TRACK AND KNOW YOUR X-RAY SOURCE HISTORY

SCANDIFLASH FXR COUNTER

GET THE MOST EFFICIENT RADIOGRAPHY OPERATIONS AND INCREASED LONGEVITY OF YOUR X-RAY SOURCE

MANAGE SERVICE AND RADIATION SAFETY INTERVALS ALONG WITH ANODE & CATHODE EXCHANGE WITH THE TOTAL NUMBER OF HIGH VOLTAGE PULSES DELIVERED

SCF FXR Counter advantages

- Monitor up to 12 pulsers/X-ray sources
- Safety measure to protect your instruments
- Historical data gives accurate insights
- Ability to count both pulses delivered and anode and cathode usage
- Retrofittable to all SCF systems
- Easy to install

Core components

FXR CAS100, Counter application software
FXR Counter unit

Accessories

Cabling (variable length)

Compatible systems

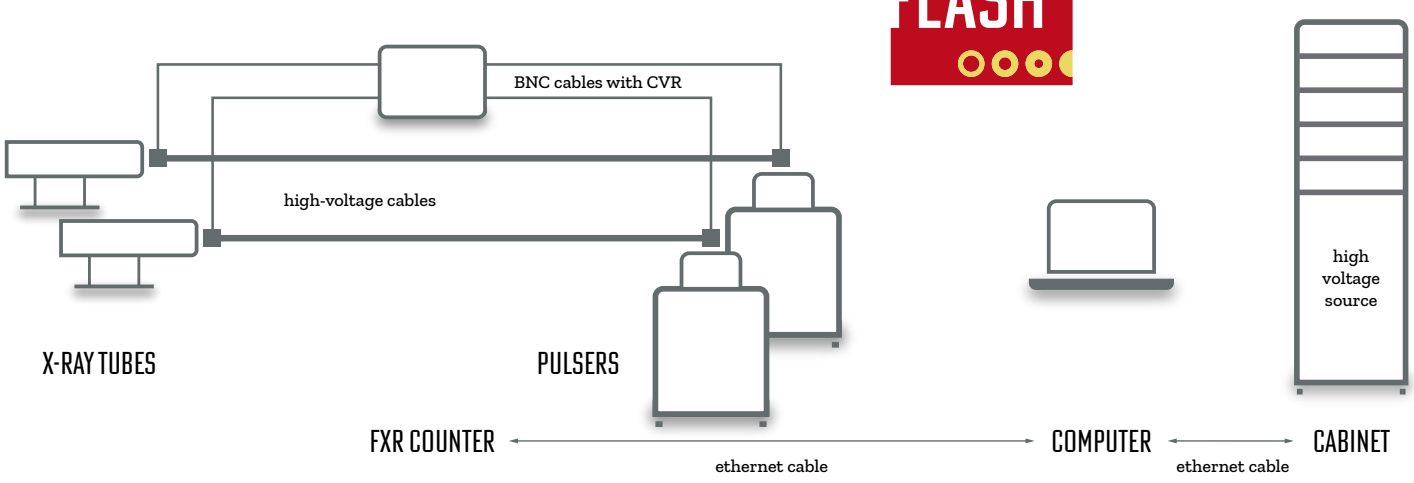
SCF150
SCF300
SCF450
SCF450S

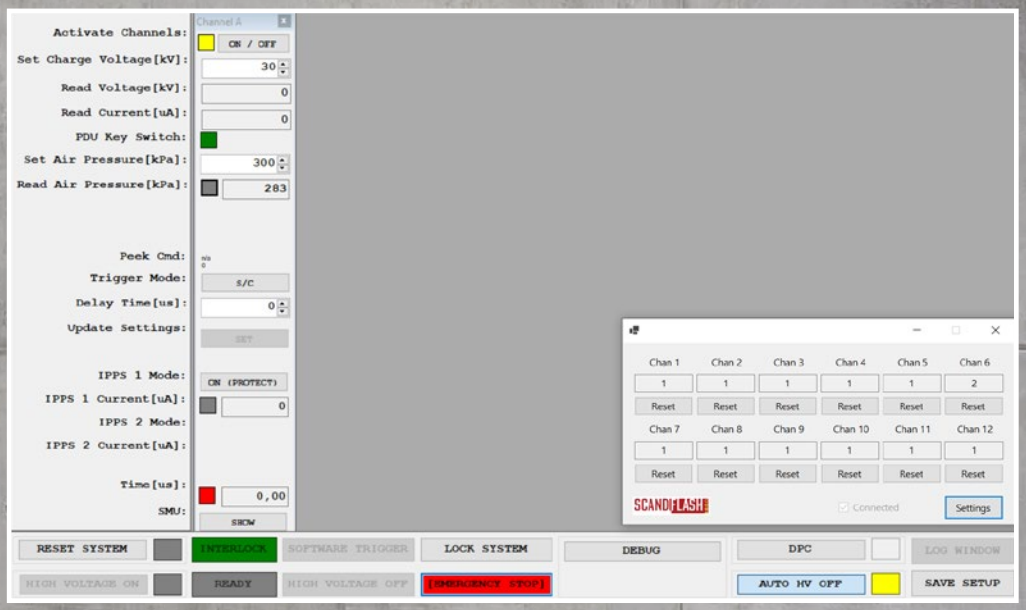
Modularity

Fits all SCF high-voltage cables

SCANDIFLASH™

www.scandiflash.com





scan this for more info

A hardware and software combination
The Scandiflash FXR Counter consists of hardware, which measures pulser discharges and X-rays generated, along with software on the control computer of your setup that tracks the usage of your FXR instruments. This tool is essential for monitoring your X-ray sources and preventing equipment damage. As a best practices tool, the FXR Counter also helps to manage logging of the total amount of x-rays produced over a specific period of time.

Tracking the number of flashes from multiple X-ray tubes that are switched between pulsers and even counting the number of discharges from individual pulsers allows you to better monitor, manage and plan service and radiation safety intervals as well as anode & cathode exchange.

How Does it Work?
A specially designed Current Viewing Resistor (CVR) is fitted around Scandiflash high-voltage cables. When a current pulse passes the CVR, it creates a magnetic field that in turn creates a current in the resistor. By reading the current out of the CVR, you know that a pulse was delivered through the cable at the position of the CVR.

