes cabling

## System Architecture

### Base System: LCD 4 + PCA

- Full platform integration of chemical detection capability
- Vehicle power input and conditioning
- Data communication and system interfacing
- Continuous real-time monitoring and alerting

### Enhanced Configuration (Optional):

#### LCD 4 + PCA + AIM

- Allows the system to be powered on and off remotely
- Reduced operator workload
- Enhanced operational flexibility and crew protection



From core vehicle integration to fully automated detection, the LCD 4 Platform Integration System scales to meet mission demands.

For product information, sales or service, please go to [www.smithsdetection.com/locations](http://www.smithsdetection.com/locations)

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