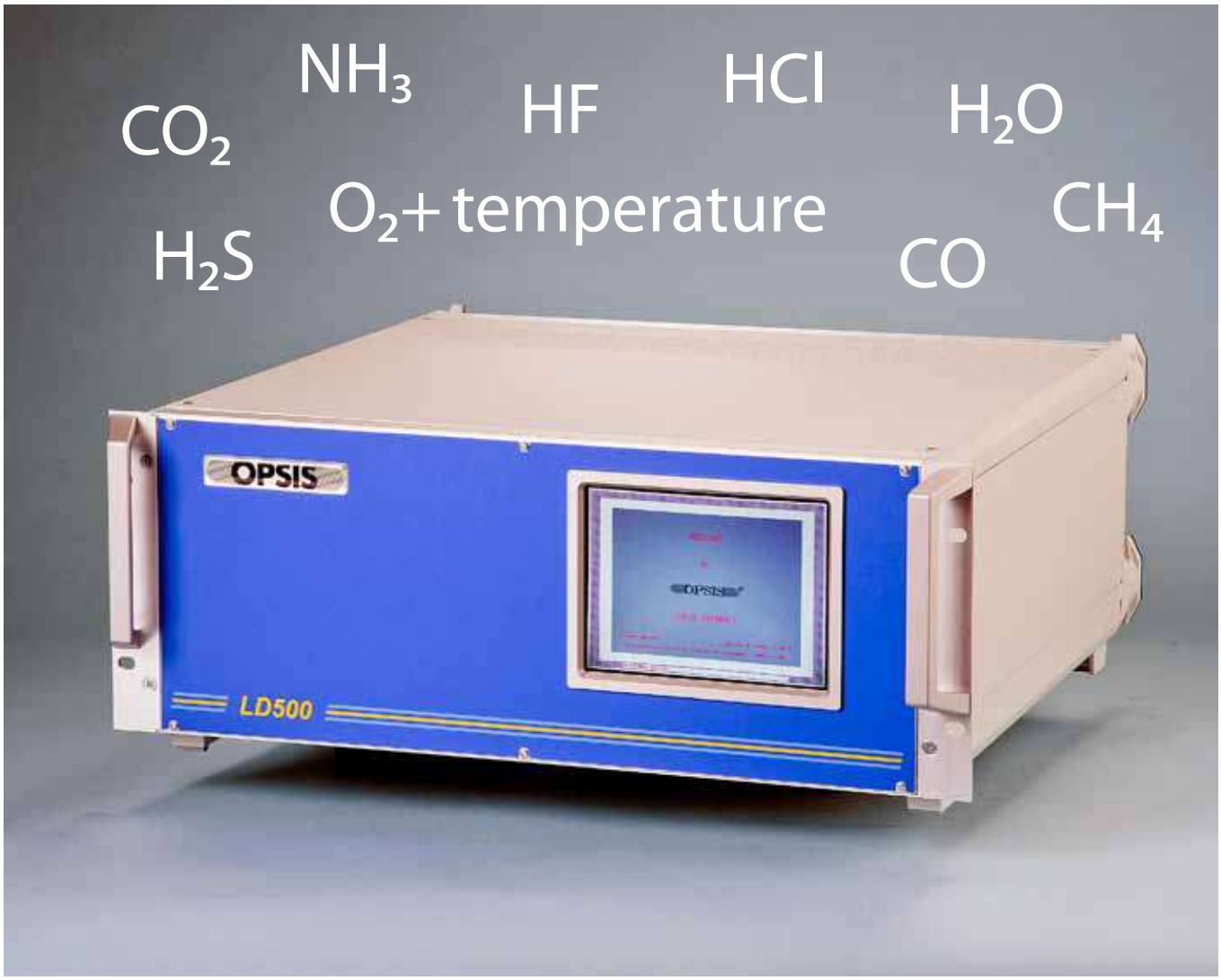


LD500

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 V_{AC} (+6%, –10%) / 115 V_{AC} (±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 LD500 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

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

-xxx = number of metres

Laser Heads

LH511 HF/H_2O laser module
LH512 HCl/H_2O laser module
LH513 NH_3/H_2O laser module
LH514 $CO/CO_2/H_2S$ laser module
LH515 O_2 laser module
LH516 CH_4/H_2O laser module
LH517 H_2O/Temperature laser module

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)

