HDHFL – WIRELESS CO$_2$ TRANSMITTER/CONTROLLER

HDHFL transmitters are designed for detecting and controlling carbon dioxide concentration, temperature and humidity in room spaces. The transmitter information can be used for demand based ventilation control, for example. The measuring information can be delivered to FLTA base station by using wireless network or straight to BMS by using 0...10 V analogue signals.

The measurement values scroll on the N model display. The wanted value can be locked to view continuously.

The FLSER or ML-SER commissioning tool is needed for transmitter commissioning.

ABCLogic™ self-calibration method eliminates the possible long term drift. The ABCLogic™ function can be turned off by using the ML-SER tool.

The control output can be controlled either according to a one measurement value or according to the maximum selection of all values. The control output information is not available via wireless network. The controller settings can be changed by using the ML-SER tool.
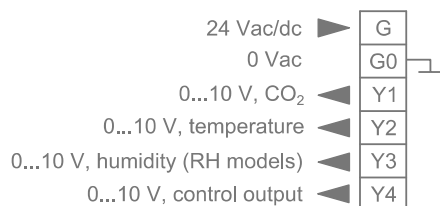
The transmission area can be extended by using 1...8 FLREP or FLREP-U repeaters between transmitters and the FLTA base station.

The transmitter can be equipped with indicator lights (HD-AL3, not available for N models) that are illuminated according to the CO$_2$ level. As a factory setting, the lights are illuminated as follows:

- o Green: 0…750 ppm
- o Yellow: 751…1250 ppm
- o Red: 1251…2000 ppm

The indicator light limits can be changed by using the ML-SER tool.

Wiring:

24 Vac/dc ▶	G
0 Vac	G0
0...10 V, CO$_2$ ◀	Y1
0...10 V, temperature ◀	Y2
0...10 V, humidity (RH models) ◀	Y3
0...10 V, control output ◀	Y4

Technical data

Supply	24 Vac/dc (22…28 V) < 2 VA
Frequency	868.30 MHz, Class1
Modulation	FSK
Update interval	10 s
CO$_2$ measurement:	
Range	0…2000 ppm
Accuracy (25 °C)	typ. ±40 ppm +3 % from value (ABCLogic™)
Long term stability / year	< 2 % FS (ABCLogic™)
Time constant	< 2 min
Temperature measurement:	
Range	0...50 °C
Accuracy (25 °C)	±0.5 °C
Humidity measurement (RH models):	
Range	0…100 %rH
Accuracy (25 °C)	±2 %rH
Outputs	0…10 V < 2 mA
Operating conditions	
Temperature	0...+50 °C
Humidity	0...85 % RH (non cond.)
Housing	IP20, ABS plastic
Mounting	on the wall surface or on the standard flush mounting box (60 mm hole distance)
Dimensions (w x h x d)	87 x 86 x 30 mm

Ordering guide:

Model	Product number	Description
HDHFL	1191150	wireless CO$_2$ and °C transmitter
HDHFL-N	1191151	wireless transmitter with display
HDHFL-RH	1191160	wireless CO$_2$, °C and %rH transmitter
HDHFL-RH-N	1191161	wireless transmitter with display
HD-AL3	1135048	option, indicator lights, 3 pcs
ML-SER	1139010	transmitter commissioning tool