



OEM Module with Flexible Artifact Leveling

- maintenance or recalibration free
- low energy consumption
- warning and error reporting system
- freely configurable, analog inputs
- multiplexed analog output
- serial interface for data exchange
- additional digital I/O functions
- easily implementation
- small dimensions (31 x 4 x 5mm)

ChipOx® can be installed as an OEM module in medical products or other applications for humans.

- anesthesia
- pre- and postoperative monitoring
- intensive care
- emergency medicine
- sleep medicine
- ambulance service
- pulmonology
- therapeutic exercises, sports medicine
- subacute care centers
- home monitoring

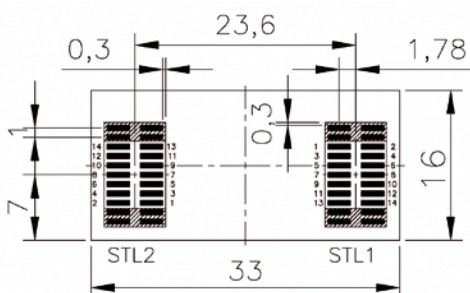
Parameter	Value range		units	Accuracy / Comments
	min.	max.		
Sampling rate	75 or 300		Hz	Better than 100 ppm
SpO₂ measurement	45	100	%	70% < SpO ₂ < 100%: better than 2% accuracy SpO ₂ < 70% not validated
Pulse frequency measurement	20	300	Bpm	1 bpm up to 2% of displayed value
Signal quality	0	100	%	A signal quality of > 90% is good, below this the SpO ₂ values and pulse frequency can be unreliable.
Plethysmogram	0	255	LSB	> 6 ppm / LSB

Parameter	Value range		units	Accuracy / Comments
	min.	max.		
Power supply V+ vs. GND	3.3-0.3		V	Ripple: < 100mVSS (linearly regulated).
Current consumption at 300Hz at 75Hz sampling rate	12	25	mA	Additionally depending on whether measurements are being carried out or not and on the regulated LED current
	12	16		

Standard / Regulations

EG Guideline 93/42/EWG: 1993-06-14
 MPG: 2002-08-07
 DIN EN 60601-1: 1990
 + A1: 1993 + A2: 1995
 DIN EN ISO 1441: 1998-01
 DIN EN 865: 1997-05
 ISO 9919: 2005
 (IEC/WD2 60601-2-54): 2002
 DIN EN ISO 60601-1-2: 2002-10
 DIN EN ISO 60601-1-4: 2001-04
 DIN EN ISO 61000-4-2: 2001-12
 DIN EN ISO 61000-4-3: 2003-11

DIN EN 1041: 1998-04



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