Device Types

The O2C is available in 15 variations. The variations differ in number of connected probes, the different number of channels, measuring depths of a probe and the parameters which can be recorded per channel.
A measurement channel is usually equipped both with a laser-Doppler-measurement-unit and with a tissue-spectrometer-unit with white light source (O2C). The version has 4 numbers, the first digits indicates the number of laser sources, digit 2 indicates the number of laser-doppler detection channels, while digit 3 indicates the number of white light sources and digit 4 indicates the number of spectrometer detection channels. in The following table shows all types with different available extensions.

Parameter	**Devices Types**		
	O2C Version **xxxx**	**O2C** Version xx00	**O2C** Version 00xx
Velocity and **Flow**	**yes**	**yes**	**no**
SO_2 and **rHb**	**yes**	**no**	**no**
Version 1111	This device is equipped for the connection of one probe which works in one detection depth. This type of device can be used together with the probes LF6, LF7, LM11 or LF3.		
Version 1212	This device is equipped for the connection of one probe which enables a place- and time-synchronised recording of values in two measurement depths on the surface and in deeper tissues. One probe can be connected at a time.		
Version 2222	This device is equipped for the connection of two probes simultaneously. For measurements on two different locations at a time. Each probe works in one detection depth. This type of device can be used together with the probes LF6, LF7, LM11 or LF3.		
Version 2323	This device is equipped for the connection of two probes simultaneously. For measurements on two different locations at a time. One probe works in one detection depth, the second port has two detection channels. At port 1 it is like the device of the version 1111, at the second port like version 1212.		
Version 2424	This device has two ports for the simultaneous connection of two probes. Each port has further two detection channels, allowing recordings in two sensitivity ranges. This device allows on each of the two ports the possibilities of version 1212.		

Technical Parameters

Manufacturer: LEA Medizintechnik GmbH

O2C(oxygen to see), Version xxxx

Parameter	
Physiological effect	Laser emission / White light
Classification	Laser device class 3 B, protective class I
Light sources	Laser diode/ Halogen lamp/LED
Laser parameter	
Wavelength	NIR
Mode	continuous wave

Power	< 30 mW
Spectrometer	
Detection range	450-850 nm
Resolution	1 nm
White standard	Yes

O2C(oxygen to see) Version xx00

Parameter	
Physiological effect	Laser emission
Classification	Laser device class 3 B, protective class I
Light sources	Laser diode
Laser parameter	
Wavelength	NIR
Mode	continuous wave
Power	< 30 mW

O2C(oxygen to see) Version 00xx

Parameter	
Physiological effect	White light
Classification	Protective class I
Light source	Halogen lamp / LED
Spectrometer	
Detection range	450-850 nm
Resolution	1 nm
White standard	Yes

The following parameters are equal in all types:

Weight	about 20 kg
Dimension	closed: 490 x 335 x 285 mm (B/H/T),open: 490 x335 x 600 mm (B/H/T)
Power supply	115-230 V AC, 50-60 Hz
Power consumption	250 VA
Environment causes	
Operation temperature	15-30°C
Storage & transport temperature	5-45°C
Atmospheric humidity	30-75%, not condensed
Terrain Height	not higher than 2000m msl