



YXLON.XMB160/225 Mobile Constant Potential X-Ray Systems



Compact and 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 very 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 thicknesses up to approx. 38 mm (XMB160) and 60 mm (XMB225).

The X-ray systems are easy to operate. Set-up modes are menu driven. All indicators, operating modes and fault diagnosis of internal or external errors are displayed in clear text with the comfort of being able to choose optional languages.

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

After setting the inspection parameters on the main control unit, the system can be switched ON/OFF via a remote control. An integrated warning lamp indicates X-rays being emitted.

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

All system components are protected against dust and water which meets IP54 requirements.

YXLON. The reason why.

- Mobile use
- High reliability
- Wide variety of applications
- Easy to use

Technical Data

Y.XMB160/225



	XMB160	XMB225
Max. Power	2,250 W	
High voltage:		
Adjustment range (four-digit LED display)	7.5 - 160 kV	10 - 225 kV
Adjustment increments	0.1 kV / step	
Accuracy	± 1 % of demand value ± 0.1 kV	
Reproducibility	± 0.01 % of max. kV value at a constant temperature	
H.V. ripple (with 10 m H.V. cable)	10 V/mA, min. 20 V	
Temperature induced drift	80 ppm/°C based on demand value	
Tube current:		
Adjustment range (four-digit LED display)	0 - 22.5 mA	0 - 15 mA
Adjustment	in 0.05 mA steps from 0.5 mA to max. value in 0.01 mA steps from 0.0 mA to max. value	
Accuracy (at constant temperature)	± 0.2 % of demand value ± 0.01 mA	
Reproducibility (at constant temperature)	± 2 µA	
Temperature drift	50 ppm/°C of demand value	

Operation

- Constant potential with Isowatt feature
- Fully automated monitoring of power limits and tube head specifications

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 radiosopic application

Pre-warning

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

Safety provisions:

- Two independent, monitored safety circuits (fail-safe, 24 V)
- Continuous system functional monitoring with fully automated system shut-down and failure indication
- Automated filament post-heating H.V. capacitor discharge upon termination
- X-ray ON warning lamp monitoring provided (fail-safe)
- Monitoring external coolant flow switch
- Temperature monitoring of power supply and H.V. generator
- Pressure monitoring of H.V. generator

Focal spot selection

- Key-pad selected: selection indicated by large and small symbols on display panel

Programmed operation

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

Environment (according to IP54)

- Duty cycle: 100 % (P_{max}) at +30 °C max. ambient temperature in non-convective air
- Operation temperature: 0 °C to +30 °C, relative humidity 90 % at +30 °C
- Storage Temperature: -25 °C bis +70 °C, relative humidity 95 % at +40 °C

Mains supply (single-phase)

230 V +10 % - 15 %, 50/60 Hz,
Protection: 20 A at 2,250 W

Mechanical Data (System)

- Dimensions (WxHxD): 720 mm x 1580 mm x 1050 mm
- Weight XMB160: 181 kg with 10 m H.V. cable
- XMB225: 187 kg with 10 m H.V. cable