

INNOVATIVE TECHNOLOGIES  
IN X-RAY NON-DESTRUCTIVE  
TESTING

DR



PORTABLE CONSTANT  
POTENTIAL X-RAY UNIT

**COMAR**



Very small ( $\varnothing 120 \times 508$  mm)  
and ultralight – 5.4 kg  
Small but powerful – 300 W  
Focal spot of a unique  
small size –  $0.8 \times 0.8$  mm  
Much longer duty cycle  
Can be used under high  
humidity conditions

## APPLICATIONS

Portable constant potential X-Ray unit COMAR is meant for radiographic testing of different parts and products in various industries.

The unit can be powered by AC mains and by autonomous DC sources.

There are two options for autonomous power supply – a portable gasoline generator and an accumulator battery. The battery enables the unit to be safely used under high humidity conditions because 220 V AC mains connections are not necessary in that case. This option provides a user with a higher level of mobility. The unit is manufactured in three modifications: COMAR 150 (x-ray tube anode voltage is up to 150 kV), COMAR 160 and COMAR 160 CP (x-ray tube anode voltage is up to 160 kV). All modifications include a newly designed high voltage power supply source and specially selected and trained x-ray tubes. The modification with a “CP” mark is meant for using under Polar environmental

conditions and within an extended rate of working temperatures.

It is equipped with a watertight compact power supply and a watertight control unit (PCU). All units also have an option of automatic warming up.



COMAR 150/160 basic kit.  
All the components can be packed into the box.



## ACCESSORIES



Lead Acid accumulator 24 V,  
12 A-h with built-in charging  
device



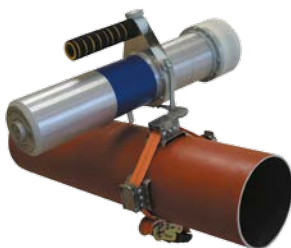
Power and control block (PCB)  
of "polar" modification



Remote control unit (RCU)



Autonomous cooling device  
with fan



Belt tube mounting device

## TECHNICAL PARAMETERS

Power output, max, W . . . . .	300
kV:	
COMAR 150 . . . . .	50–150
COMAR 160/COMAR 160 CP . . . . .	50–160
Tube current, mA . . . . .	0.1–3
Target angle . . . . .	80°×100°
Focal spot size (EN 12543), mm . . . . .	0,8×0,8
Power supply, Hz, V . . . . .	50-60, 100-240
Power input, W . . . . .	450
Operating temperature, °C	
COMAR-150/COMAR-160 . . . . .	-20 to 40
COMAR-160 CP . . . . .	-40 to 40
Storage temperature, °C . . . . .	-50 to 50

### Dimensions, mm:

Monoblock . . . . .	∅120×508
Power and control block	
COMAR 150 and COMAR 160 with case . . . . .	580×430×240
COMAR 160 CP . . . . .	273×185×157
Remote control unit . . . . .	155×100×30
Accumulator battery . . . . .	270×250×120
Autonomous cooling device: . . . . .	∅180×450

### Apparatus main parts weight, kg:

Monoblock . . . . .	5,4
PCB	
COMAR 150 and COMAR 160 with case . . . . .	10,5
COMAR 160 CP . . . . .	3,9
Accumulator battery case . . . . .	10,5
Monoblock stand with handle . . . . .	1,1
Autonomous cooling device . . . . .	1,3
Magnet tripod . . . . .	2,3

