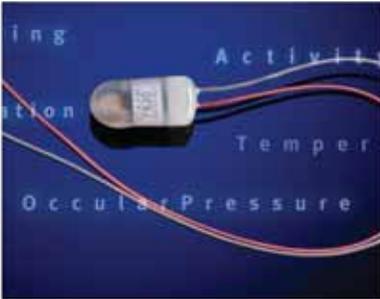
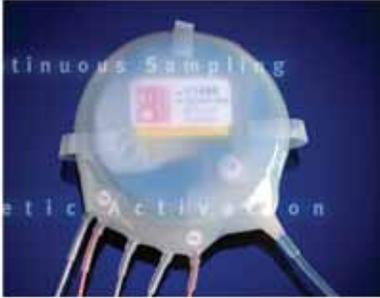
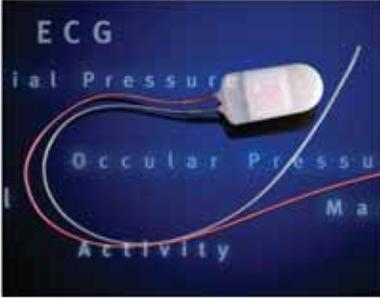
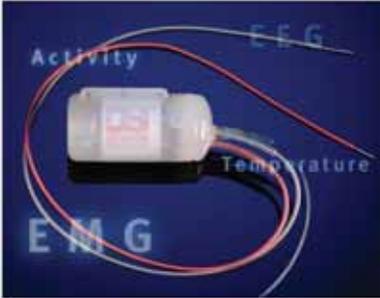


Guide to PhysioTel™ Transmitters



**Mouse
Small Animal
Large Animal
Transmitters**



Better Data. Better Science.

DSI: the global leader in implantable telemetry

Data Sciences International (DSI) has been providing telemetry solutions to the research community for over 20 years. PhysioTel™ implantable telemetry transmitters provide the most cost-effective and efficient method of measuring physiologic parameters in conscious, freely moving laboratory animals. Virtually any laboratory animal can be, and has been, monitored using DSI telemetry products.

Physiologic data collection using telemetry has many advantages over older, traditional methods of data collection such as restraints, cuffs and tethers. In some cases, anesthesia is still used in obtaining physiologic data. However, the anesthesia itself may affect the data being collected. Telemetry eliminates the need for such data collection methods and provides researchers with data that are free from stress-induced artifact and the effects of anesthesia.

PhysioTel Implantable Transmitters

PhysioTel transmitters range in size to accommodate a wide variety of research animals from mice and rats to dogs and primates. The design of the transmitter shape

allows for subcutaneous or intraperitoneal placement. PhysioTel transmitters also can be resterilized between uses, extending their implant life and reducing costs.

Mouse Transmitters** (from 17 grams to 175 grams)

Model	Product Line	Temperature	Pressure	Biopotential Channels	Battery Life (Months) Warranted	Weight (gm)	Volume (cc)	Min. Animal Weight	Max. Cage Size**
PA-C10	PA Series		●		1.5	1.4	1.1	17 grams	33 x 33 x 14 cm
F20-EET	Multiplus Series	●		2	1.5	3.9	1.9	20 grams	33 x 33 x 14 cm
TA-F20	TA Series	●			6	3.8	1.75	20 grams	33 x 33 x 14 cm
EA-F20	EA Series			1	4	3.9	1.9	20 grams	33 x 33 x 14 cm
ETA-F20	ETA Series	●		1	4	3.9	1.9	20 grams	33 x 33 x 14 cm

Small Animal Transmitters** (from 175 grams to 2.5 kilograms)

Model	Product Line	Temperature	Pressure	Biopotential Channels	Battery Life (Months) Warranted	Weight (gm)	Volume (cc)	Min. Animal Weight	Max. Cage Size**
TA-F40	TA Series	●			12	7.25	3.5	175 grams	42 x 42 x 18 cm
TA-F40 W/TP*	TA Series	●			12	7.25	3.5	175 grams	42 x 42 x 18 cm
CA-F40	CA Series			1	6	7.0	3.0	175 grams	42 x 42 x 18 cm
CTA-F40	CTA Series	●		1	6	7.0	3.0	175 grams	42 x 42 x 18 cm
PA-C40	PA Series		●		4	7.6	4.4	175 grams	42 x 42 x 18 cm
F40-EET	Multiplus Series	●		2	3	7	3.7	175 grams	42 x 42 x 18 cm
C50-PXT	Multiplus Series	●	●	1	2	11	6	175 grams	42 x 42 x 18 cm
F50-EEE	Multiplus Series			3	2	11.5	5.5	175 grams	42 x 42 x 18 cm

Large Animal Transmitters** (from 2.5 kilograms and larger)