The CVR is located at the X-ray tube side for SCF300/450 and SCF450S and on the pulser side for SCF150 as standard. By simply adding CVRs at both ends of a cable, it is possible to count both the number of pulses delivered from a pulser and the X-rays generated by an X-ray tube.

Each FXR Counter can monitor up to 12 individual signals, and each counter can be named individually. By using the Scandiflash FXR Counter, you can ensure the longevity of your X-ray source and maintain the efficiency of your radiography operations.

Why is it Important?
The 20 ns short X-ray pulse generated in Flash X-ray radiography is extremely powerful and wears down the anode and cathode of the X-ray source. The resulting limits of anodes and cathodes ranges from tens to hundreds of flashes, depending on anode size and pulser model. Overuse of an anode can lead to equipment damage, such as a short in the high-voltage cable. It is crucial to keep track of the number of flashes generated with your system, and the FXR Counter is a simple solution that helps to safeguard your instruments.

Retrofittable to Scandiflash Systems
One of the key advantages of the Scandiflash FXR Counter is its retrofit capability. This means that it can be easily integrated into existing Scandiflash systems. If you're concerned that your cables are not designed to fit CVRs on the tube and/or pulser side, it's just a quick fix away. This feature allows for a seamless upgrade, ensuring that you can continue to use your current equipment while benefiting from the enhanced functionality of the FXR Counter. This makes it a versatile and cost-effective solution for managing your X-ray source history.

X-ray dose restrictions
It's common practice to give dose restrictions in exposures per hour for X-rays. However, Flash X-ray is not a continuous source, so the dose per hour unit is not of much value. A better way to handle dose monitoring is to consider the dose per shot and calculate the number of shots per month or year. The FXR Counter gives the possibility to track the number of flashes and estimate the total exposure of X-rays over a period of time.