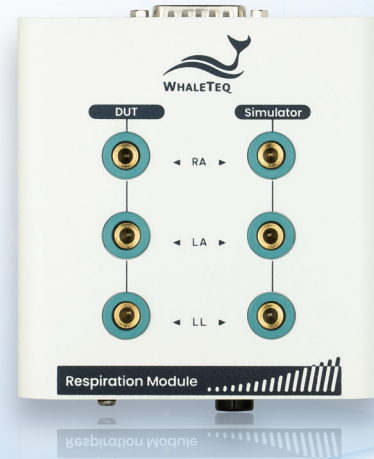


Respiration Module

Paired with the SECG 5.0 AIO Multi Vital Sign Simulator to enhance its respiratory measurement range and resolution



- ◆ Expands the respiratory measurement range and optimizes resolution — provides the impedance baseline of up to 4500Ω and adjustable variations with a minimum step size of 0.05Ω
- ◆ Raw data playback — loads and plays clinically recorded or user-defined waveforms to rapidly verify respiratory signal processing systems and algorithms

Note: The respiration module only supports impedance respiratory signal simulation in ECG mode on the SECG 5.0 AIO.

Specifications

Parameters	Respiration Module Specifications	SECG 5.0 AIO Built-in Respiration Specifications
Rate	1 ~ 200BrPM (Minimum step size: 1BrPM)	1 ~ 200BrPM (Minimum step size: 1BrPM)
Ratio (inspiration:expiration)	1:1, 1:2, 1:3, 1:4, 1:5	1:1, 1:2, 1:3, 1:4, 1:5
Impedance Variations ($\Delta \Omega$)	0.0 ~ 5Ω (Minimum step size: 0.05Ω) 5.0 ~ 10.0Ω (Minimum step size: 0.1Ω)	1.0 ~ 5.0Ω (Minimum step size: 0.1Ω)
Variation Accuracy	\pm (2% of setting + 0.1Ω)	\pm 1% (according to the component's specifications)
Impedance Baseline	100Ω, 200Ω, 500Ω, 1000Ω, 1500Ω, 2000Ω, 2500Ω, 3000Ω, 3500Ω, 4000Ω, 4500Ω	500Ω, 1000Ω, 1500Ω, 2000Ω, 2500Ω
Baseline Accuracy	\pm 2%	\pm 5% (including 25kΩ internal resistance of the internal ECG signal line)
Respiration Lead	RA, LA, LL	RA, LA, LL, V1 ~ V6
Apnea Selection	1 ~ 60 sec./min.	1 ~ 60 sec./min.
Noise Add-on	Selection	50, 60, 100, 120, 150, 180, 200, 240Hz White noise
	Amplitude	0.01 ~ 5mV (Minimum step size: 0.01mV)
Play Raw Data	Sample Rate	Maximum: 10kHz (able to play customized digital ECG waveforms together with impedance respiratory signals)
	Baseline	0 ~ 16% (Minimum step size: 1%)
Wave Modulation	Amplitude	0 ~ 16% (Minimum step size: 1%)
	Frequency	0 ~ 16% (Minimum step size: 1%)

Ordering Information

• Respiration Module

Part No.	Description	Quantity
100-EC00006	Model No.: Respiration module Model Name: Respiration Module	1

• Optional Accessories

Part No.	Description	Quantity
K22-0300201	BNC cable (banana male to banana male) (31.5cm) (red)	1
K22-0300301	BNC cable (banana male to banana male) (31.5cm) (black)	1
K28-0300301	DB15 cable (male to female) (30cm)	1
K29-1000801	Grounding cable (alligator clip to ring terminal) (100cm)	1
N54-0120013	Compound terminal	1

• Optional Calibration Service and Warranty Extension

Part No.	Description
YY0007	Model No.: C3 Provides (3) years of calibration service coverage. WhaleTeq equipment can be calibrated to original performance on the basis of (1) year interval.
YY0008	Model No.: R3 Extends the limited warranty from (1) year to (3) years.



**Respiration
Module**
Scan for
more information