

*If the dog eats the special dog's food
and sleeps on a special dog's rug,
from the special dog's bowl
then does it require an ECG recording
by a special veterinary digital ECG system?*

Poly-Spectrum-8/V *eterinary*



USB

Specialized Digital ECG System for Veterinary

Poly-Spectrum-8/V can register animals' ECG in standard lead system by Einthoven (I, II, III), augmented lead system by Goldberger (aVR, aVL, aVF), and also precordial lead system (V1...V6) (optional).

Poly-Spectrum-8/V is equipped by electrodes of special construction intended for ECG recording of dogs, cats, horses, cows, sheep, rabbits, rats and other animals.

The device is an electronic unit which is a mobile-phone in size. It is connected to computer via high-speed USB interface. The use of USB interface allows to carry out the high quality curve digitalization: sampling rate – 2000 Hz per channel, A/D converter – 12 bits.

During the registration, the electrocardiogram is displayed on the computer screen. After that, it can be printed on the plain paper with the use of any computer printer.

The software included in the digital ECG system delivery set provides high-quality noises filtration with the use of specially developed digital filters library.

The program automatically arranges ECG measurement and interpretation. For ECG markers arrangement, calculations and interpretation, the special algorithm adapted to veterinary purposes is applied.

The digital ECG system can be effectively used as an ECG monitor during the surgical operation. During each cardiocomplex registered in on-line mode, the beep is generated, and in the bottom part of the screen the current value of heart rate is displayed constantly.



The advantage of our electrodes construction over the more widely spread needle electrodes is that they do not hurt the animal's skin excluding the infection risk and providing much better contact to skin.



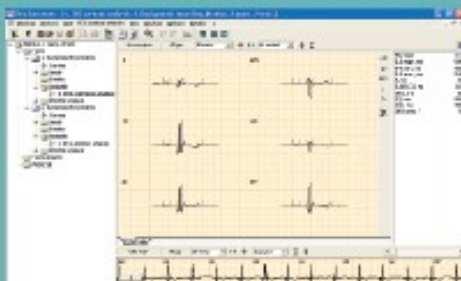
ECG of clinically healthy dog.



ECG monitoring during the surgical operation. The figures in the right bottom corner indicate the current value of heart rate.



ECG of a dog with ventricular premature beats emerged as a result of digitalis intoxication. Clinical presentations are undue fatigability and short loss of consciousness.



Poly-Spectrum-8/V Specifications:

Number of ECG channels	12
ECG leads	I, II, III, aVR, aVL, aVF, V1...V6
A/D converter	12 bit
Sampling rate	2000 Hz
Frequency response	0.05 - 250 Hz
Low pass filter	35 Hz (myogram), 75 Hz
High pass filter	0.05 Hz (3.2 s)
Additional filter (activated by software)	AC filter, drift filter
Sensitivity	5, 10, 20 mm/mV
Paper speed	12.5, 25, 50, 100 mm/s
Input range	0.03 - 5 mV
Input impedance, not less than	50 MΩ
Common-mode rejection, not less than	100 dB
Defibrillation protection	yes
Control of electrode setting	yes
Supply Voltage:	
Electronic unit	5 V DC
Electronic unit power consumption, not more than	0.3 W
Dimensions:	
Electronic unit	150×70×25 mm
Delivery set	250×190×150 mm
Weight:	
Electronic unit (with cables and electrodes)	0.6 kg
Delivery set, not more than	2 kg
Interface	USB
Safety	BF type

Poly-Spectrum-8/V Delivery Set:

- Electronic unit
- ECG cable (2 m)*
- Set of reusable ECG electrodes of "crocodile" type (2x4 pcs)**
- Electrode gel (250 ml)
- CD with software
- Technical manual
- Transportation bag

* ECG cable with set of electrodes (6 pcs.) can be supplied optionally

** ECG electrodes of needle and plate types can be supplied optionally