

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.



485 × 450 × 200 mm, 19" rack

230 V_{AC} (+6%, -10%) /

115 V_{AC} (±10%) 50/60 Hz

15 kg

110 W

512 Mb

RS 232

IP 20

PC compatible

Hayes compatible

+15°C to +25°C

(+60°F to +75°F)

Technical Specifications (standard)

Dimensions $(L \times W \times H)$ Weight incl. case (approx.) Voltage supply

Power consumption Computer CF memory External modem Serial outputs Ambient temperature

Degree of protection

An LD500 includes as standard

Central unit with 6.4" LCD monitor and keyboard PC and slots for four laser modules External modem $4 \times RS 232$ Communication card CC202L USB port

Standard separately ordered

One laser head One ER060L/ER080L/ER110L/ER150L emitter and receiver unit or ER120L/ER130L 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

Laser Optical Fibre

OF010-xxx Laser fibre for modules LH511, LH512, LH513, LH514 and LH516 OF005-xxx Laser fibre for module LH515 and LH517

Laser Heads

LH511 HF/H₂O laser module LH512 HCI/H₂O laser module LH513 NH₃/H₂O laser module LH514 CO/CO₂/H₂S laser module LH515 0₂ laser module LH516 CH₄/H₂O laser module LH517 H₂0/Temperature laser module

-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

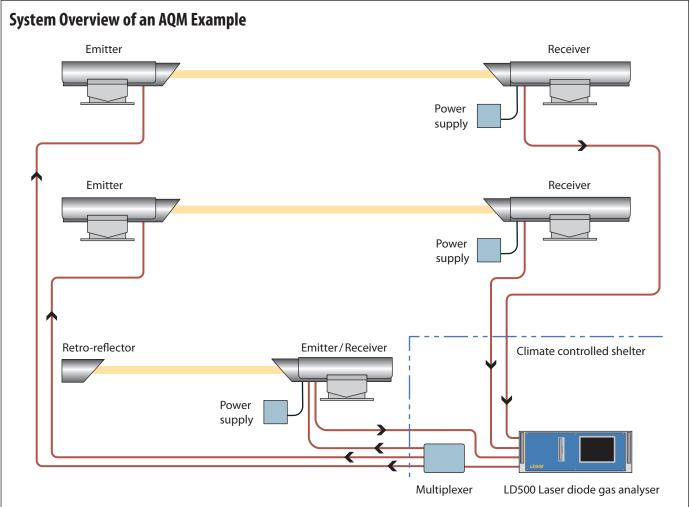
Accessories

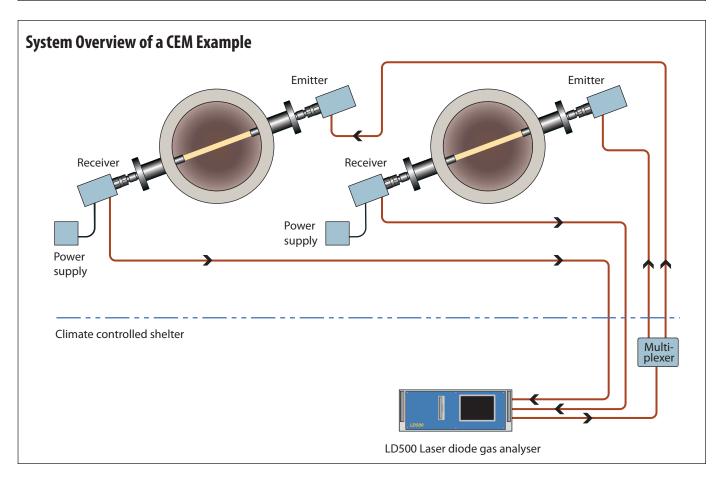
AC180 Air-conditioned cabinet Auto-calibration equipment MX10XL Multiplexer* MXX01L Demultiplexer* I/O Management software IO256 Digital and analogue input and output modules Short-haul modems Sensors Dataloggers EnviMan Software

* Please specify the number of inputs/outputs and type of laser(s)











System Configurations – 3 Exampl	es			
One laser module for two paths				
Laser module	Multiplexer		Emitter Emitter	Receiver Receiver
Communication card				
LD500				
Two laser modules for one path				
Laser module	Demultiplexer		Emitter	Receiver
2×Communication card				
LD500				
Two laser modules for three paths				
Laser module	Demultiplexer	Multiplexer	Emitter Emitter	Receiver
Laser module			Emitter	Receiver
2×Communication card				
LD500				

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