CORRECTION OF GRADIENT ERRORS IN THERMAL ANEMOMETRY

FREQUENTLY ASKED QUESTION #3

Question:

I have a TSI hot wire system with IFA signal processor. The system works fine. I am now measuring a highly turbulent flow. The turbulence intensity is over 20%. The question came up as to whether ThermalPro software can correct for gradient errors.

Answer:

In these cases we advise using the smallest size wire type probe possible, for the best frequency response. The error involved here results from the possibility of instantaneous flow reversal because of the high turbulence intensity. ThermalPro does not correct for this type of error.





TSI Incorporated - Visit our website www.tsi.com for more information.

 USA
 Tel: +1 800 874 2811
 India
 Tel: +91 80 67877200

 UK
 Tel: +44 149 4 459200
 China
 Tel: +86 10 8251 6588

 France
 Tel: +33 4 91 11 87 64
 Singapore
 Tel: +65 6595 6388

 Germany
 Tel: +49 241 523030

1/14/2013 ©2013 TSI Incorporated Printed in U.S.A.