

## TURN-KEY SYSTEM

The SQM500W is a fully integrated 3-D color graphics data computer, a motorized X-Y scanning stage (6" X 6" Travel) with 2-Axis controller, color printer and a SQM200W Surface Quality Monitor. All scanning and data acquisition is controlled by PETSCAN™ software.

The system can be used to scan a flat sample surface and acquire data using any analog sensing device. It displays graphics in both color map and 3-D Topo map formats, with the ability to print out a color hard copy. The data can also be printed out, in a matrix format, listing the X,Y position and associated signal value.

## SOFTWARE FEATURES DESCRIPTION

### SCANNING

Enables the user to scan any flat sample surface, acquire data and display a color map on the monitor. The user can define the number of data points to be

collected in the X and Y directions, and the stepsize (the distance between data point). All scan parameters are automatically saved and recalled to scan additional parts or re-scan the same part after some surface treatment. This feature is helpful in visualizing the effect of any treatment/changes to the surface.

## COLOR GRAPHICS DISPLAY

A interactive color graphics mode allows rapid visual analysis of the data. In this mode, the user has the ability to **PAN** and **ZOOM** onto a portion of the color map. The **ZOOM** portion can also be saved as a file. Two color maps can be displayed simultaneously to visually compare any two scans. This enables the user to visually analyze the effect of any treatment or the variation in two parts. Another feature is the ability to normalize, i.e., subtract point-by-point, one file from another. The resultant file is displayed in a 3D type format.

A 3-D Topo map of the data can also be displayed on the screen. In this display mode, the user has the ability to tilt and rotate the image and set the Z-scale factor to visually enhance differences in the surface characteristics.



760 Calle Plano • Camarillo, CA 93012-8555 USA

E-mail: sales@photoemission.com • www.photoemission.com

(805)482-5200 • FAX: (805) 482-5252

**SOFTWARE FEATURES DESCRIPTION (CONT'D.)**

**ANALOG TO DIGITAL CONVERSION**

An analog input of 0-5 VDC is standard for the system. Other ranges of DC signal can be accepted with a minor modification, done at no additional cost. The SQM500W can accommodate any instrumentation that has an out-put which ranges within the standard or modified analog signal range.

**REPORT GENERATION**

Any graphic image displayed on the screen can be printed on the color printer, which comes complete with the system. All scan parameters are also printed automatically. It is also possible to print a list of all sensor data values, along with their corresponding X-Y position. The high, low, mean, and standard deviation of the scan are also printed out.

**DETAILED PRODUCT SPECIFICATIONS**

**X-Y SCANNING STAGE:**

- 6" x 6" travel\*, Motorized X-Y Scanning Stage. Sensor Holder with sensor clamp
- Manually operated micrometer for sensor height adjustment, 1" (25 mm) travel

**DESK TOP COMPUTER:**

- Current Model Computer System
- Color Monitor
- Keyboard
- Current Model Color Printer

**PETSCAN™ SOFTWARE**

- Scanning Routines for defining step size, and the number of steps in the X & Y direction
- File saving and management routines
- Color Graphics Display routines with Pan & Zoom capability. Displays as a Color Map or Topographic Map
- Displayed Screen Printing Capability
- Data File Printing Capability

**MODEL SQM200W SYSTEM**

- Surface Quality Monitoring System

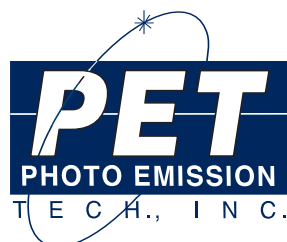
**OPTIONS**

- \*Larger X and/or Y travel available
- Replace SQM200W Surface Quality Monitoring system with SQM300W or any other analog surface characterization sensors

**CONTACT FACTORY OR AREA REPRESENTATIVE FOR DEMO**

**SOFTWARE DISKETTE. REPRESENTED IN YOUR AREA BY:**

*Specifications subject to change without notice.*



760 Calle Plano  
Camarillo, CA 93012-8555 USA  
E-mail: sales@photoemission.com  
www.photoemission.com  
(805) 482-5200 • FAX: (805) 482-5252

REPRESENTED IN YOUR AREA BY