



DESCRIPTION

The *DIGIMET* 3000 is a 5-key, hand-held, battery operated, microprocessor-based vacuum and pulsation multi-function meter for measuring vacuum level characteristics and pulsation attributes in the dairy milking system. Use the *DIGIMET* 3000 to spot-check critical variables within the milking system. With the *DIGIMET* 3000, you can store data and recall it at a later time. The *DIGIMET* 3000's stored data can be either viewed on its LCD screen, uploaded to a computer or printed to the *DIGIMET* Printer. By monitoring vacuum levels, pulsator ratios, milk/rest ratios and pulsation electronics, the *DIGIMET* 3000 can evaluate system performance and improve milking efficiency.

FEATURES

- 5-key membrane key pad
- 4-row by 16-character LCD
- Accepts pneumatic and

electrical input

- User selectable shut-off from 0 to 30 minutes of non-use
- NEW! Display blinks when outside Pulsation Ratio limits
- Battery life of approximately 40 hours
- Microprocessor based, menu-driven software
- Save five 10-second graphs with data collected at 125 Hertz
- Label data with up to 16 characters
- Units measured may be inches of Hg or kPa
- Save data from 30 double coil pulsators
- Serial port output for printer or computer
- DOS & WINDOWS programs included

The *DIGIMET*® 3000 will enable the user to store, recall and then upload or print data. From any of the four functions (Vacuum Level, Pulsator

Ratio, Milk/Rest Ratio or Pulsation Electronic), the user will be able to upload/print data on individual items. Also, from any of the pneumatic functions, the user can save up to a total of five 10-second waveforms (graphs). In addition, in the Utility Menu, the user can upload/print all stored numeric data at one time. Each of the five graphs must be uploaded or printed, individually.

TYPE OF DATA COLLECTED:

The *Vacuum Level Function* measures: Avg. Vacuum, Max. Vacuum, Min. Vacuum and Fluctuation. The *Pulsator Ratio Function* measures: A+B, C+D, B Fluc, Max. vacuum per pulse, Min. vacuum per pulse, A, B, C, D, Total time, Pulses per minute and Limping data. The *Milk/Rest Function* measures: Ratio, Pulses per minute, Max. vacuum per pulse, Min. vacuum per pulse, Milk, Rest, Total time. The *Pulsation Electronic Function* measures: On time, Off time, Max. volts per pulse, Min. volts per pulse, Pulses per minute.

UPLOADING DATA:

Two computer software programs are provided to enable the user to receive data into a computer file: 1) A DOS program which enables the user to upload the *DIGIMET* data to a computer file and then call the data up into a number of off-the-shelf programs, like word processors, spreadsheets, etc. 2) A program for WINDOWS can be used to view and print the data collected by the *DIGIMET* 3000.

PRINTING:

Sending data to the *DIGIMET* Printer (paper size similar to an adding machine paper roll) is as simple as pressing a key. The user can print out individual items from each of the four functions, for example, the data for one pulsator. Or, all the stored data in the *DIGIMET* 3000 can be printed at one time.

SENTINEL™ DIGIMET® 3000 Version 4.0

LIMPING DATA:

The Digimet 3000 evaluates the A + B phase of each side of the pulsator and indicates the difference as a percentage and in milliseconds. This is referred to as Limping.

LABELING DATA:

In addition to a timer stamp, as in the Digimet 2000, DIGIMET 3000 users can label data (up to 16 characters) when it is stored.

DATA STORAGE:

In the Pulsator Ratio function, data is stored as either dual or single pulsation. In the dual mode, storage slots would be indicated as 1A, 1B, 2A, 2B etc. In the single mode, the storage slots would be indicated as 1, 2, 3, etc. Again, these slots can also be labeled. Also, if a user is storing a lot of pulsation data, the program will stay at the last selected storage item instead of going back to the beginning. The user doesn't have to scroll down the whole list of storage slots each time he/she enters the storage function.

The amount of storage slots for the Pulsator Ratio function is 60. This means that in this function, data can be stored for 30 double coil pulsators or 60 single shot pulsators.

Storage slots for the different functions are as follows:

Vacuum Level	10
Pulsator Ratio	60
Milk/Rest Ratio	30
Pulsation Electronic	5

GRAPH STORAGE:

From any of the three pneumatic functions the user will have the ability to store up to five 10-second waveform graphs. The graphs can be saved for later viewing in the provided WINDOWS program, or printed using the DIGIMET Printer. This would enable the user to collect five waveforms, upload them to, for example, a laptop computer, saving them as files and then going back and recording another five waveforms without the need to wait for a print-out. The graphic files can either be printed directly to the DIGIMET printer, saved to a file for later printing to the computer's printer or saved to a file which can be viewed in the WINDOWS program. The WINDOWS program will allow for both viewing and printing of graphs.

VACUUM LEVEL FUNCTION:

Fluctuation time frames can be set at 1, 2, 3, 4, 5 and 10 seconds.

AUTO SHUT-OFF:

User can adjust the Auto Shutoff from 0 to 30 minutes.

NEW FEATURE ADDED:

The Digimet 3000 Version 4.0 allows users to input pulsator ratio parameters, like the range for the C phase, in milliseconds. While viewing data from a pulsator, when the pulsator values fall outside those limits, the Digimet display digits will blink. Also, existing units are easily modified.

DIGIMET 3000 CONFIGURATIONS:

The basic unit will include the DIGIMET 3000, user guide, software for computer uploading, a cable to attach to a computer, and miscellaneous fittings, etc. So, if a user has access to a computer, he/she can get a hard copy of the DIGIMET data by transferring to the computer and then getting a print-out from the computer's printer. In order to get a printed copy directly from the DIGIMET 3000, a DIGIMET Printer must be purchased as a separate item.

The following items will be sold as accessories:

DIGIMET Printer - This is a 4" x 7" x 3" impact printer which can print characters and graphics. The printer uses voltage from an AC wall transformer which is supplied with the printer.

The Printer uses adding machine roll paper and the printer cartridge is an EPSON HX-20 ribbon.

Large Hard Carrying Case - A larger case has been configured to accommodate the DIGIMET 3000, accessories, the DIGIMET Printer and an AC transformer.

COMPLETE DIGIMET 3000 PACKAGE:

This package includes the DIGIMET 3000, user guide, software for computer uploading, a cable to attach to a computer, miscellaneous fittings, the DIGIMET Printer with wall transformer & cables and a Large Carrying Case.

L. J. ENGINEERING, INC.

18192 Gothard Street

Huntington Beach, CA 92648 USA

1-800-635-6413 • 714-848-8001 • fax 714-848-0973

email: info@sentinelproducts.com

www.sentinelproducts.com