



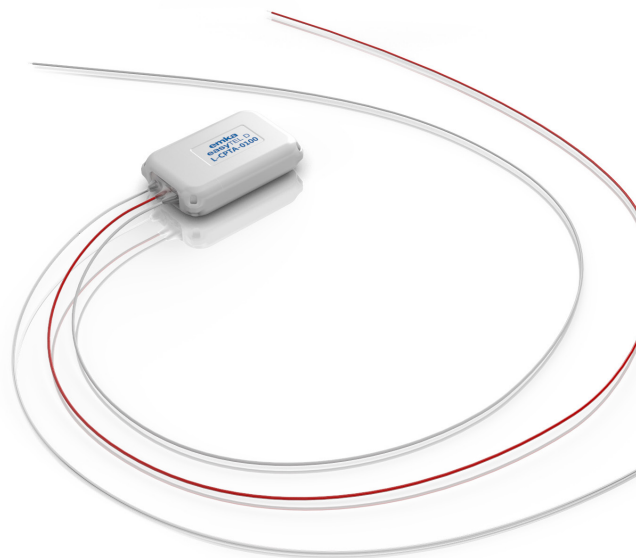
IMPLANTABLE TELEMETRY FOR LARGE ANIMALS

Continuous, real-time physiological data
from conscious freely moving large animals such as dogs or primates.



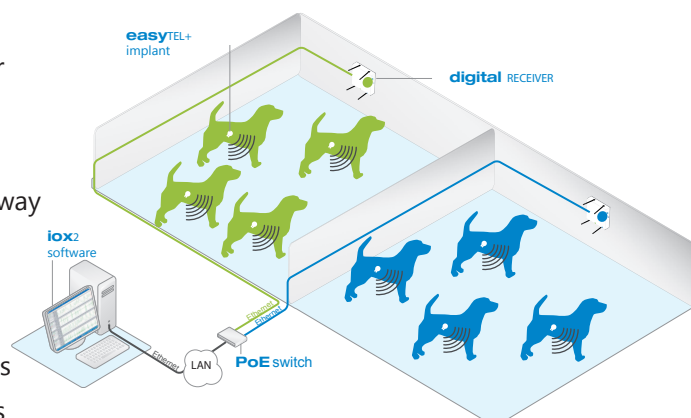
RECORDED SIGNALS

- » ECG (in-depth ECG analysis, breathing rate)
- » EEG
- » Temperature
- » Blood pressure
- » Acceleration from 3 axis accelerometer (activity)



EASY, ROBUST & COST-EFFECTIVE INFRASTRUCTURE

- » easyTEL+ implant is surgically implanted in the animal
- » digitalRECEIVER collects signals from up to 4 implants
- » digitalRECEIVER can be placed outside animal cage or pen
- » digitalRECEIVER contains ambient pressure monitor
- » 1 Ethernet cable per receiver handles data & power
- » smartTOOL for implant detection & configuration
- » simultaneous monitoring from multiple distant PCs
- » automatic reconnection if subject is momentarily away from receiver or after network failure
- » implants price very competitive
- » implant can be re-implanted as long as battery lasts
- » no refurbishment and no associated costs or delays



ECG and blood pressure signals from dog acquired in iox2 software software

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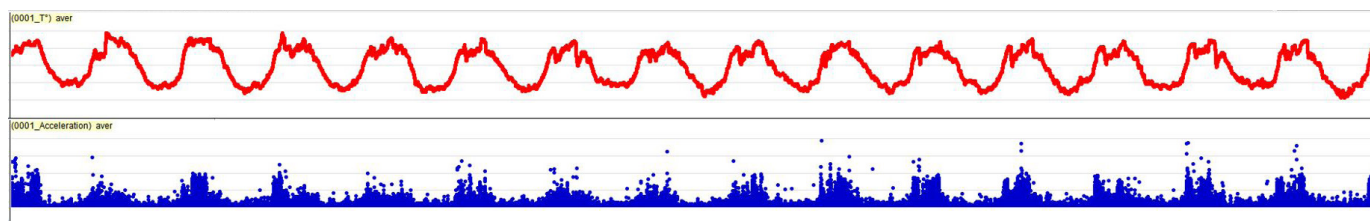
MAIN FEATURES

- » 29g implant, ideal for animals > 1kg
- » transmission range 4 to 6 m
- » group housing of up to 32 animals in the same room
- » fully digital with no possible crosstalk
- » sampling frequency user settable, to optimize battery life
- » up to 180 days of continuous transmission
- » records battery on-time of each implant
- » implant set to active or sleep mode remotely
- » implant full on/off with magnet

ACQUISITION & ANALYSIS WITH IOX2 SOFTWARE

easyTEL+ exclusively runs with emka iox2 recording and analysis software:

- » signal acquisition and real-time analysis, synchronized video
- » alarms generated when selected parameters cross preset thresholds (flashing display, audio tone or e-mails)
- » automated detection of onset of fever with alarm generation for MCM and infectious diseases studies
- » signal quality recorded, analysis able to skip lost data zones



14 days of temperature and activity data from pair-housed primate

IMPLANT SPECIFICATIONS

Models	Heart rate	Breathing rate	Full ECG	EEG	Pressure	Temperature	Activity	Battery life (days)	Size (mm)	Weight (g)
TA						1	1	180	51x35x14	29
CTA		yes	1			1	1	100	51x35x14	29
HBTA	1	yes				1	1	130	51x35x14	29
EETA				2		1	1	90	51x35x14	29
PT		yes			1	1		110	51x35x14	32
CPTA		yes	1		1	1	1	100	51x35x14	32

- » **HBTA** model is ideal for biodefense studies
- » **CPTA** model is ideal for efficacy & safety pharmacology studies
- » **PT** model is ideal for minimally invasive pressure studies and can be combined with emkaPACK4G

For more information on other possible signal combinations, please contact our team of specialists.