

ALERIO 1600 from Iatome Electric (I) Pvt Ltd.



Portable x-Rays, by definition, are x-ray equipment intended to be moved from one location to another while used or between periods of use while being carried by persons. The weight of the portable x-Ray shall not exceed 12kg. Portable x-Rays find application in outside of the hospital settings such primary healthcare services, medical camps, natural disaster sites, emergency and trauma care units, military field hospitals and other such scenario where power availability and terrain do not permit regular x-ray equipment. X-ray screening is an important tool in tuberculosis (TB) prevention and care. Government programs such as the National Strategic Plan for TB elimination provide guidelines on screening for TB and recommend use of digital x-ray. Portable x-Rays could add value to such initiatives by extending the reach to a larger population.

Typical features of the portable x-Rays are its smaller weight and size. Some models have in-built battery power source. LED light collimator and laser indicators for x-ray field indication are other features. Wireless exposure control is an advantage. A sturdy carry case, site deployable stands, battery powered DR panels and laptop, complete the bundle for a portable digital x-ray system. Portable and ultra-portable x-ray machines from several brands are available in the market. Most of the Indian brands are line frequency units. There are a few Indian brand high frequency portable units that offer the true advantages of portable units. The advances in performance and design of



the portable x-ray systems are considerable and it can be economically, safely, and effectively used for x-ray imaging applications and extend the reach of healthcare to a wider proportion of the population.

ALERIO Smart 1600 is a true portable x-ray unit made in India. This equipment works from an inbuilt rechargeable battery pack. This x-ray unit has a kV range of 40-90kV and can deliver 1600W of peak x-ray power at all kV settings. The mAs range determines the imaging capability of any x-ray. The Smart 1600 can deliver 40mAs at 40kV and up to 20mAs at 80kV. All this is possible using the in-built battery. The 0.8mm focal spot produces x-ray images of crisp and excellent quality.

The battery used for this product is unique. It is lightweight, small in size, low cost and replaceable by the user. A spare battery pack is provided as part of the equipment. The battery packs can be recharged by plugging in the mains adaptor to the x-ray unit. In addition, an external charging dock is provided that can be used to charge the spare battery. More than 100 x-rays are possible using the set of batteries.

A soft carry case is provided as standard accessory. The hard carry case is an optional purchase. The x-ray machine weighs less than 9kg and can be mounted to a stand. Exposure control is by using the provided wired or wireless exposure switch. An LED light beam collimator is built in to indicate x-ray field. The collimator shutters are provided to limit the x-ray to the desired area.

ALERIO Smart 1600 is certified, type approved, and safety tested as per Indian & International standards. It meets the regulatory requirements to purchase and operate the x-ray in India. The equipment is designed, manufactured, and serviced by an ISO13485:2016 certified company. The machine comes with 2 years of standard warranty. Spare parts and warranty claims are easy.

The advances in engineering and design have enabled the successful commercialisation of the ALERIO Smart 1600 portable x-ray system. These are now available at competitive rates and through the vendor's pan India sales network.