




Questionnaire for potential buyers of systems for testing thermal imagers

The DT series systems are specialized test systems optimized for task of extensive testing/boresight of thermal imagers and thermal camera cores at laboratory/depot conditions. DT systems are not optimal for testing very short range (wide FOV) imagers. Different test systems (DTR, TCAR, SAFT, TWAP) are recommended.

Dear customer, please note that the higher number and ranges of the requirements marked in this questionnaire will have direct influence on the price of proposal version of DT test system.

1. What is list of main types of imaging systems to be tested?

Type	Image of exemplary device
<input type="checkbox"/> optical output short/medium thermal range imagers: thermal monocular, thermal binocular, thermal sight, thermal clip ons,	
<input type="checkbox"/> electronic output medium/long range thermal sights,	
<input type="checkbox"/> electronic output long/ ultra long range thermal imagers,	
<input type="checkbox"/> other:.....,	

If it is possible please attach the images of systems similar to your system (internet data).

2. What is minimal diameter of a circle that overlaps totally optics of the biggest thermal imager to be tested?

3. Please fill in the table with informations about imaging systems to be tested:

Spectral range	Maximum aperture	Nyquist frequency	Parameters to be measured		
<input type="checkbox"/> LWIR	Min.: Max.:	<input type="checkbox"/> MRTD <input type="checkbox"/> MDTD <input type="checkbox"/> MTDP <input type="checkbox"/> SiTF <input type="checkbox"/> NETD <input type="checkbox"/> FPN <input type="checkbox"/> Bad pixels <input type="checkbox"/> SNR	<input type="checkbox"/> 3D Noise <input type="checkbox"/> NPSD <input type="checkbox"/> MTF <input type="checkbox"/> SRF <input type="checkbox"/> AutoMRTD <input type="checkbox"/> FOV <input type="checkbox"/> Distortion <input type="checkbox"/> Magnification	<input type="checkbox"/> Responsivity <input type="checkbox"/> PVF <input type="checkbox"/> NER <input type="checkbox"/> NEI <input type="checkbox"/> NEP <input type="checkbox"/> D* <input type="checkbox"/> Other:
<input type="checkbox"/> MWIR	Min.: Max.:	<input type="checkbox"/> Other:		
<input type="checkbox"/> Other:	Min.: Max.:	<input type="checkbox"/> Other:		

4. What are types of alignment of thermal imagers are to be tested?

- Zoom-through boresight: angular shift of target marked by imager line of sight (indicated by aiming mark) when zooming,
- Focus-through boresight: angular shift of target marked by imager line of sight (indicated by aiming mark) when focusing (at different range of focusing depending on version),
- Deflection angle: angular shift of target marked by line of sight of telescopic sight (indicated by aiming mark) at two modes: 1) clip on not used, 2) clip-on is fixed to weapon,
- Boresight error of thermal imager to the reference mechanical axis. Tested thermal imager must be equipped with mounting to the picatinny/dovetail rail,
- Boresight error of thermal imager to the reference mechanical plane. Tested thermal imager must be equipped with the reference mechanical plane.

5. Please fill in the table with informations about other informations about systems to be tested:

Additional targets	Simulated distance	Testing thermal camera cores	Testing measurement thermal imagers
<input type="checkbox"/> Set of eight 4-bar targets <input type="checkbox"/> IR USAF1951A <input type="checkbox"/> IR USAF1951B <input type="checkbox"/> Custom:	<input type="checkbox"/> Fixed infinity <input type="checkbox"/> Continous regulation	<input type="checkbox"/> Noise parameters	<input type="checkbox"/> Low temperature range <input type="checkbox"/> Medium temperature range
Video interface (up to four)	Optical table	Budget preferences	General customization
<input type="checkbox"/> Analog <input type="checkbox"/> USB 2.0 (DirectShow) <input type="checkbox"/> USB 3.0 (DirectShow, Gemicam) <input type="checkbox"/> Camera Link <input type="checkbox"/> HD-SDI/HDMI <input type="checkbox"/> LVDS <input type="checkbox"/> GigE <input type="checkbox"/> CoaXPress <input type="checkbox"/> Custom:	<input type="checkbox"/> No <input type="checkbox"/> Optical table for test system <input type="checkbox"/> Optical table for test system and tested system: Required space for tested system:	<input type="checkbox"/> Cheapest option <input type="checkbox"/> Typical option comparable to offered on the world market <input type="checkbox"/> Advanced option	<input type="checkbox"/> Space application <input type="checkbox"/> Temperature chamber <input type="checkbox"/> Cleanroom compatibility