

Safe Training Systems Ltd Radiation and Contamination Training Systems

The most comprehensive range of handheld training devices available, offering complete solutions for training requirements in the Nuclear, Emergency Services, Radiological and Research fields.



www.radiationsimulation.com



Radiation Field Simulation

The STS Safe-Series range brings new technology into handheld simulation to provide the most realistic simulators available today.

A unique radio system produces both a near isotropic field pattern from the source and from the detector. A good representation of the inverse square law and attenuation of different materials adds to the realistic response.





For basic radiation field training STS has produced the Survey-Safe a simulated field survey meter and the Safe-EPD simulated dosimeter. These units feature user definable alarms and backgrounds and a range of approx 15m.

All of the instruments in the range are compatible – so any of Survey Meter, Dosimeter and be used – with up to 16

being simultaneously fielded.



Safe-Series combination Source may instruments



The sources are available in several variants – a pocket source and mini source - both have a variable activity which has 10 levels set by a rotary dial and a radio-controlled version with 8 levels.

The mini source is just 80 x 60 perfect for hiding in a training Pocket Source is excellent for or in smaller spaces.



x 40mm and are area whilst the hiding on a person



Contamination Training Solutions

STS Contamination simulators use a clear odourless liquid spray to produce contamination on a surface to be monitored. The spray is virtually invisible on most surfaces and will last for up to 2 hours.

The liquid source material (LS1) is transferable, and so is ideal for demonstrating the hazards of cross contamination from surfaces to clothing and equipment. The contaminated surface may be cleaned using standard methods and then re-monitored to demonstrate effective decontamination techniques.

The STS range of simulated instruments incorporate a specialised gas detection head. The detector senses the small gas cloud produced by the liquid spray evaporating and the resultant signal is translated into a count rate displayed on the instrument.





STS Smart Probes offer users the ability to use their existing real meters for contamination training utilising an STS smart simulation probe or the new Training Simulation Smart Interface. Used for contamination surveys, cross contamination demonstration and decontamination verification, they offer an ideal solution to meet your regulatory training requirements.

The new probes offer longer run times due to an integrated Lithium-Ion battery with up to 12 hours training between charges. The integrated cells allow for the STS simulation circuits to be built into smaller style probes with less modifications of the original probe, meaning trainees use equipment that is very similar to what they will be using every day.

Currently Smart probes are available in a Tubular 44A style and an AP6/ DP6 style for direct connection to various meters -including the Thermo RadEye SX, Mini900, Ludlum 3 and more.







Alternatively, where users wish to use small frisker style probes such as an HP260 you can use the Training Simulator Smart interface (TSSI) which connects directly to a real meter and the Standard STS probe connecting to the interface.

The TSSI can be supplied with various connectors allowing it to be used with for instance the Ludium 3 or 3000, Mini900, Thermo RadEye SX, Automess 6150AD and others.

All the STS Smart Series Probes and TSSI with standard LS1 and SS4 simulants and carrycases with associated cables, year's warranty.



are compatible are supplied in manuals and 1



All STS contamination monitors are based on real instrument with additional STS electronics built into them or are wholly manufactured by STS such as the Contamination Trainer and CMS. User controls, screens and instrument functions are either retained or duplicated to provide the most realistic training environment.

Training scenarios can be developed to include both field survey and contamination monitoring without ever

needing to use a real source and therefore minimising exposure to both trainee and trainer alike.







Simulated Contamination Meters (Modified meters for training Only)	
UN OR DAY THE MALE	 Thermo Mini 900 Desktop Analogue meter Alarm set point Compatible with all standard STS probes Commonly used with STS 44A and EP15 probes
	 Thermo Electra Digital meter Alarm set point Compatible with all standard STS probes Customer to supply meter for conversion as no longer available
Augustion Model 3 Training Structure Under Model 3 Training Structure Under Model 3 Mainteen Strates Training Structure Mainteen Strates	Ludlum 3,3A,12,14 • Analogue meter • Fast/slow response • Adjustable range control • Compatible with all standard STS Probes
	 Rotem Ram Gene 1 MK II Contamination only digital Simulator (CPS) Inbuilt detector -no probe required Handheld format Selectable Alarm Threshold
	 STS Contamination Trainer Digital Desktop Meter Large Colour LCD display Alarm set point Audio on/off Adjustable Front legs & Carry Handle Powered from Mains or internal Lithium battery Compatible with all STS Standard Probes





STS Wall mounted Contamination Monitor

- Large Touch screen Colour LCD
- Dual Channel Alpha/Beta output with separate channel alarm LEDS
- Background check on start up
- Adjustable alarm thresholds for both channels
- Comprehensive user menu
- Audio output of clicks and separate alarm sounder
- Mains Powered 110-230V
- Compatible with STS DP6 Standard probe

