



**TELEDYNE DALSA**  
Everywhereyoulook™

Teledyne DALSA • 880 Rue McCaffrey • St-Laurent, Québec, H4T 2C7 • Canada  
<http://www.teledynedalsa.com/>

## *Z-Trak Laser Profiler – All Models*

---

### **FREQUENTLY ASKED QUESTIONS**

***Q: WHAT IS THE DIFFERENCE BETWEEN ACCURACY AND RESOLUTION?***

A: Statistically, accuracy is the average of measured values closest to a known or true value. Resolution is the smallest value the system is able to resolve. Please refer to the link [https://en.wikipedia.org/wiki/Accuracy\\_and\\_precision](https://en.wikipedia.org/wiki/Accuracy_and_precision) for a more in-depth discussion.

***Q: WHAT IS THE MINIMUM SAPERA LT VERSION NEEDED FOR Z-TRAK?***

A: Z-Trak requires Sapera LT Ver. 8.40.00.1937 or higher. This version will be released concurrently with this rollout package. Sapera LT is available FREE of charge and includes field proven libraries for image acquisition, control and utilities.

***Q: CAN I USE SAPERA CAMEXPERT WITH Z-TRAK?***

A: No. Starting with Sapera LT ver. 8.40, we have introduced a new camera tool called CamExpert X. CamExpert X has more advanced display capabilities to render 3D views. Currently CamExpert X only supports Z-Trak 3D laser profilers.

***Q: WHAT SOFTWARE CAN I USE WITH Z-TRAK?***

A: Z-Trak supports the GenICam standard. As such, software packages that support the GenICam 3D standard will work with Z-Trak cameras. We have successfully validated Z-Trak operations with Sherlock 8 3D (in beta now; available in H1 2019), Sapera Processing 8.0, MVTec Halcon and Stemmer CVB. Customers using proprietary software that also use GenICam interfaces should also be able to use Z-Trak cameras.

***Q: WHAT IS THE COST OF SHERLOCK 8 3D?***

A: Sherlock 8 3D is a subset of Sherlock 8 and is offered Free of charge when used with Z-Trak. However, Sherlock 8 3D must be activated through the Teledyne DALSA website before use. A beta version of Sherlock 8 3D is currently available for evaluation on request. Sherlock 8 release is expected in the first half of 2019.

***Q: WHAT IS THE COST OF A SAPERA PROCESSING LICENSE FOR Z-TRAK?***

A: Sapera Processing Group 1 run-time license is offered FREE of charge when used with Z-Trak. However, customers have to either buy or update to Sapera Processing 8.0 SDK.

***Q: I ALREADY HAVE SAPERA PROCESSING GROUP 1 LICENSES, HOW DO I RENEW THEM TO INCLUDE Z-TRAK?***

A: After compiling a Sapera Processing 8 for Z-Trak application, registered users can obtain an updated Group 1 license after logging back into their account on our website. Note: all registered users with an active maintenance contract can download Sapera Processing SDK 8.0 from the Teledyne DALSA website.

***Q: WHAT IS THE MAXIMUM PROFILE RATE OF Z-TRAK?***

A: Z-Trak uses a CMOS image sensor thus the profile rate (frame rate) can be increased by creating a smaller region-of-interest (ROI)/area-of-interest (AOI). For example, by reducing the ROI to 320x240 the profile rate can be increased to around 2200 profiles/sec.

***Q: THE Z-TRAK DATASHEET SHOWS Z-RESOLUTION, X-RESOLUTION BUT NOT Y-RESOLUTION. WHY?***

A: Y-resolution is determined by the speed at which an object moves in front of the camera. If an encoder is used, encoder pulses are used to estimate the speed and calculate the Y-resolution.

***Q: CAN TELEDYNE DALSA CREATE A SEMI-CUSTOM MODEL OF Z-TRAK IF SPECIFICATIONS OF THE CURRENT MODELS DO NOT MEET MY REQUIREMENTS?***

A: Yes, however, some conditions may apply. Contact Teledyne DALSA sales for further assistance.