

CO₂ NH₃ HF HCl H₂O
H₂S O₂+ temperature CO CH₄



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 x W x H)	485 x 450 x 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 x 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/H₂O laser module
LH512 HCl/H₂O laser module
LH513 NH₃/H₂O laser module
LH514 CO/CO₂/H₂S laser module
LH515 O₂ laser module
LH516 CH₄/H₂O laser module
LH517 H₂O/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
classified 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

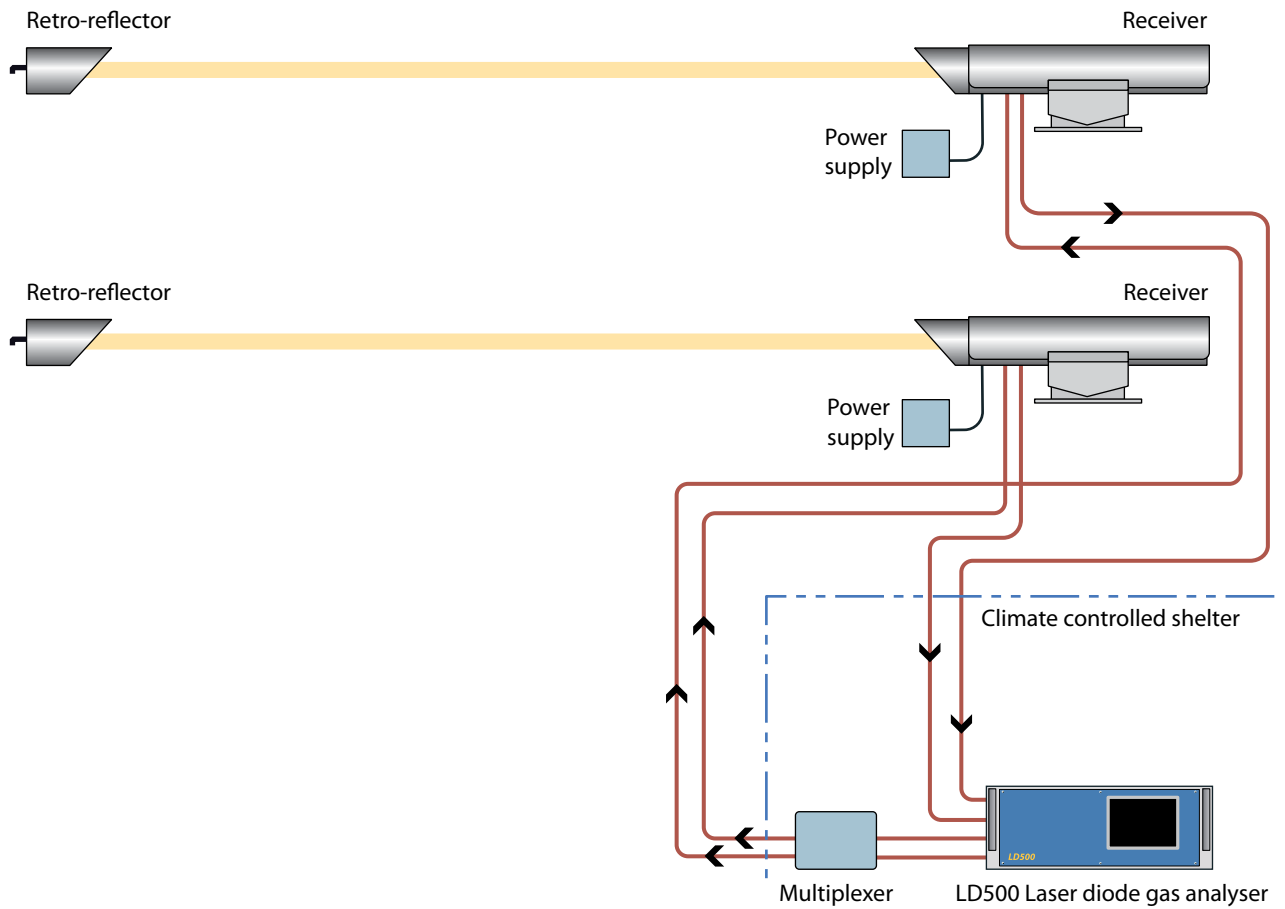


