

# 9-30501-KID

## Kidde MiniLaser

### Compact Aspirating Detection for Demanding Applications

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The MiniLaser is a compact, single-zone aspirating smoke detector designed for applications that demand high sensitivity, advanced diagnostics, and flexible configuration. Built on proven ModuLaser technology, it delivers reliable early warning while maintaining a small footprint suitable for a wide range of installations.

### High Resolution Detection with Intelligent Alarm Stability

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MiniLaser uses laser-based forward-scattering optical detection, optimized for identifying extremely small particles associated with incipient fires. With very high optical resolution and multiple independent alarm levels, it supports early intervention while maintaining operational reliability.

The integrated ClassiFire technology continuously adapts sensitivity based on environmental conditions, ensuring long-term alarm stability and minimizing nuisance alarms throughout the detector's lifecycle. This intelligence maximizes early warning performance without increasing false alarm risk.

### Designed for Fast Installation, Commissioning, and Service

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MiniLaser is engineered to simplify every stage of deployment. Modular placement of the user interface and expansion modules allows flexible physical installation, while pre-installation backplanes enable wiring to be completed early in the project lifecycle. Commissioning is accelerated through a DIP-switch interface, enabling key configuration settings without a PC, while a USB-C interface supports advanced diagnostics, configuration, and firmware updates. All wiring terminals are front-accessible, allowing live testing and maintenance without powering down or dismantling the detector, significantly reducing service time and disruption.

### Long Term Operational and System Integrity

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MiniLaser delivers sustained value through features that enhance reliability, traceability, and lifecycle performance. Continuous airflow monitoring detects blocked sampling points, broken pipes, and abnormal flow conditions, while event logging and chart recording provide long-term visibility of system performance. Embedded PipeCAD file storage ensures full design traceability over time, even when original documentation is unavailable. The 10/90 waste-gate airflow architecture and multi-layer internal dust filter extend maintenance intervals, protect the optical chamber, and support consistent detection performance over the product's lifetime.



### Dettagli

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- **Dual Configuration** : Dip-switch configuration setting for simple sampling pipe layouts or PipeCAD modeling for more complex sampling pipe with laptop configuration
- **Customizable**: Display sub-module and Expansion sub-module can be located most conveniently based on wiring needs, on either side of the detector module. Subjected to the specific requirements of the application, up to 2 functional-modules can be installed in the expansion sub-module
- **Simplified installation** : Ingenious docking station design allows detector to be easily installed. Sensitive electronics are easily removed to ensure they will not be damaged during first fix installation. Aspirating pipework and cable entries can easily be made into either the top or the bottom of the unit.
- **Intuitive user interface** : Easy to understand icon driven UI, providing status of faults and alarms. With the addition of a bar graph display showing smoke level development in the protected area.
- **Easy pipe connection** : The quick fit pipe adaptor system locks down securely, yet leaves plenty of room for easy pipe connection and removal.

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### Specifiche tecniche

#### Generale

Indicazione stato	LED's
Interfaccia utente	Alarm and fault indicators, with smoke bar graph display
Livelli di allarme	4 (Aux, Pre-alarm, Alarm and Alarm 2)
Registro eventi	20 000
Connettività	USB (USB-C)

#### Elettrico

Tensione di esercizio	18 to 30 VDC
Consumo attuale	120 mA - fan speed 1 180 mA - fan speed 4 (default speed) 230 mA - fan speed 6 365 mA - fan speed 10

#### Rivelazione

Principio di rilevamento	Laser light scattering mass detection and particle evaluation
Sensibilità	0.002 %obs/m to 25 %obs/m (0.0006 %obs/ft to 7.62 %obs/ft)
Area di copertura	Up to 1600m <sup>2</sup> (subjected to local approvals and installation standards)
Intervallo di sensibilità delle particelle	0.003 to 10 microns

#### Tubo di campionamento

Lunghezza	Up to 125 m (410 ft.) combined per detector module
Quantità di fori di campionamento	Up to 10 - Class A per detector module Up to 20 - Class B per detector module Up to 35 - Class C per detector module
Dimensioni ingresso	27 or 25 mm (1.06 or 0.98 in) outer diameter
Posizione di ingresso	Top or bottom
Misura scarico	27 or 25 mm (1.06 or 0.98 in) outer diameter
Posizione di scarico	Top or bottom

#### Ingresso

Quantità in entrata	1
Tipo di input e intervallo	Supervised
Termine	15 KΩ 5% 1/4 W
Programmabile	Yes

#### Uscita

Quantità in uscita	3
Tipo di uscita e intervallo	Voltage free (contact rating 2 A at 30 VDC / NO/NC/C)
Programmabile	Yes (2 x outputs / 1 x fixed for fault)

#### Fisico

Dimensioni fisiche	W x D x H 165 x 133.5 x 300 mm (6.5 x 5.25 x 11.8 in)
Peso netto	2.15 Kg (4.7 lb.)
Colore	Grey-white (RAL 9002)
Tipo di montaggio	barra DIN, Montaggio a superficie
Cavo di entrata	4 at the bottom, 2 at the rear, 5 at the top

#### Ambientale

Temperatura operativa	Equipment: -10 to +60°C (14 to +140°F) Sampled air: -40 to +60 °C (-40 to +140 °F) with sampled air heated to operational temperature of at least -10°C (14°F)
Umidità relativa	0 to 95% noncondensing
Ambiente	Interno
IP rating	IP40

#### Regolatorio

Conformità	REACH, RoHS
Certificazioni	CPR, EN54-20

#### Physical

Cable entry size	20 mm (0.5 in) - top and bottom
Detector module orientation	Vertical (0 deg or 180 deg)

#### Chart recorder

Sampling period	Adjustable between 1s and 60 s
Capacity	1 months @ 1s / Up to 5 years @ 60 s
Values recorded	Detector value, 4 alarm level values, flow value and temperature (all simultaneously)

#### Sampling pipe

Inlet quantity	1
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#### Prodotti compatibili

Categoria	Riferimento	Descrizione
Dispositivo di rivelazione	9-30520	
Dispositivo di rivelazione	9-30521	