

PORTABLE X-RAY SYSTEMS Digital Radiography Solutions for NDT Applications



X-RAY GENERATOR, DETECTOR, AND SOFTWARE IN ONE BUNDLE!

Discover our complete range of portable X-Ray systems for NDT inspections.

Fully developed in-house, these packages combine a detector, an X-Ray generator, and Sherlock NDT, a state-of-the-art and user-friendly NDT inspection software.

Paired with Teledyne ICM's X-Ray generators (**CP Series** or **CP Batteries**), the **GO-SCAN**'s detectors deliver a sharp, clear, and detailed image and can reveal a very large majority of defects such as cracks, corrosion and failing welds.

Sherlock NDT, Teledyne ICM's NDT inspection software is fully compatible with Teledyne ICM's complete range of portable X-Ray generators. It is the perfect tool for industrial radiography, allowing compliancy with most quality standards. The intuitive and user friendly touchscreen software produces high quality images, allows real-time (video) acquisition, and comes with many different enhancement features.

Make your own selection according to your inspection needs.

CONNECTIVITY





X-RAY GENERATORS : CP BATTERY OR CP SERIES





CP120B

Directional

Battery

40 to 120

0.1 to 1.0

1.0

120



CP160B

Directional

Battery

40 to 160

0.1 to 0.5

0.5

80





CP SERIES BUILD-IN CARROUSEL 5 OUTPUT POSITIONS





Lead shutter

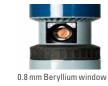
3 mm Aluminium filter





Customizable diaphragm

Laser pointer



Constant power mode	-	Yes	Yes
Working cycle at 30°C (*)	%	/	/
Steel penetration (**)	mm/in	10/0.4	21/0.8
Weight	Kg/lbs	7.0 / 15.4	9.2/20.3
Overall dimensions	mm/in	Ø 124 x 476 / 4.9 x 18.7	Ø 124 x 520 / 4.9 x 20.5
Leakage dose at 1 m at full output	mSv/h	< 2.0	< 2.0
Optical focal spot according to EN 12543	mm/in	0.8 x 0.5 / 0.03 x 0.02	0.8 x 0.7 / 0.03 x 0.03
Maximum useful angle	0	50 x 50	60 x 60
Inherent filtration	mm/in	Equiv. 3.5 / 0.1 (Al)	Equiv. 3.5 / 0.1 (AI)
Waterproof level	-	IP54	IP54
Operating temperature	°C/F°	-25 to +50 / -13 to +140	-25 to +50 / -13 to +140
Storage temperature	°C/F°	-40 to +80 / -40 to +176	-40 to +80 / -40 to +170
Guard rings	-	/	/

Unit

-

kV

mΑ

mΑ

W

(*) Open air - airstream 5m/sec.

(**) 700 mm FFD, 10 min , AA400, D=2 for CPD

CP SERIES	Unit	SITEX CP160D	SITEX CP200D	SITEX CP200DS	SITEX CP225D	SITEX CP300DM	SITEX CP300DS	
Radiation geometry	-	Directional	Directional	Directional	Directional	Directional	Directional	
Power supply	-	Mains	Mains	Mains	Mains	Mains	Mains	
Output voltage range	kV	10 to 160	10 to 200	10 to 200	10 to 225	30 to 300	30 to 300	
Tube current range	mA	1 to 10	1 to 10	0.5 to 10	1 to 10	0.5 to 10	0.5 to 6	
Tube current at full output	mA	5.6	4.5	3.7	4.0	3	3	
Maximum power at the anode	W	900	900	750	900	900	900	
Constant power mode	-	Yes	Yes	Yes	Yes	Yes	Yes	
Working cycle at 30°C (*)	%	100	100	100	100	100	100	
Steel penetration (**)	mm/in	29/1.14	42 / 1.65	40/1.57	47 / 1.9	66/2.6	66/2.6	
Weight	Kg/ <mark>lbs</mark>	14.7/30.86	14.7 / 30.86	15.9/35.05	14.7/30.86	29/63.93	29/63.93	
Overall dimensions	mm/in	Ø 140 x 725 / 5.5 x 28.5	Ø 140 x 725 / 5.5 x 28.5	Ø 140 x 705 / 5.51 x 27.75	Ø 140 x 725 / 5.5 x 28.5	Ø 180 x 837 / 7.1 x 33	Ø 180 x 837 / 7.1 x 33	
Leakage dose at 1 m at full output	mSv/h	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	
Optical focal spot according to EN 12543	mm/in	3/0.12	3 / 0.12	1/0.04	3/0.12	3/0.12	1/0.04	
Maximum useful angle	0	60 x 40 elliptical	60 x 40 elliptical	60 x 40 elliptical	60 x 40 elliptical	60 x 40 elliptical	60 x 30 elliptical	
Inherent filtration	mm/in	0.8 / 0.03 (Be window)	0.8 / 0.03 (Be window)	0.8 / 0.03 (Be window)	0.8/0.03 (Be window)	0.8/0.03 (Be window)	0.8 / 0.03 (Be window)	
Waterproof level	-	IP65	IP65	IP65	IP65	IP65	IP65	
Operating temperature	°C/F°	-30 to +60 / -22 to +140	-30 to +60 / -22 to +140	-30 to +60 / -22 to +140	-30 to +60 / -22 to +140	-30 to +60 / -22 to +140	-30 to +60 / -22 to +140	
Storage temperature	°C/F°	-40 to +70 / -40 to +158	-40 to +70 / -40 to +158	-40 to +70/ -40 to +158	-40 to +70 / -40 to +158	-40 to +70 / -40 to +158	-40 to +70 / -40 to +158	
Guard rings	-	2	2	2	2	2	2	

(*) Open air - airstream 5m/sec.