Thermo FH40 Dual purpose meter

- Modified Meter to run both Gamma and Contamination probes
- Internal Gamma Detector simulation
- Compatible with FHZ732 contamination probe and FHZ512 Gamma Probe
- Unit automatically switches from internal detector to external Gamma probe when plugged in output in uSV.
- Probe output in CPS
- Powered by rechargeable Lithium cell giving 10-12 hours run time



Simulated Smart Contamination Probes (for use with Real meters)	
UPU	 DP2 Smart Probe XL version of DP2 style probe 75cm² probe Connects directly to Real unmodified RadEye SX All functionality of RadEye retained Responds to STS LS1 and SS4 simulants Powered by Lithium Ion rechargeable battery
	 DP6 Smart Probe for RadEye SX Large area 100cm² probe Connects directly to Real unmodified RadEye SX All functionality of RadEye retained Responds to STS LS1 and SS4 simulants Powered by Lithium Ion rechargeable battery Run time 12-14 hours
	 DP6 Smart Probe for Mirion Radiagem 2000 Large area 100cm² probe Connects directly to Real unmodified Radiagem All functionality of Radiagem retained Responds to STS LS1 and SS4 simulants Powered by Lithium Ion rechargeable battery Run time 12-14 hours
	 ADK Large Area Probe for Automess 6150AD Dual detector large area 100cm² probe Connects directly to Real unmodified 6150AD All functionality of retained Automatic range switching Setable alarm thresholds Responds to STS LS1 and SS4 simulants Powered by 6AA battery pack
	 SBM-2D Simulated Probe for Canberra MIP10D Dual detector large area probe Connects directly to Canberra MIP10D Responds to STS LS1 and SS4 simulants Powered by Mip10 from mains supply Probe hook so probe can be hung for non- contact hand monitoring.



 STS Universal Smart Probe End Window probe Connectors available for RadEye SX, Automess 6150AD, Mini 900, Canberra MIP10D, Radiagem 2000 Responds to STS LS1 and SS4 simulants Powered by Lithium Ion rechargeable battery Run time 12-14 hours
 STS Training Simulator Smart Interface Interface box to connect real meter to smaller STS standard probes. Ideal for HP260,HP210,44A,DP2 STS Standard Probes. Connects directly to Real unmodified meter Small form size 100*80*40mm Responds to STS LS1 and SS4 simulants Powered by Lithium-Ion rechargeable battery Run time 12-14 hours
 Bertin Saphyrad AB31 Probe 31cm2 Dual detector probe Connects directly to Bertin's Saphyrad Meter Responds to STS LS1 and SS4 simulants Powered by Lithium-Ion rechargeable Cell giving 10 hours run time Probe has rate and Proximity to surface alarm LEDs.
 Bertin Saphyrad AB170Probe 170cm2 Dual detector probe Connects directly to Bertin's Saphyrad Meter Responds to STS LS1 and SS4 simulants Powered by Lithium-Ion rechargeable Cell giving 10 hours run time Probe has rate and Proximity to surface alarm LEDs



Standard Contamination Probes (for use with STS simulated meters and Interface box)	
As Statutistical As Sta	 44A Probe Cylindrical end window Probe 150 x 50mm Dia Anodised steel body Powered from host instrument via 5 way connector Compatible with all STS simulated meters and the Training Simulator Smart Interface. Detects STS LS1 and SS4 Simulants
	 EP15 Probe Cylindrical end window Probe 110 x 60mm Dia Anodised steel body Powered from host instrument via 5 way connector Commonly used with Mini900 Instrument Compatible with all STS simulated meters and the Training Simulator Smart Interface. Detects STS LS1 and SS4 Simulants
	 BP4 Probe Cylindrical end window Probe 150 x 40mm Dia handle x 70mm dia head Powder coated Aluminium body Powered from host instrument via 5 way connector Compatible with all STS simulated meters and the Training Simulator Smart Interface. Detects STS LS1 and SS4 Simulants
	 DP2 Probe Square 70cm² end window Probe 150 x 70 x 70mm Powder coated steel body Powered from host instrument via 5 way connector Compatible with all STS simulated meters and the Training Simulator Smart Interface. Detects STS LS1 and SS4 Simulants







	 DP6 Dual detector large probe 100cm² Large Area Probe with 2 detectors 340 x 64 x 76mm Powder coated alloy body Powered from host instrument via 5 way connector Compatible with all STS simulated meters and the Training Simulator Smart Interface. Detects STS LS1 and SS4 Simulants
Contraction of the second	 FHZ 732 Probe Pancake Probe 150 x 50mm Dia Plastic and aluminium body For use with STS Thermo FH40 Dual Meter Powered from host instrument via 4 way connector Compatible with all STS simulated meters and the Training Simulator Smart Interface. Detects STS LS1 and SS4 Simulants