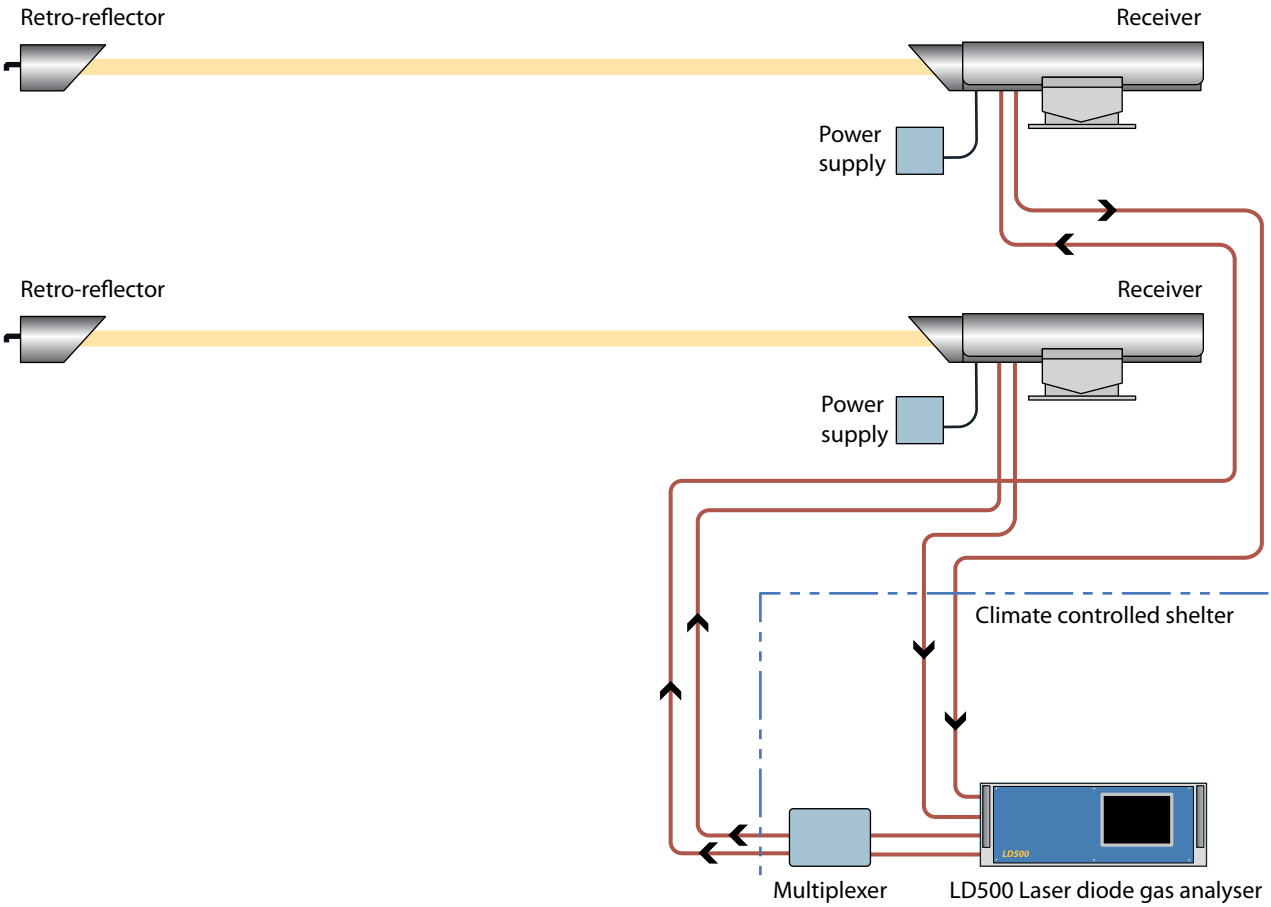
Multiplexer/Demultiplexer MXXXXL

Light adjustment LA060

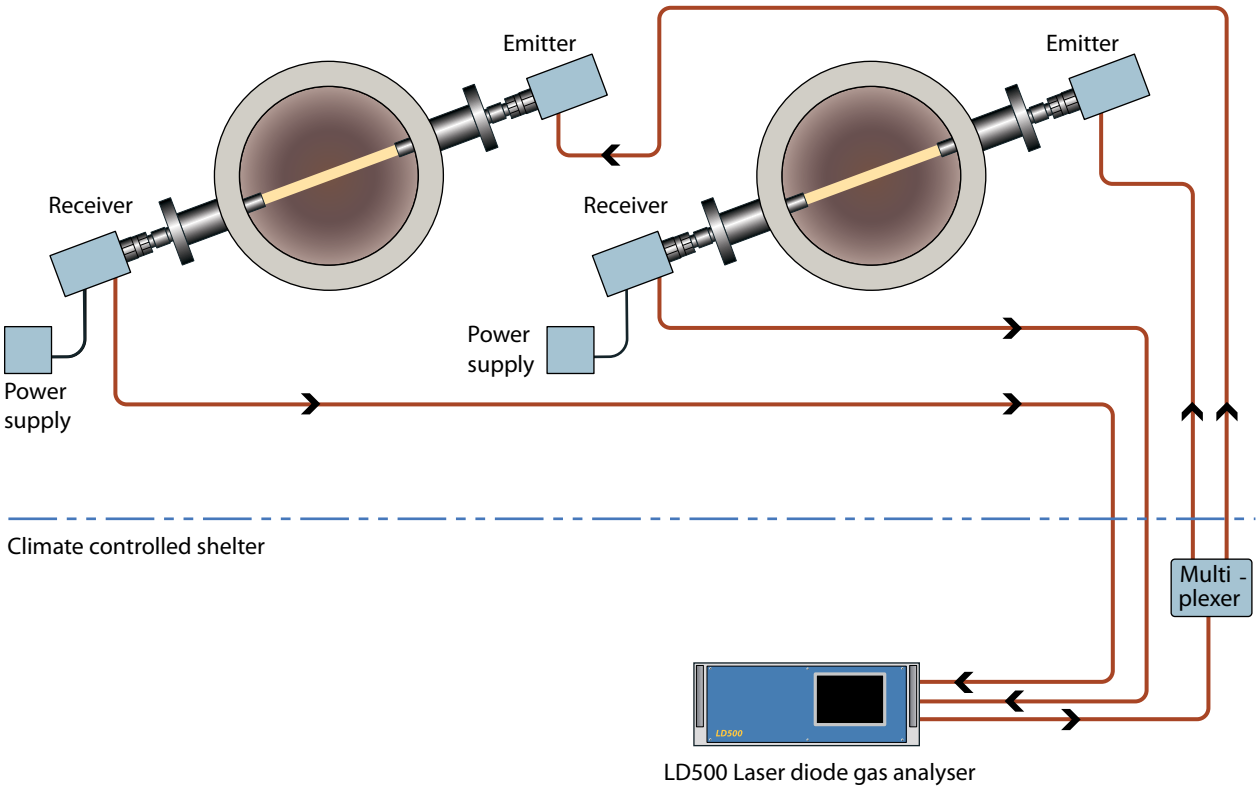
Example of an emitter and receiver unit – ER060L