Model	Product Line	Temperature	Pressure	Biopotential Channels	Battery Life (Months) Warranted	Weight (gm)	Volume (cc)	Min. Animal Weight	Max. Cage Size**
TA-D70	TA Series	●			11	40	25	2.5 kilograms	1 x 1 x 1 meter
CTA-D70	CTA Series	●		1	4	30.0	20.0	2.5 kilograms	1 x 1 x 1 meter
D70-EEE	Multiplus Series			3	2	37	25	2.5 kilograms	1 x 1 x 1 meter
PA-D70	PA Series		●		4	37	25	2.5 kilograms	1 x 1 x 1 meter
D70-PCT	Multiplus Series	●	●	1	3.5	49	33	2.5 kilograms	1 x 1 x 1 meter
D70-PCTP	Multiplus Series	●	●	1	2.5	49	33	2.5 kilograms	1 x 1 x 1 meter
D70-CCTP	Multiplus Series	●	● (2 channels)	2	2.5	49	33	2.5 kilograms	1 x 1 x 1 meter

*Equipped with 13 cm thermistor-tipped catheter(s)

**Suggested weight ranges. Minimum animal weight may vary depending on methodology and preference.

Smaller transmitters can be used with large animals when used in conjunction with an externally worn telemetry repeater.

For a full list of product specifications visit www.datasci.com.

Understanding the Model Numbers

Parameters

P = Pressure
A = Activity
T = Temperature
E, X, C = Biopotentials

Shapes

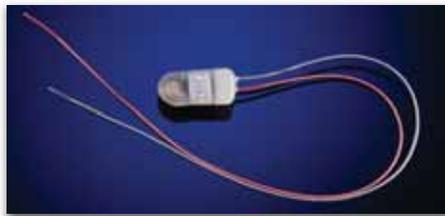
F series transmitters have a flat-shaped design.
C series transmitters have a cylindrical-shaped design.
D series transmitters have a disk-shaped design.

Other advantages of telemetry include:

- » More humane than other methods of monitoring.
- » Animals can be chronically instrumented and used sequentially as their own control or in multiple studies.
- » Stress artifact induced by handling is avoided.
- » Physiologic measurements can be obtained around the clock with no lab personnel present.
- » Decreases the costs of many protocols by reducing the number of animals required.
- » Reduces animal maintenance costs.
- » Exit site infections are eliminated.



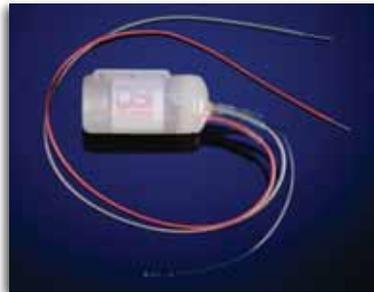
PA-C10



ETA-F20



PA-C40



C50-PXT

DSI transmitters are designed for monitoring and collecting data from conscious, freely moving laboratory animals and are available in a variety of sizes to accommodate species and cage size requirements.

Parameters measured by researchers and scientists include arterial pressure, venous pressure, left ventricular pressure, intra-ocular pressure, bladder pressure, kidney pressure, ECG, EMG, EEG, EOG, temperature, activity, as well as other parameters. DSI offers a variety of transmitters to improve data quality and simplify studies.

**Parameters Measured—
by Product Series**

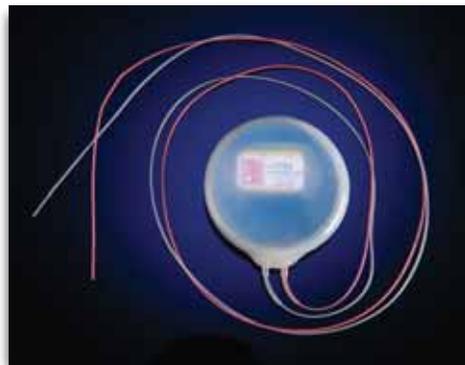
- PhysioTel® PA series transmitters measure pressure (P) and activity (A) in mice, small animals and large animals.
- PhysioTel® TA series transmitters measure temperature (T) and activity (A) in mice, small animals and large animals.
- PhysioTel® EA, CA, ETA and CTA series transmitters measure biopotentials (E, C) such as ECG, EEG and EMG as well as temperature (T) and activity (A) in mice, small animals and large animals.
- PhysioTel® Multiplus series transmitters measure combinations of pressure (P), biopotentials (E, X, C), temperature (T) and activity (A).



D70-PCTP



PA-D70



CTA-D70

For a full list of product specifications
visit www.datasci.com.



To learn more, talk to a DSI representative
at 1-800-262-9687 (U.S.A. / Canada),
1-651-481-7400 (worldwide),
or visit www.datasci.com.



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