EndoGear3 is the first telemetry system to incorporate a Doppler flowprobe for blood flow measurement in addition to pressure, ECG and temperature, providing a complete hemodynamic profile for cardiovascular studies in rats and other small animals.

This miniaturized biotelemetry implant can be custom configured with up to 2 channels of flow velocity and 2 biometric signal channels (pressure or ECG) with replaceable probes and sensors allowing the researcher to modify the implant to each experiment’s requirements. Perivascular cuff-style and Endovascular Doppler probes are available, as well as combined Flow/Pressure Endovascular probes for minimized surgical instrumentation protocols. Solid state pressure sensors (1F) provide high fidelity measurements. Battery Power Modules are also replaceable; or choose the Wireless Power Supply and Receiver for standard size rodent cages.

New EndoGear Transceivers operate over multichannel RF bands to allow monitoring of up to 16 independent research subjects. The bidirectional communication link ensures that the implant can be turned on/off and data collected without disturbing the animal subject. Compatible with the EG108 Base Station.
BASE STATION
The EG108 Base Station interfaces between the Implant, the E-GUI control software and the user chosen data acquisition system. It provides analog data outputs for all telemetered signals including a reference barometric pressure from the Base Station.

TRANSCEIVERS
Remote Transceivers transmit commands from the Base Station to the Implant via RF signals and receive data from the Implant. Transceivers are positioned near the animal subject and can be located up to 50 meters from the Base Station. Coverage in RF challenged environments may be maximized with low profile Transceiver Expanders.

E-GUI SOFTWARE
EndoGear3 Implant communication is controlled by the E-GUI software from a computer connected to the Base Station via a USB/COM Port. The E-GUI allows users to select Implant experimental subject groups, set up controls for each Implant, put Implants into Sleep (power save) mode, turn individual channels on and off, and set timed acquisition or triggered recording sessions.

NOTE: The E-GUI does not record data. A separate data acquisition system is required.

RAT ABDOMINAL AORTA BLOOD FLOW VELOCITY AND PRESSURE

Transonic Systems Inc. is a global manufacturer of innovative biomedical measurement equipment. Founded in 1983, Transonic sells “gold standard” transit-time ultrasound flowmeters and monitors for surgical, hemodialysis, pediatric critical care, perfusion, interventional radiology and research applications. In addition, Transonic provides pressure and pressure volume systems, laser Doppler flowmeters and telemetry systems.