

## OT-302D

### Display Module

For On-Trak Position Sensing Amplifiers



#### Features

- LCD Display of Absolute Position
- LCD Backlight
- X, Y Position and Sum Display
- Metric (mm) or English (in)
- RS-232 Interface
- Push Button Zero Offset
- Computer Controlled or Stand Alone
- Front Panel Push Button Control
- High Resolution 0.1 Micron (0.0001")
- Display Update Control 0.1 To 25.5 Second Update Speed
- Calibration Features for all Size Detectors
- Fast/Slow Averaging

## OT-302D Display Module. Comprehensive Data Display And Analysis.

The OT-302D Display Module brings a new level of ease and sophistication to display and analysis of position sensing data collected from the OT-301 Position Sensing Amplifier.

Utilize the module in three ways: as a standalone readout system, in tandem with BeamTrak data processing software (included), or with user-programmable routines via RS-232 communication.

### Stand Alone Readout.

The OT-302D is an ideal stand alone display. The simple two-button front panel allows you to quickly set-up the OT-302D for your individual measurement applications.

Press both buttons simultaneously to enter the configuration mode. Select the size of your position sensing detector, measurement units, and display update speed. Press the FAST/SLOW button to exit. The OT-302D is ready to display position data.

### BeamTrak Display And Analysis Software.

Complimentary BeamTrak software makes it easy to collect, display and ana-



Complete On-Trak position sensing solution.

lyze data from the OT-302D on your IBM PC compatible computer.

Featuring a full toolset of “must have” functions — from automatic data logging and history trace, to data averaging and autoscale — you’ll be up and running in no time.

### RS-232 Communication Control.

All OT-302D commands are available through the RS-232 port — ideal for users

writing custom application-specific programs. Address the OT-302D via the RS-232 comm port with the following settings: 9600 Baud Rate, 8 Bits, 1 Stop Bit, No Parity.

### Absolute Position — mm And Inches.

The OT-302D’s microprocessor-controlled module takes analog output voltage from the position sensing amplifier and converts it into absolute position — millimeters or inches. X/Y position and SUM output is simultaneously displayed on the backlit LCD to a resolution of 0.1  $\mu$ m (0.0001 inches).

### Lifetime Warranty.

So reliable is the OT-302D, we back it with a comprehensive lifetime warranty... at no additional charge.

Backlit LCD display of absolute position — High resolution: 0.1 micron (0.0001")



Selectable Fast/Slow update speed

LED to indicate zero offset engaged

User selectable zero for relative measurements

## BeamTrak Software

IBM-PC compatible OT-302D BeamTrak Software is included at no extra charge—making it easy to collect, store and process data. This Windows-based program will have you up-and-running in minutes.

- **Data Log.** Automatically collect data points every two to 120 seconds for up to a 48 hour period. Then import all data into your favorite spreadsheet program for comprehensive display and analysis.

