

BLOOD PRESSURE
MEASUREMENT,
CARDIAC MONITORING
AND SMALL ANIMAL
EXAMINATION

Doppler Vet BP



Veterinary Doppler



How to measure blood pressure:

1. Place cuff above the vessel to be examined.
2. Shave the area where the probe will be positioned or wet hair with alcohol (underneath the tail or the carpal pad at the end of the paw or the radial artery).
3. Put gel on the probe. Put probe in contact with the vessel to examine (without pressure because it would stop or reduce blood flow).
4. Move the probe slightly until you hear a clear Doppler sound signal.
5. Maintain the probe with your finger or fix it on the skin with an adhesive tape.
6. Inflate the cuff with the sphygmomanometer to block the artery until you hear no sound.
7. Deflate the cuff slowly and progressively.
8. The sound that will return corresponds with the patients systolic pressure.
9. The diastolic pressure corresponds to a change of the Doppler's tonality. The detection of diastolic pressure requires experience as well as good operating conditions.
10. To validate the results, it is best to measure the pressure several times.

Blood pressure measurement in veterinary medicine:

At the beginning of some diseases, the symptoms of arterial hypertension in animals are difficult to detect. In many cases, the diagnosis is made too late. Primarily older animals are affected by hypertension, in particular cats, however there are also many indicators seen in dogs.

Periodic checks should be performed on older animals: blood analysis (detection of kidney insufficiency) and blood pressure measurement to assist in detecting hypertension. According to current studies, up to 30% of cats suffering from chronic kidney insufficiency have systemic hypertension. Cerebral, ocular and severe renal problems can be a consequence of arterial hypertension.

It is also useful to perform a blood pressure screening prior to the infusion: arterial pressure can be a suggestive indicator of an animal's condition. The veterinarian can then adjust the infusion according to the results.

Monitoring with the Doppler:

The Doppler measures the flow detection in the artery. The probe can be affixed to the animal's paw or tail during an anaesthesia, intensive care, serial or general measuring. The veterinary team will hear a sound reflecting the heart rate and pulse.

The Doppler set includes:

- √ A 8 MHz blood pressure probe
- √ Battery charger
- √ Sphygmomanometer
- √ 4 cuffs in different sizes according to circumference of the limb:
 - 4-8 cm (3.3Hx16L cm)
 - 6-11 cm (4Hx17.5L cm)
 - 7-13 cm (5Hx20L cm)
 - 8-15 cm (6Hx25L cm)
- Optional 3-6 cm (2.5Hx14L cm) cuff
- √ Headset
- √ Tube of gel

Packed in a robust carrying case

Optional pencil probe for exotic animal examination



Optional esophageal probe: a cardiac monitoring solution



Technical features:

| | |
|--------------------------------------|---|
| Ultrasonic frequency: | 8 MHz |
| Audio output: | 200mW |
| Frequency response: | 300Hz - 6kHz |
| Battery: | 3 x 1.2V, 1500mAh |
| Operating time: | +/- 6 hours |
| Charging time: | 15 hours |
| Dimensions and weight incl. battery: | 7''x3''x1'' (175 x 80 x 25 mm) - 11 oz. (300 g) |
| Headset acoustic output: | mini jack |



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