

Y.XMB160 and Y.XMB225 Mobile Constant Potential X-Ray Systems



The compact Y.XMB160 and Y.XMB225 constant potential X-ray systems are especially designed for mobile inspection tasks. Due to the extraordinary high power, the Y.XMB are suited for a wide variety of applications ranging from low density composite material to aluminum and steel.

All components are arranged on a trolley with pneumatic tires enabling easy transportation by one person. The small dimensions of only 60 cm, the solid platform, and the crane hook of the trolley as well as the reliable cooler allow operation under almost all conditions.

The X-ray systems are easy to operate. Set-up modes are menu-driven. All indicators and operating modes are displayed in clear text with the comfortable choice of optional languages. After setting the inspection parameters on the main control unit, the system can be switched on/off via a remote control.

YXLON. The reason why.

- mobile use
- wide variety of applications
- high reliability
- easy to use

	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		
- Standard range	in 0.05 mA steps from 0.5 mA to max. value	
- High resolution range	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
- Manual or PC-controlled by the optional RS232 interface

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

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
- Pre-warning adjustable from 1 to 30 sec.
- The parameters of the X-ray tube are permanently monitored
- Temperature monitoring of power supply and H.V. generator
- Pressure monitoring of H.V. generator

X-ray tube and focal spot selection

- large choice of 100 kV, 160 kV, and 225 kV X-ray tubes from YXLON
- Pushbutton to select between standard and small focal spot
- Indication of the focal spot size on the display

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 +40 °C, relative humidity 90% at +40 °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)

- Width of the axis: 600 mm
- Height x depth: appr. 1,630 mm x 980 mm
- Weight XMB160: 184 kg with 10 m H.V. cable
- XMB225: 190 kg with 10 m H.V. cable



The clear, menu driven control unit is easy to operate.



The powerful cooler is easy to access and ensures a maximum of reliability.