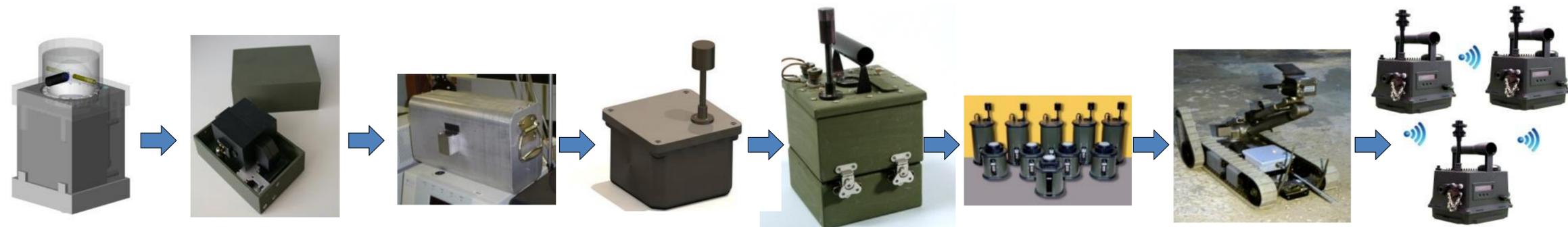
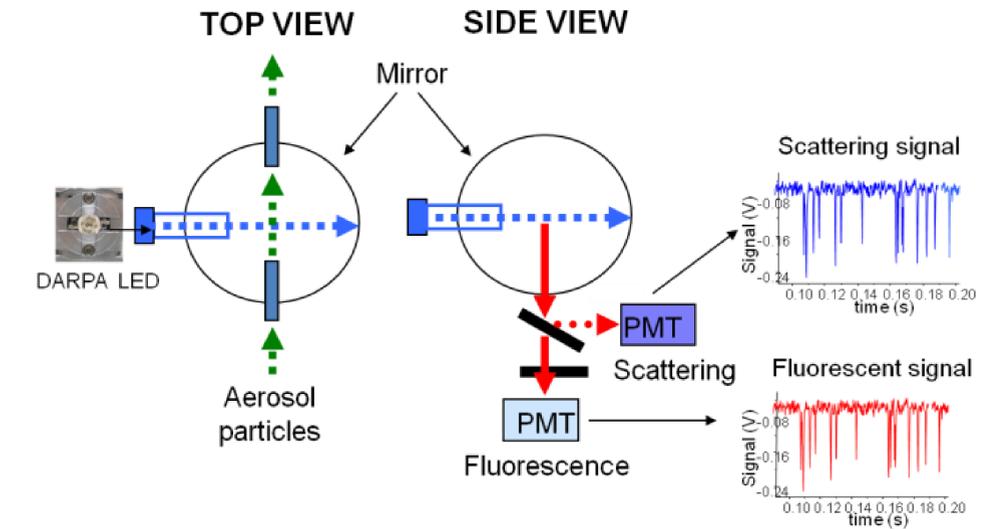


Tactical Biological Detector, Generation II

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The Tactical Biological Detector (TACBIO) Generation (Gen) II, funded by both the Defense Threat Reduction Agency (DTRA) and the Defense Advanced Research Project Agency (DARPA), is a small, lightweight, portable biological aerosol agent detector specifically designed to meet a \$2K/unit production cost goal. This was achieved, in part, through the development of novel injection molded plastic parts and assembly processes. In addition, the detector incorporates a deep ultraviolet light-emitting diode (UV LED) (<280-nm) developed by DARPA that provides enhanced performance. The detector design integrated the Joint Warning and Reporting Network (JWARN) Common CBRN Sensor Interface (CCSI) standard to achieve enhanced situational awareness. This standard enabled the use of a system level false alarm reduction algorithm of networked TACBIO Gen II detectors. It was demonstrated that this network could improve biological threat detection, warning and confidence.



Particle Size	< 2 um
Concentration	< 200 ppl
Time to Detection	<1 min
Weight	3 lbs 3oz
Size	12" x 6" x 8"
Power	24 VDC/ Battery powered
Communication	CCSI compliant USB/ethernet/RS-232
Data Storage	Internal SD Card
Cost	\$2K/ 10K qty

FY02/03	FY04	FY05/06	FY07	FY08	FY09-10	FY11	FY12/13
Basic Concept	Advanced Concept	Testbed	Brassboard	TACBIO GEN I	Cooperative Research and Development Agreements & Patent License Agreements	Applications	TACBIO GEN II
Near UV (340-375nm) LED research and development (R&D)						Deep UV (<280 nm) LED R&D	

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