Example of an emitter and receiver unit – ER060L

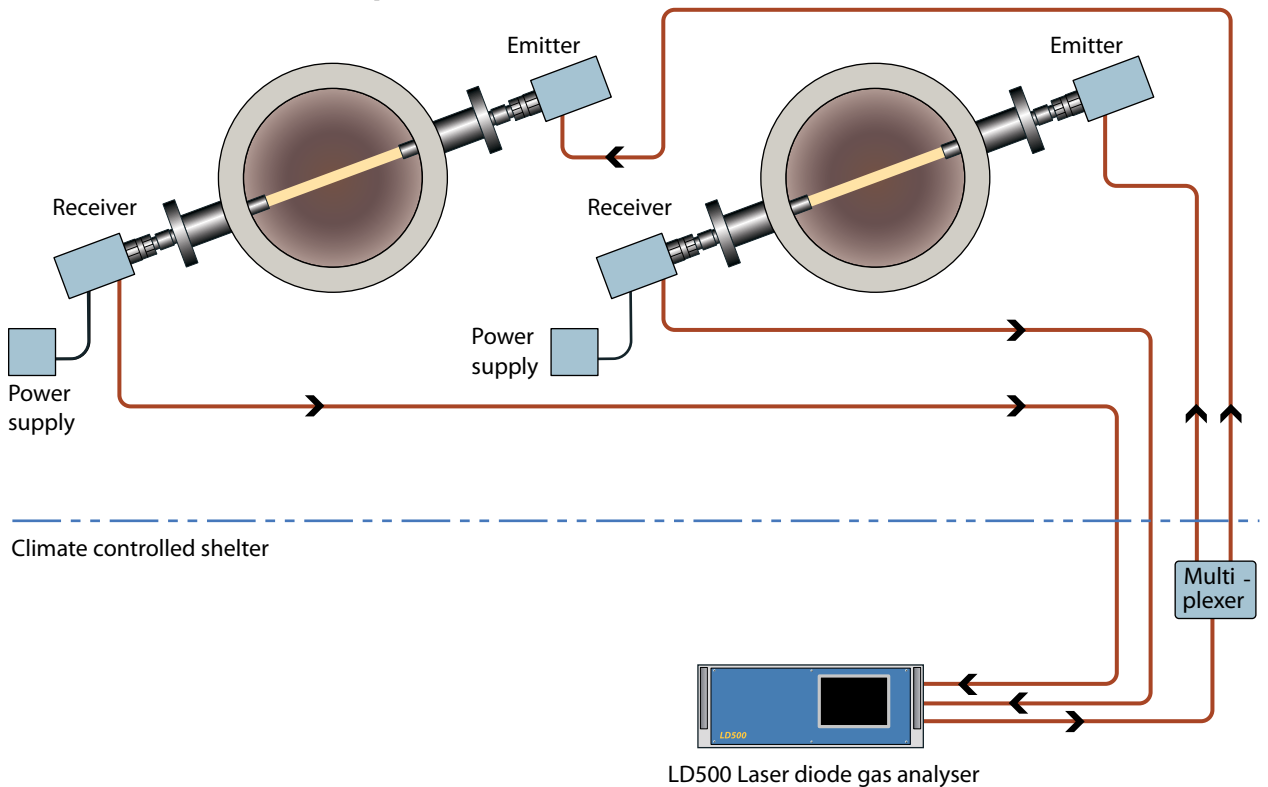


Communication cable CF120

System Overview of an AQM Example

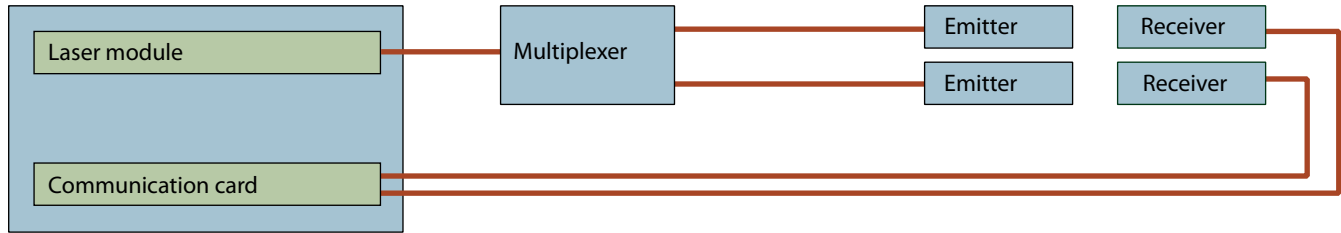


System Overview of a CEM Example



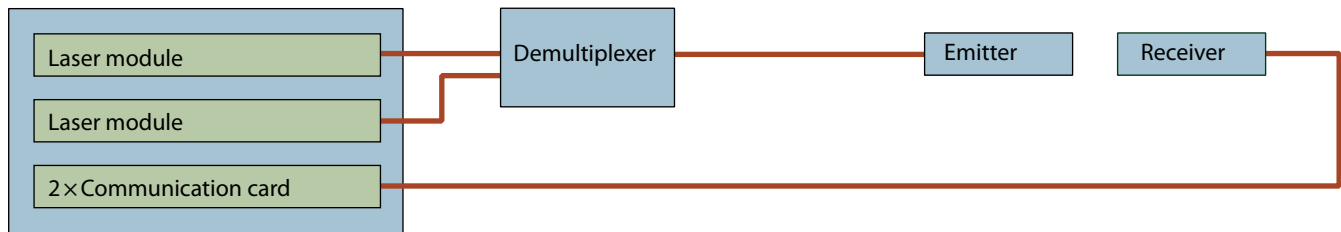
System Configurations – 3 Examples

One laser module for two paths



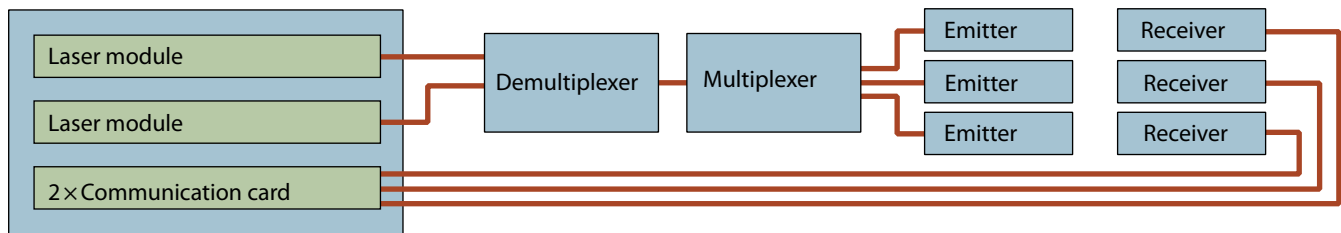
LD500

Two laser modules for one path



LD500

Two laser modules for three paths



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