# ECG ANALYSIS SYSTEM AND SPIROMETRY

CZ-800 • CZ-430







## **ECG ANALYSIS SYSTEM**

The electrocardiograph (abbreviated as EKG or ECG) is a device that records surface potentials associated with the electrical activity of the heartbeat. The surface potentials are conducted to the device by metal contacts called electrodes which are fixed to various parts of the body. Usually, the electrodes are attached to the four limbs and over the heart.





### CZ-430 ECG ANALYSIS SYSTEM

- High-performance 12 channel ECG system
- Easy, Smart, Fast, and High quality
- 4.3" Colorful TFT LCD touch screen (Alphanumeric keyboard support)
- 2 ways of print system with roll and Z-fold paper
- Internal data storage and extendable with USB memory
- Able to be used with Li-ion rechargeable battery

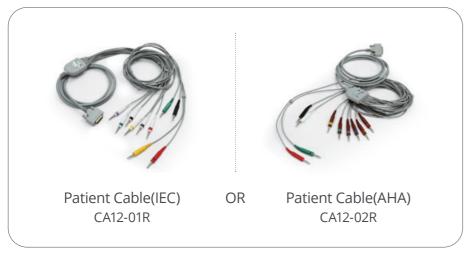
## CZ-800 ECG ANALYSIS SYSTEM

- High-performance 12 channel ECG system
- Easy, Smart, Fast, and High quality
- 8.0" Colorful TFT LCD touch screen (Alphanumeric keyboard support)
- 2 ways of print system with roll and Z-fold paper
- Internal data storage and extendable with USB memory
- Able to be used with Li-ion rechargeable battery
- PACS(Worklist)
- Spirometry
- Preview



# STANDARD ACCESSORIES











Model	CZ-800	CZ-430
ECG Leads	12 Lead, 12 channel simultaneous ECG and acquisition	
Display	Color TFT Wide 8 inch (800 x 480) 12 channels Preview ECG wave	Color TFT Wide 4.3 inch (480 x 272) 12 channels Preview ECG wave
Dimensions	353(W) X 302(D) X 92(H) mm, Approx. 3.7 kg	353(W) X 302(D) X 102(H) mm, Approx. 3.7 kg
Basic Measurement	Heart Rate, PR/RR, QRS, QT/QTc, P/QRS/T axis, RV5/SV1/R+S	
Recording Channel	12CH, 6CH+1RHY, 3CH+1RHY, 3CH+2RHY, 3CH+3RHY and Detail Report 1CH Long-term (1min., 3min., 5min.,10min.) and Arrhythmia Info. Discloser(10min.) and 10 sec. Interpretation	12CH, 6CH+1RHY, 3CH+1RHY, 3CH+2RHY, 3CH+3RHY and Detail Report 1CH Long-term (1min., 3min., 5min.,10min.) and Arrhythmia Info.
Sensitivity	2.5, 5, 10, 20, Auto (I~aVF: 10, V1~V6: 5)mm/mV	
Printing Speed	5, 12.5, 25, 50, 100 mm/sec	
Sample Rate	8,000 sample per second	
Filters	Base line drift (0.1Hz, -3dB or better), Low pass filter (off, 40Hz, 100Hz, 150Hz) Muscle (25~35Hz, -3dB or better), AC (50/60 Hz, -20dB or better)	
Electrical	Internal noise: 20uV(p-p)max Input impedance: > 50MΩ @ 10Hz AC Differential: ±5mV DC offset: ≥ ±390mV CMRR: > 105dB Frequency response: 0.05 ~ 150 with in −3dB Isolated, Defibrillation and ESU protected Time constant: 3.2 sec Patient leakage current: < 10uA	
Record	12ch. Auto Analysis, Rhythm, Arrhythmia Detect	
Signal Quality Control	Pacemaker pulse detection, Lead Off detection, Exceeded range	
Data Storage	Internal Storage for 500 ECGs and External USB Memory	
Communication	USB, PACS	USB
File Format	PDF, JPG, BMP, XML, MFER, DICOM	
Power	Input: AC100-240V 2-1A, 50/60Hz, 105VA max or Battery operation	
Battery	Replaceable and rechargeable, Lithium ion / 10.89V 2.6A (Option: 10.89V 5.2A) Li-ion rechargeable battery allows up to 4 hours of operation (about 200 ECG printouts)	
Safety Conformity	Class I, Type CF	
Environment	Operating humidity: 10~95% Operating temperature: 5 ~ 40℃ Atmospheric pressure: 70 ~106KPa	



# Spirometry with CZ-800 for pulmonary function test.

Spirometry is the most common type of pulmonary function or breathing test. This test measures how much air you can breathe in and out of your lungs, as well as how easily and fast you can the blow the air out of your lungs.



#### **Spiro measuring format**



- PRE-POST bronchodilator Comparison





COPD-6

Dimensions(Handle)	190(W) x 46(D) x 46(H) mm, approx. 200g
Measuring Values	- FVC:     FVC, FEV0.5, FEV1, FEV3, FEV0.5/FVC,     FEV1/FVC, FEV3/FVC, FEF25-75%, PEF,     MFE25%, MEF50%, MFE75%, FIVC, FIV1,     FIV1/FIVC, FIV1/FVC, PIF - COPD6:     FEV1, FEV6, FEV1/FEV6 - SVC:     SVC, TV, ERV, IRV - MVV:     MVV, RR, TV
Presentation (Printout and Monitor)	<ul><li>- Flow / Volume Curve</li><li>- Time / Volume Curve</li><li>- Measurements table</li><li>- Real-time flow curve</li></ul>
Measuring Method	Differential Pressure Method
Measuring Range	Flow: ±14L/s Volume: 15L
Measurement Accuracy	Flow: ±5% or 170ml/s Volume: ±5% or 3% or 50ml (Compiles with ATS standard)
Flow Accuracy	<0.2 cmH2O/L/s at 12L/s
Predication Equation	Morris, Knudson, ECCS/Quanjer, Choi JK



# DESIGNED, DEVELOPED, AND MADE IN KOREA

ZERONE is a medical device manufacturer, specialized in surgery and treatment.

We work under strict policy of quality control and orient excellent performance.

We promise to provide the best competitiveness aiming user's satisfaction.

#### DESIGNED, DEVELOPED, AND MADE IN **KOREA**

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