LD500
Laser Diode Gas Analyser

The Opsis LD500 Analyser is the central unit in the laser diode gas monitoring system. It can house up to four laser diode heads. Each head is a complete laser control and data sampling system. A built-in PC with LCD display controls the function of the instrument.

The LD500 will emit light from the internal laser diode to an emitter via a fibre optic cable. A receiver converts the signal and sends it back via a second fibre optic communication cable to the LD500 analyser. The LD500 will process and evaluate the signals and provide measurement results with response times down to one second.

Please refer to page two for the gases that can be measured. The specifications for each gas are presented in the respective application sheet.

The system can be configured according to the system examples described on page four.

Altogether, the LD500 analyser can measure on up to eight paths.
Technical Specifications (standard)

Dimensions (L × W × H)  485 × 450 × 200 mm, 19” rack
Weight incl. case (approx.)  15 kg
Voltage supply  230 VAC (+6%, –10%) / 115 VAC (±10%) 50/60 Hz
Power consumption  110 W
Computer  PC compatible
CF memory  512 Mb
External modem  Hayes compatible
Serial outputs  RS 232
Ambient temperature  +15°C to +25°C (+60°F to +75°F)
Degree of protection  IP 20

An LDS500 includes as standard
Central unit with 6.4” LCD monitor and keyboard
PC and slots for four laser modules
External modem 4 × RS 232
Communication card CC202L
USB port

Standard separately ordered
One laser head
One ER060L / ER080L / ER110L / ER150L emitter and receiver unit or ER120L and RR090L transceiver and retro-reflector
One OF010 / OF005 laser optical fibre cable
One CF120 optical communication fibre
Gas calibration EG002 (one for each gas)
LA060 light adjustment kit for the emitter/receiver heads

Specifications subject to change without notice

Laser Optical Fibre

<table>
<thead>
<tr>
<th>Laser fibre for module</th>
<th>Laser Heads</th>
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<tbody>
<tr>
<td>OF010-xxx Laser fibre</td>
<td>LHS11, LHS12, LHS13, LHS14 and LHS16</td>
</tr>
<tr>
<td>OF005-xxx Laser fibre</td>
<td>LHS15 and LHS17</td>
</tr>
</tbody>
</table>

-xxx = number of metres

Options

Additional laser heads (up to 4)
Additional monitoring paths (up to 8)
Additional serial ports
Additional communication card CC202L
RE060L-EEx receiver for use with EM060L emitter for explosion classed areas Zone 1
External screen

Accessories

AC180 Air-conditioned cabinet
Auto-calibration equipment
MX10XL Multiplexer*
MXX01L Demultiplexer*
I/O Management software IO256
Digital and analogue input and output modules
Short-haul modems
Sensors
Dataloggers
EnviMan Software

* Please specify the number of inputs/outputs and type of laser(s)
System Configurations – 3 Examples

One laser module for two paths

Two laser modules for one path

Two laser modules for three paths

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