



## Mobile Constant Potential X-Ray System

The compact, low-weight XMB160 and XMB225 constant potential X-ray systems are especially designed for mobile use. All components are arranged on a transportation trolley which has two tilting positions and an eye for a crane hook. This enables one person to easily carry the whole device to the place of operation. If necessary, all components can be removed from the trolley.

The mobile X-ray systems are suited for a wide variety of applications ranging from low density composite material to aluminum and steel products with a thickness up to approx. 1.5" (38mm) XMB160 and 2.25" (60mm) XMB225.

The X-ray systems are easy to operate. Set-up modes are menu driven. All indications, operating mode and fault diagnosis of internal or external errors are displayed in clear text in your choice of four languages.

Up to 100 frequently used exposure data (kV, mA, time, focal spot) can be stored and retrieved by program number.

After setting the inspection parameters on the main control unit, the system can be switched On/Off by remote control. An integrated warning lamp indicates X-rays are being emitted.

The 40kHz technology ensures a very high system output stability, a precise energy setting and fast change-over to any selected new value. Any fluctuation or deviation of set values are controlled and corrected within microseconds. In many cases these features reduce inspection times considerably.

All system components are protected against dust and water.



# XMB160, XMB225

## Technical Data:

Valid for XMB160 as well as XMB225 unless otherwise stated

## Operation:

- Constant potential with Isowatt feature
- Fully automatic monitoring of power limits and tubehead specifications

High Voltage:	XMB160	XMB225
Adjustment range		
(four-digit LED display):	7.5-160kV	10-225kV
Adjustment increments:	0.1kV / step	0.1kV / step
Accuracy:	±1% of demand value ±0.1kV	±1% of demand value ±0.1kV
Reproducibility:	±0.01% of max. kV value at a constant temperature	±0.01% of max. kV value at a constant temperature
H.V. Ripple		
with 30' (10m) H.V. cable:	10V/mA, min. 20V	10V/mA, min. 20V
Temperature induced drift:	80ppm/°C based on demand value	80ppm/°C based on demand value
Tube Current:	XMB160	XMB225
Adjustment range		
(four-digit LED display):	0-22.5mA	0-15mA
Adjustment:		
Standard range:	in 0.05mA steps from 0.5mA-22.5mA	in 0.05mA steps from 0.5mA-15mA
High resolution range:	in 0.01mA steps from 0.0mA-22.5mA	in 0.01mA steps from 0.0mA-15mA
Accuracy		
(at constant temperature):	±0.2% of demand value ±0.01mA	±0.2% of demand value ±0.01mA
Reproducibility		
(at constant temperature):	±2µA	±2µA
Temperature drift:	50ppm/°C of demand value	50ppm/°C of demand value

## Exposure Timer (four-digit LED display):

Input range: in 1 sec. steps up to 10 min.  
in 10 sec. steps up to 99 min. and 50 sec  
∞ setting for radioscopic application

## Pre-Warning:

- Adjustable from 1 to 30 seconds
- Menu-driven selection
- Input through touch keypad

## Focal Spot Selection:

Keypad selected: selection indicated by large and small symbols on display panel

## Safety Provisions:

- Two independent, monitored safety circuits (fail-safe, 24V)
- Continuous system function monitoring with fully automatic system shut-down and failure indication
- Automatic filament post-heating H.V. capacitor discharge upon termination
- X-ray On warning lamp monitoring provided (fail-safe)
- Monitor external coolant flow switch
- Monitor temperature of power supply and H.V. generator
- Monitor pressure of H.V. generator

## Programmed Operation:

- 100 technique capacity ( kV, mA, time, focal spot),
- Programmable through numeric keypad
- 3-level program for automatic tube conditioning

## Environment (according to IP54):

Duty cycle: 100% (Pmax) at +86°F (+30°C) max, ambient temperature in non-convective air

Operation temperature: 14°F to 86°F (-10°C to +30°C), relative humidity 90% at +104°F (+40°C), non-condensing

Storage Temperature: -13°F to 158°F (-25°C to +70°C), relative humidity 95% at 104°F (+40°C), non-condensing

## Main Supply:

230V +10% -15%, single phase, 50/60Hz, 16A

## Mechanical Data (System):

(WxHxL): 2.25' x 5.25' x 3.25 (700 x1600 x 1000 mm)

Weight: approx. 353 lbs (160kg) with 30' (10m) H.V. cable

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