Trivitron Healthcare

Fluoroscopy examines moving body structures with a continuous X-ray beam being passed through one or more parts of the body. The monitor connected to the source then displays the body parts in detail. One can say that it serves as an imaging tool enabling physicians gain access to the many body systems.

Fluoroscopy systems can be permanently fixed or mobile. Permanent fluoroscopy systems utilize an examination table with an imaging system above and a mounted tube below. Mobile systems called *C-arm*, however, offer greater flexibility for examination because they are portable and allow movement horizontally, vertically, and even around the swivel axis, hence providing image X-rays from various angles. Its name is derived from the C-shaped arm that connects the X-ray source and X-ray detector to one another. It is used extensively for examinations in fields that require flexibility in positioning, such as:

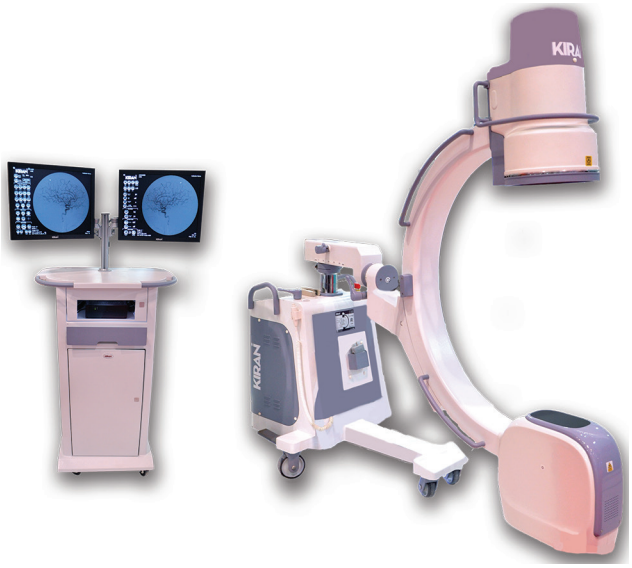
- Orthopedics
- Vascular studies
- Cardiology
- Angiography

From general fluoroscopy to various surgical operations for intra-operative imaging, the *C-arm* has many applications. This imaging scanner intensifier can be seen in various ORs within a clinic.

The general risk associated with fluoroscopy is radiation exposure, especially cumulative radiation exposure, which would mean frequent exposure over a long period of time. Collimation, using a high-quality monoblock, and using an X-ray source of good quality are a few ways that are currently used to evade extended exposure to radiation from this device.

Now, Trivitron Healthcare's radiology division, Kiran Medical Systems have introduced their most recent technological innovation, which is being sported as the *super harmonic controlled frequency* that ranges from 40 kHz to 80 kHz. This brand-new technology has been integrated into their first of its kind C-arm generator.

Kiran's new C-arm generator stands strong in providing efficient results with reduced exposure to radiation. This technology, which has exclusively been developed by the R&D team at Kiran Medical Systems, has been designed to control the frequencies of X-ray automatically, depending on the line and dose requirement.



Elite C-arm

Kiran's inventory already includes *Infinity* C-arm and the *Elite* C-arm, both of which offer mobility in a compact design with high contrast images among a range of functions. Kiran strives to bring forth imaging products that ensure:

- Lesser X-ray radiation exposure
- Protection of physicians and surgeons
- The extended life cycle of the product

Keeping this vision in mind, not only does the new C-arm generator lower radiation thereby protecting surgeons from cumulative exposure, but also increases the lifespan of the equipment thanks to a controlled coordination between the generator and X-ray source.

Kiran Medical Systems — a division of Trivitron Healthcare, has long been a leader in innovating and manufacturing some of the world's finest radiology equipment, accessories, and radiation protection products. With the new *super harmonic controlled frequency* C-arm generator, Kiran progresses another step toward providing healthcare solutions that minimize costs and risks while maximizing efficiency and holistic care. ●