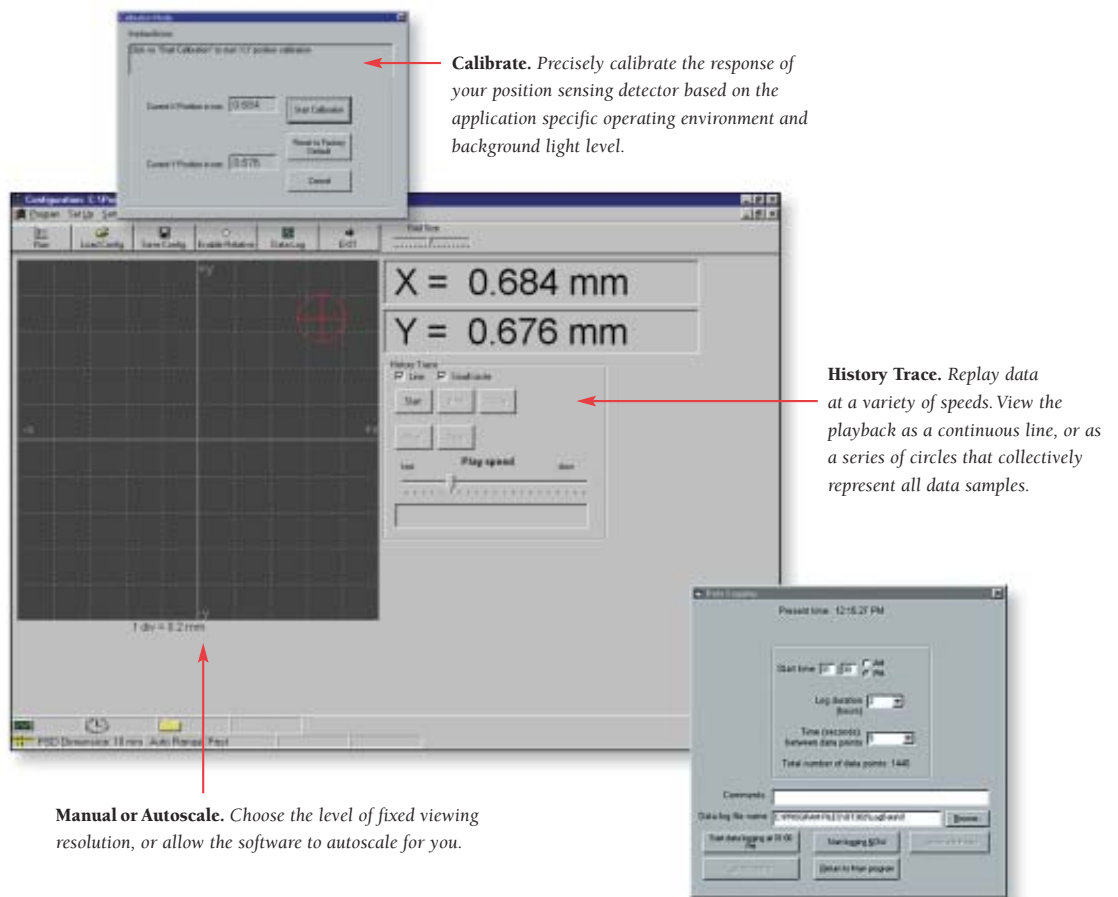
- **Calibrate.** Precisely calibrate the response of your position sensing detector based on the application specific operating environment and background light level.

- **History Trace.** Replay data at a variety of speeds. View each playback as a continuous line, or a series of circles representing all data samples.

- **Manual Or Auto Scale.** Choose the level of fixed viewing resolution, or allow the software to autoscale for you.

- **Axis Orientation.** Reverse the orientation of the X and Y coordinates.

- **Enable Relative.** Set the current position to zero.



**Manual or Autoscale.** Choose the level of fixed viewing resolution, or allow the software to autoscale for you.

**Data Log.** Automatically collect data points every two to 120 seconds for up to a 48 hour period. Then import all data into your favorite spreadsheet program for comprehensive display and analysis.

## RS-232 Software Control Functions

The OT-302D is compatible with the complete range of On-Trak position sensing amplifiers. This microprocessor-controlled module takes analog output voltage from the position sensing amplifier and converts it into absolute position in both millimeters or inches. XY position output and SUM output is simultaneously displayed on the backlit LCD.

The OT-302D features RS232 communication to set metric or English position, scale factors for different size detectors, display update speeds and many more functions. The RS232 has a continuous or on demand position update for data logging and control.

The OT-302D Display Module can be controlled through the RS232 comm port with the following settings: 9600 Baud Rate, 8 Bits, 1 Stop Bit, No Parity.

a = average value in 1/10 second intervals  
d = default selection (for multidrop)  
e = echo on/off (echoes commands)  
f = fast/slow averaging  
h = help display commands  
i = assigns ID number  
j = X offset adjust  
k = Y offset adjust  
l = sensor length in mm  
m = metric or English

n = sum offset adjust  
o = sets current value to zero  
p = data scroll  
q = quiet mode  
r = return position value  
s = unit select  
v = version and status display  
w = write to eeprom  
x = gain calibration X  
y = gain calibration Y  
z = gain calibration SUM

## OT-302D Specifications

<b>Input Voltage Range</b>	X, Y and Sum: 0 to $\pm 10V$
<b>Update Speed</b>	0.1 sec to 25.5 sec
<b>Power Supply</b>	12V DC 500mA wall adapter
<b>Size</b>	2.5 x 5.5 x 6.5 inches (H x W x D)
<b>RS-232</b>	9600 baud rate, 8 bits, 1 stop bit, no parity
<b>Weight</b>	1 lb. 10 oz.
<b>Display Resolution</b>	0.0001 inch (0.0001 mm)



See OT-301 Position Sensing Amplifier for details.