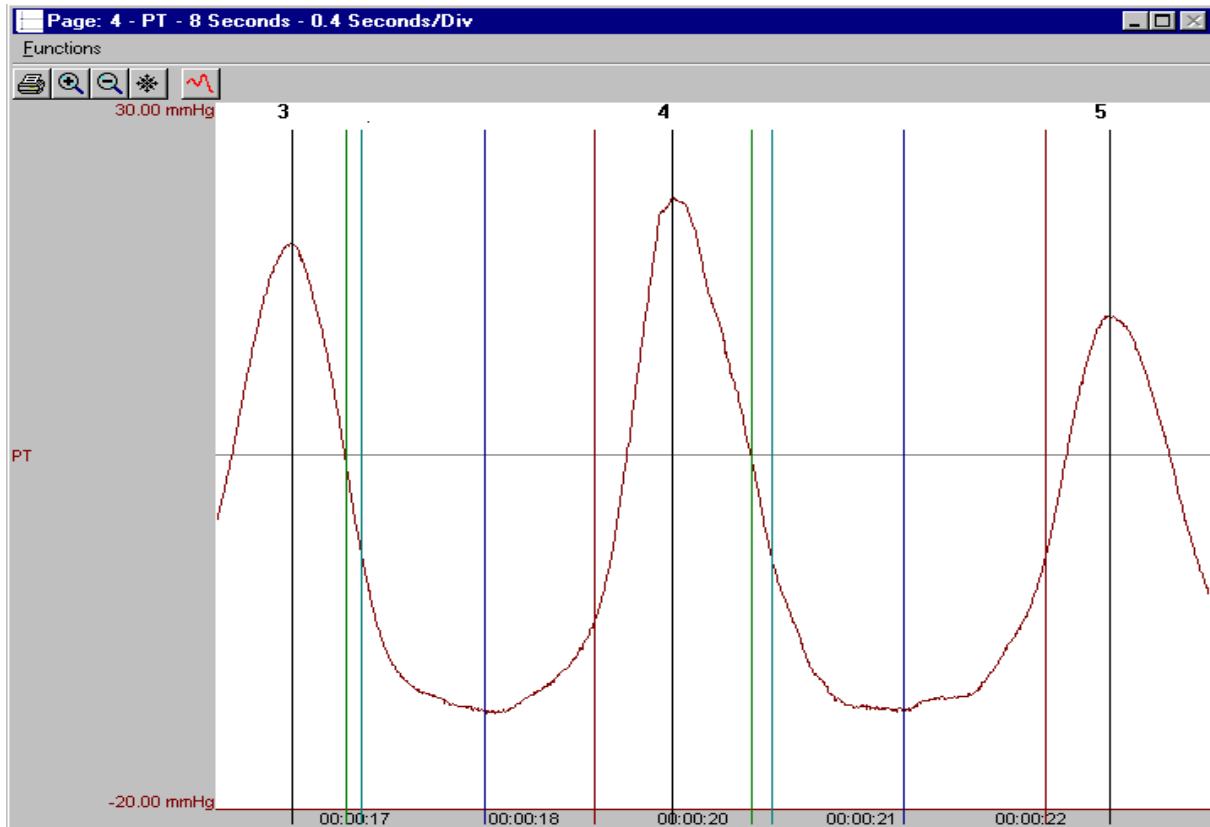




# Pulsatile Tissue and Gut Motility

The purpose of the Pulsatile Tissue & Gut Motility (PT) Analysis Module is to compute physiologically meaningful parameters from digitized pulsatile data. The analysis functions by applying a series of logical tests to the digitized signal and its first derivative using criteria selected by the user. The graph below represents a typical force (tension) recording as it

would appear on the monitor. Automated validation marks for Maximum Mark and Minimum Mark are shown along with Percent Recovery Marks 1 and 2 and Start Contraction Mark. The validation marks provide visual, on-line verification of the accuracy of the system.



# Technical Data Sheet

## Model PNM-PT100W

### Pulsatile Tissue and Gut Motility Analysis Module

Name	Definition
Num	The number of the tissue contraction cycle.
Max	The Maximum value that occurs during the contraction cycle.
Min	The Minimum value that occurs during the contraction cycle.
Avg	Avg is the area under the curve for a valid cycle divided by the number of logging points under the curve.
Delta	The Delta is the difference between the maximum and minimum values of a cycle.
Rate	Rate is the reciprocal of the time interval for the cycle multiplied by 60.
TTPK	Time To Peak is the time from the start of the rise of the contraction to the maximum contraction value. The value is reported in milliseconds.
+d_/dt	The maximum positive value of the first derivative of the contraction that occurs between the Start Contraction Mark and the completion of Peak Validation Time.
-d_/dt	The maximum negative value of the first derivative of the contraction that occurs between the Maximum Mark and the point that clears the minimum pulse height.
%Rec1	Percent Recovery 1 is the period of time after the maximum contraction has occurred until a pre-defined percentage of the delta has occurred. The time is in milliseconds.
%Rec2	Percent Recovery 2 is the period of time after the maximum contraction has occurred until a pre-defined percentage of the delta has occurred. The time is in milliseconds.
+dd/dt	The maximum positive value of the second derivative of the contraction that occurs between the Start Contraction point and the peak validation time.
-dd/dt	The maximum negative value of the second derivative of the contraction that occurs between the maximum point and the point that clears the minimum pulse height.
MI	The Motility Index is the product of DELTA multiplied by RATE for a given logging period. Note: When running in a logging mode other than 1 epoch, MI is calculated from the averaged Delta and averaged Rate values.
Area	Area is the area under the curve for a valid cycle.

*DSI products are not intended for the purposes of diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, or used as a life support device. Use of DSI products are solely for the purposes of conducting life science research.*