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VIATOM	Oximeter Equivalence Analysis Report	
Shenzhen Viatom Technology Co., Ltd.	Document Number	Revision
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1 Purpose and Scope

This document describe the oximeter design equivalence between PO2 pulse oximeter (O2 ring) and Checkme Pro.

2 Equivalence Comparison Analysis

		Checkme Pro health monitor	PO2 pulse oximeter	Result
Intended use		The Checkme Pro Health Monitor is intended to be used for measuring, displaying, reviewing and storing of ECG (adults only), oxygen saturation and pulse rate (adults only for continuous data collection and recording, adults and pediatrics for spot checking) and temperature in the home or in healthcare facilities.	This Pulse Oximeter is intended to be used for measuring, displaying and storing of pulse oxygen saturation (SpO_2), pulse rate of adults in home or healthcare facilities environment.	The intended use of oximeter function are the same. And the PO2 Pulse Oximeter designed on the basic of Checkme Pro Health Monitor.
Technical spec.	Parameter	SpO_2, PR (pulse rate)	SpO_2, PR (pulse rate)	Same
	SpO_2 display range	70-100%	70-99%	Same
	SpO_2 accuracy	80%-100%: ±2% 70%-79%: ±3%	80%-99%: ±2% 70%-79%: ±3%	Same
	PR range	30-250bpm	30-250bpm	Same
	PR accuracy	2bpm or +/-2%, which is greater	2bpm or +/-2%, which is greater	Same
Theory		Red/IR dual wavelength, transmission type	Red/IR dual wavelength, transmission type	Same
Sensor	Detection type	Transmission-type	Transmission-type	Same
	Wavelength	660/ 940nm	660/ 940nm	Same
	Photo-emitter and detector	Emitter: ODTECH / OL6694TMF Detector: ODTECH/ OP30TMF	Emitter: ODTECH / OL6694TMF Detector: ODTECH/ OP30TMF	Same
	Application site	Finger	Finger	Same
SpO_2 Hardware	Chipset	TI AFE IC	TI AFE IC	Same
	Schematic diagram	AFE IC typical design	AFE IC typical design	Same

	Summary: Both product use the same chipset solution based on the same schematic diagram.			
SpO_2 algorithm	Sampling rate	250Hz	250Hz	Same
	Average	8s moving average	8s moving average	Same
	Filter	15Hz low-pass	15Hz low-pass	Same
	R-table	660/940 R-table	660/940 R-table	Same
	Summary: Both products use the same algorithm software.			
Conclusion	According to above comparison and analysis, the PO2 pulse oximeter and Checkme Pro health monitor show the equivalence in intended use, sensor design, hardware design, algorithm design and technical specification. They are substantial equivalence.			