Consumables for use with Contamination meters and probes	
State State State State State State State State State State	 Box of 10 LS1 STS Liquid simulated radiation Source Pack of 10 35ml spray cans Approx 200 applications per can Shelf life of 5 years Product completely evaporates to leave training area clear Full MSDS supplied
SASA Marter Radaration Barcel and and and the active wardward Barcel and 2000 Barcel and and and Barcel and Bar	 Box of 10 SS4 STS solid (granular) simulated radiation Source Pack of 10 35ml cans Approx 50 applications per can Shelf life of 3 years Product can be swept up after use to leave no trace Full MSDS supplied



Simulated Radiation Survey Meters	
Survey-Safe Solo	 STS Survey-Safe Simulated Survey Meter 360° detection User selectable alarm threshold User selectable background level Led and Audible alarm Digital display with backlight Range ~15m Powered by 2AA cells Compatible with all sources and Networks with all other Safe series equipment up to 16 units.
	 STS Safe-FH40GL10 Survey Meter 360° detection User selectable alarm threshold User selectable background level Led and Audible alarm Digital display with backlight Range ~15m Powered by 2AA cells Can be used on Telepole with FHZ512 Probe Compatible with all sources and Networks with all other Safe series equipment up to 16 units.
STS SIMULATOR STS SIMULATOR D 000000000000000000000000000000000000	 Safe- Thermo RadEye G10 Survey Meter 0.5µSv/h to 100mSv/h 360° detection Standard RadEye controls retained Led and Audible and vibration alarm Digital display with backlight Range ~15m Powered by 2 x AAA cells Compatible with all sources and Networks with all other Safe series equipment up to 16 units.



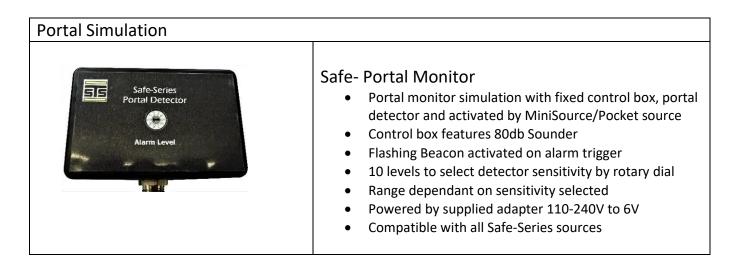




Simulated Gamma Probes	
	 Gamma Probe for FH40 Telepole Suitable for use with STS FH40 and FH40 Dual meters With Fischer connector suitable for connection to Thermo Telepole 170 x 48mm dia Plastic body with Aluminium connection housing Probe turns on automatically when connected to meter Power is supplied from host meter Compatible with all STS Safe series sources and may be networked with any other safe series equipment. Up to 16 devices may be networked and fielded simultaneously.
	 FHZ512 Simulated Gamma Probe Suitable for use with FH40 & FH40 Dual meters Standard 6 way Fischer connector (NOT suitable for Thermo telepole but may be used with STS Telepole) 150 x 48mm dia Plastic body Probe turns on automatically when connected to meter Power is supplied from host meter Compatible with all STS Safe series sources and may be networked with any other safe series equipment. Up to 16 devices may be networked and fielded simultaneously.



Simulated Dosimeters **Dosi-Safe Simulated Dosimeter** Dose and Rate displays 1 user selectable rate alarm 2 user selectable dose alarms User selectable background level Led and Audible alarm Digital display with backlight Range ~15m Powered by 2 x AA cells Compatible with all Safe-Series sources and Networks with all other Safe series equipment up to 16 units in total. Safe- EPD Simulated Dosimeter Dose and Rate displays • 1 user selectable rate alarm 2 user selectable dose alarms User selectable alarm threshold AIRM: B: 99 D: 0.0 nSv User selectable background level • Led and Audible alarm • Safe-EPD SIS Digital display with backlight • Range ~15m • Powered by 2 x AA cells • Compatible with all Safe-Series sources and Networks with all other Safe series equipment up to 16 units in total.





Simulated Radiation Sources Safe- MiniSource Small size 80x60x40mm 10 power levels to select field strength by rotary dial Field strength ~0.5µSv/h to 25mSv/h @ 1m Range ~15m Powered by 2 x AA cells -12hours+ lifetime Low battery /on led Compatible with all Safe-Series meters and Networks with all other Safe series equipment up to 16 units in total. Safe- MiniSource Variable Remote Control Small size 80x60x40mm Safe-MiniSource 8 power levels to select field strength by remote Control (remote range ~50m) O Field strength ~0.5µSv/h to 25mSv/h @ 1m Range ~15m Powered by 2 x AA cells – 12hours+ lifetime Low battery /on led Compatible with all Safe-Series meters and Networks with all other Safe series equipment up to 16 units in total. Safe- Pocket Source Variable Small size 105x65x24 – slim form suitable for hiding on people 515 10 power levels to select field strength by rotary dial Safe-Series ocket Source ~0.5µSv/h to 25mSv/h @ 1m Range ~15m Powered by 2 x AA cells- 12hours+ lifetime On/off Low battery /on led Compatible with all Safe-Series meters and Networks with all other Safe series equipment up to 16 units in total.

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