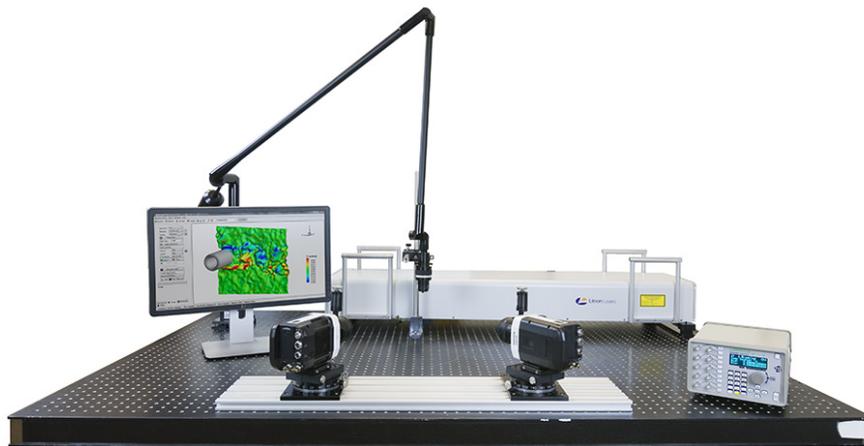


## TIME RESOLVED PIV SYSTEM

SKU: 630102-18GB

TSI can supply integrated PIV systems capable of obtaining data at rates ranging up to 10s of kilohertz. TSI offers "time-resolved" versions of all of our global imaging systems including 2D-PIV, Stereoscopic PIV, V3V™ Volumetric PIV, GSV, SSA, and PLIF. The detailed temporal data obtained from these high repetition rate measurements offer unique information about flow dynamics, flow transport and the motion of structures in a flow.



## PRODUCT DETAILS

TSI PIV systems can provide flow field information with very high spatial resolution by making use of high megapixel cameras. Historically, however, the temporal resolution of successive PIV vector fields has been limited by the system's overall repetition rate, which is governed by the camera frame rate and the laser pulse rate. For most practical flow field applications (in both air and water cases), the system repetition rate has been too low to be of value.

However, the ability to measure flow field evolution as a function of time has always been of great interest to experimentalists. As laser and camera technology progress, we are continually expanding the range of PIV systems in terms of both spatial and temporal resolution (which are often in conflict with each other).

Today, TSI is proud to be able to offer PIV systems capable of operation across a very broad spectrum of repetition rates. TSI offers traditional low-speed (1-15 Hz), mid-speed (~90 Hz), and high-speed systems. Recently, TSI systems have even been able to reach repetition rates in the 10's of kilohertz range, with pulse energies as high as 50 mJ/pulse.

TSI offers "time-resolved" versions of all of our global imaging systems including [2D-PIV](#), [Stereoscopic PIV](#), [V3V Volumetric PIV](#), [GSV](#), [SSA](#), and [PLIF](#).

## APPLICATIONS

- Measure flow field evolution in time
- Obtain unique information on flow dynamics, flow transport, and motion of structures in a flow

## INCLUDED ITEMS

- High Repetition Rate Nd:YLF or Nd:YAG laser (specific model depends upon application)
- High Frame Rate CMOS camera (specific model depends upon application; includes camera lens, all interface cables, camera frame grabber)

## FEATURES & BENEFITS

- High-speed cameras designed specifically for high frame rate applications
- INSIGHT™ Data Acquisition, Analysis and Display Software provides complete system control
- Remote focusing and Scheimpflug adjustment enables remote system alignment
- Flow measurements with capture rates as high as 50 kHz