Communication cable CF120

System Overview of an AQM Example

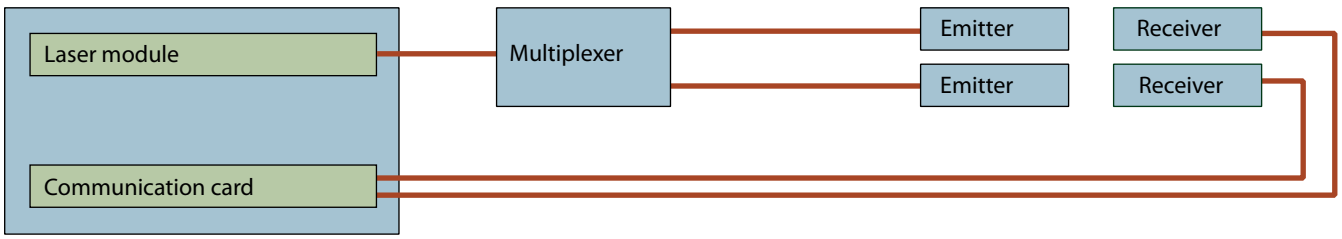


System Overview of a CEM Example



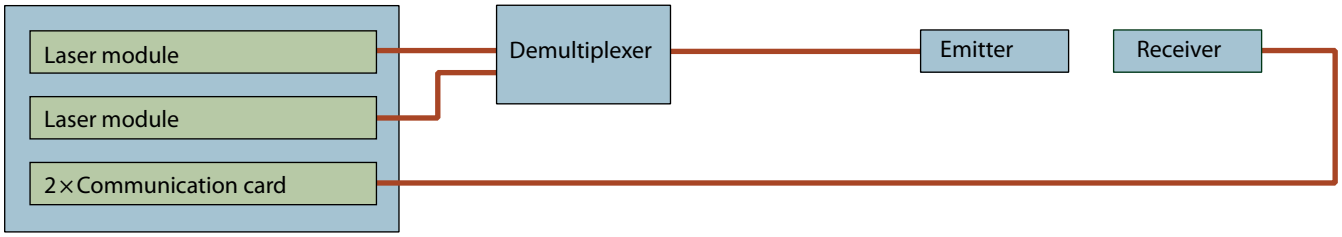
System Configurations – 3 Examples

One laser module for two paths



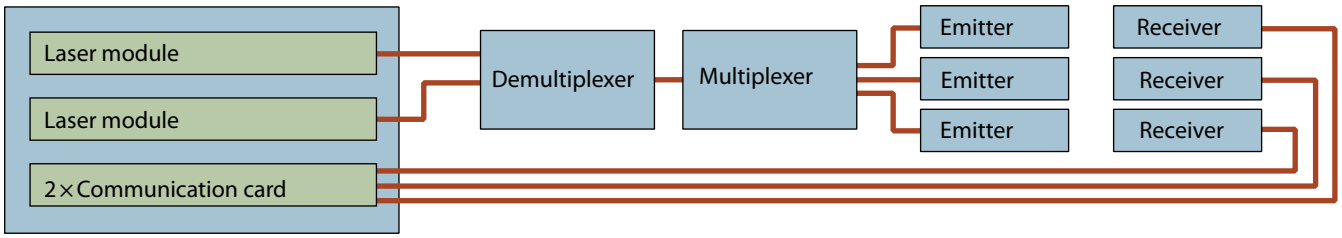
LD500

Two laser modules for one path



LD500

Two laser modules for three paths



LD500

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