



CP SERIES

SITEX

Constant Potential Portable X-ray generators

Thanks to its cutting-edge **SITEX CP SERIES**, ICM has now really taken the portable CP technology to the next level.

Featuring unprecedented ease, it successfully covers a broad spectrum of NDT applications.

Whether it is high-contrast radiographies of light alloy aviation parts or thick steel pipeline inspections in the harshest and most extreme environments, this is your solution.



KEY FEATURES

- ▶ Unbeatable Power to Weight ratio
- ▶ 0.8 Be window
- ▶ Up to 960 W anode dissipation
- ▶ 160 to 320 kV range
- ▶ 1 kV and 0.1 mA steps
- ▶ 100% duty cycle at 30 °C
- ▶ Forced air cooled
- ▶ Gas insulated
- ▶ V-shaped hand rings
- ▶ Laser pointer
- ▶ Shutter & diaphragms included
- ▶ 7.9 kg control unit
- ▶ 90 to 264 VAC mains
- ▶ 6A at 230V

BEST DESIGN EVER

ICM's **CP SERIES** has been designed to revolutionize the handling and the performances of portable x-ray sets. Despite of having halved the weight of similar portable X-ray generators available on the market (with the same power output), the generators of the **SITEX CP SERIES** contain a shutter, a laser pointer, a beryllium window, an aluminum filter and two integrated diaphragms (customized sizes available on request). Without compromising ICM's robustness and reliability, the small size and light weight of the **SITEX CP SERIES** will radically change the way that you perform your RT inspections, impacting positively in terms of both quality and return on investment (ROI).



AND THERE'S MORE...

The **SITEX CP SERIES** is setting new standards in terms of both handling and operating cost. It comes equipped with a number of intuitive yet exclusive user-friendly functions and characteristics that you can benefit from every day. Furthermore, our exposure time computing software can be fed with your own exposure charts, ensuring improved accuracy, specific applications and any type of materials. The **POWERBOX** control unit detects the positioning of the carousel in order to avoid shooting through the shutter by mistake. Additional outstanding features include V-shaped hand rings, constant power mode, radial or axial socket position, custom-length interconnecting cables (up to 100 m), a low voltage DC fan with variable speed, and much more.

PERFORMANCES

While the **SITEX CP200D** & **CP320D** weigh respectively just 12 & 23 kg, they are still extremely powerful and capable to penetrate 42 mm of steel for the **CP200D** and 70 mm for the **CP320D**, all in 10 minutes. ICM's unexcelled air cooling system combined with the CP output means a 100% duty cycle at 30°C ambient temperature. Meanwhile, its broad input power range (from 90 to 264 VAC) enables the **SITEX CP SERIES** to be operated on virtually any grid in the world and generator sets. Finally, its low power consumption will ensure that your inspections are more environmentally friendly.



SITEX CP SERIES technical specifications

DIRECTIONAL	UNITS	CP160D	CP200D	CP225D	CP300D	CP320D
Output voltage range	kV	10 to 160	10 to 200	10 to 225	20 to 300	20 to 320
Output voltage selection step	kV	1	1	1	1	1
Tube current range	mA	1 to 10	1 to 10	1 to 10	1 to 10	1 to 10
Tube current at full output	mA	5.6	4.5	4	3.2	3
Tube current selection step	mA	0.1	0.1	0.1	0.1	0.1
Max. power at the anode	W	900	900	900	960	960
kV and mA stability	%	± < 0.5	± < 0.5	± < 0.5	± < 0.5	± < 0.5
Working cycle at 30°C ambient temperature (*)	%	100	100	100	100	100
Steel penetration at maximum kV and mA (700mmFFD, 10 min, AA400, D=2)	mm Fe	29	42	47	66	70
Total weight (excluding hand rings)	kg	11.9	12	12.1	23	23
Overall dimensions	mm	Ø140 x 695	Ø140 x 715	Ø140 x 725	Ø180 x 839	Ø180 x 839
Leakage dose at 1m at full output	mSv/h	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0
Dimensions of optical focal spot according to EN12543	mm	3.0 (~1.5 IEC 336)	3.0 (~1.5 IEC 336)	3.0 (~1.5 IEC 336)	3.0 (~1.5 IEC 336)	3.0 (~1.5 IEC 336)
Radiation geometry	-	directionnal	directionnal	directionnal	directionnal	directionnal
Maximum useful angle	°	60 x 40 elliptical	60 x 40 elliptical	60 x 40 elliptical	60 x 40 elliptical	60 x 40 elliptical
Inherent filtration	mm Be	0.8	0.8	0.8	0.8	0.8
Weatherproof level	-	IP65	IP65	IP65	IP65	IP65
Operating temperature range	°C	-30 to +60	-30 to +60	-30 to +60	-30 to +60	-30 to +60
Storage temperature range	°C	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70
Standard length of connecting cable	m	20	20	20	20	20
Maximum interconnecting cables extension	m	100 (5x20m)	100 (5x20m)	100 (5x20m)	100 (5x20m)	100 (5x20m)
Type of connector	-	MIL-DTL 26482 Metallic circular	MIL-DTL 26482 Metallic circular	MIL-DTL 26482 Metallic circular	MIL-DTL 26482 Metallic circular	MIL-DTL 26482 Metallic circular
Constant power mode	-	Yes	Yes	Yes	Yes	Yes
Axial or radial positions switchable socket	-	Yes	Yes	Yes	Yes	Yes
SF6 insulation pressure at 20°C	bar	5.5	5.5	5.5	5.5	5.5
Cooling fan supply voltage	VDC	48	48	48	48	48
Line consumption @ 230VAC	A	6	6	6	6	6
Guard rings	-	2	2	2	2	2
Microcontroller HT measurement circuit (kV and mA)	-	Yes	Yes	Yes	Yes	Yes
Fail-safe warning red light	-	Yes	Yes	Yes	Yes	Yes
Real time clock for full automatic warm-up	-	Yes	Yes	Yes	Yes	Yes
Built-in carousel featuring 2 diaphragms, shutter and laser pointer	-	Pb shutter, laser pointer, 0.8 mm Be window, 3 mm Alu filter, 10x48 cm diaphragm				

* Open air - airstream 5m/s

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Accessories

- ▶ Audible / flashing light warning system
- ▶ Tripod (height can be adjusted between 65 cm and 190 cm)
- ▶ 'STORMCASE' transport (without tripod)
- ▶ 20 m extension interconnecting cable
- ▶ 12 V or 24 V car battery / 230 VAC converter

Certifications

- ▶ CE certified to EMC and LVD
- ▶ NFC74-100 Bureau VERITAS LCIE certified
- ▶ Manufactured under ISO9001/2008 certified



The SITEX CP SERIES works in conjunction with the POWERBOX 7.9 kg control unit (see specific documentation).