(**) 700 mm FFD, 10 min , AA400, D=2 for CPD

1

CP BATTERY

Radiation geometry

Output voltage range

Tube current at full output

Maximum power at the anode

Tube current range

Power supply

X-RAY DETECTORS : GO-SCAN SERIES











GO-SCAN Unit			GO-SCAN 1510		GO-SCAN 2329			GO-SCAN	GO-SCAN BENDABLE	
	GO-SCAN 1506	HR	XR	GO-SCAN 3025		GO-SCAN 4335	1025B	1043B		
GENERAL							1			
Technology	-	CMOS Active Pixel	CMOS Ad	tive Pixel	aSi	aSi	aSi	а	Si	
Pixel pitch	μm	49.5	99	49.5	75	120	154	ę	9	
Sensitivity settings	#	1	2	1	-	1	1		-	
Active area	mm/in	57 x 146 / 2.2 x 5.7	102 x 153 / 4 x 6	114 x 145 / 4.5 x 5.7	230 x 288 / 9 x 11.3	300 x 250 / 11.8 x 9.8	434 x 355 / 16.9 x 13.8	97 x 249 / 3.8 x 9.8	97 x 427 / 3.8 x 16.8	
Active resolution	pxl	1152 x 2940	1032 x 1548	2304 x 2940	3072 x 3840	2560x 2048	2816 x 2304	988 x 2524	988 x 4316	
BANDWITH										
Data interface	-	GigE & Wi-Fi**	GigE 8	& Wi-Fi	GigE & Wi-Fi	GigE & Wi-Fi	GigE & Wi-Fi	GigE &	k Wi-Fi	
ADC conversion	bits	14	1	4	16	16	16	16		
Frame rate- 1x1 (GigE)	fps	15	up to 30	up to 9	-	0.3	0.3		-	
POWER CONSUMPTION										
Power supply	-	Battery**/Mains*	Battery	/ Mains*	Battery/Mains*	Battery/Mains*	Battery/Mains*	Battery	/ Mains*	
Power consumption	W	40	15 <24 17 20		20	< 24				
Battery performance	-	-	Approx. 7 hours		9h (standby) / 7h (acquisition)	Approx. 7 hours	Approx. 7 hours	6h (standby) / 5.5h (acquisition)		
INTEGRATION										
Dimension (without sleeve)	mm/in	206 x 78 x 31 / 8.1 x 3 x 1.2		54 x 25 / .0 x 1.0	355 x 322 x 17 / 13.9 x 12.7 x 0.7	339 x 287 x 18.8/ 13.3x 11.3 x 7.4	464 x 388 x 18.8/ 18.3 x 15.3 x 7.4	182 x 443 x 20 / 7.2 x 17.4 x 0.8	182 x 620.5 x 20/ 7.2 x 24.4 x 0.8	
Overall dimension	mm/in	218 x 90 x 35 / 8.6 x 3.5 x 1.4	259 x 227.7 x 107.5/ 10.2 x 8.9 x 4.2		408.4 x 404.9 x 34/ 16 x 15.9 x 1.3	412.5 x 310 x 34.2 / 16.2 x 12.2 x 1.3	538.5 x 410 x 34.5/ 21.2 x 16.1 x 1.3	230 x 473 x 21 / 9 x 18.6 x 0.8	230 x 650,5 x 21 9 x 25.6 x 0.8	
Weight	Kg/lbs	1.04/2.29	3.5	/ 7.7	5.3/11.7	3.5/6.6	5.9/13	1.5/3.3	1.7 / 3.7	
ENVIRONMENTAL										
Operating temperature	°C/F°	+10 to +40°C / +50 to +104°F	-20 to 50°C / -4 to +122°F		-20 to +50°C / -4 to +122°F	-20 to 50°C / -4 to +122°F	-20 to 50°C / -4 to 122°F	-20 to 50°C / -4 to +122°F		
Storage temperature	°C/F°	-10 to +55°C / +14 to +131°F	-20 to 60°C / -4 to +140°F		-20 to +50°C / -4 to +122°F	-20 to 60°C / -4 to +140°F	-20 to 60°C / -4 to 140°F	-20 to 50°C / -4 to +122°F		
Humidity	% R.H.	10 to 80	20 t	co 80	10 to 90	30 to 75	30 to 75	10 t	o 90	
X-ray energy range	kV	Up to 225	Upt	o 225	Up to 450	Up to 300	Up to 300	Up to 450		

(*) with Power/Com Cable accessory

(**) with Power unit





2

RUGGEDIZED TABLET WITH SHERLOCK NDT SOFTWARE











TOUCHSCREEN SOFTWARE



PLUG AND PLAY

WIRELESS OR CABLE

IMAGE EDITING

Interconnected by cable or wireless

TELEDYNE FILTER

SOFTWARE FEATURES

All-in-one touchscreen software
Available in 20 languages
Add unlimited users
Library to store all inspections efficiently

Fast image acquisition Preset exposure configurations

MULTIPLE IMAGE EDITING FEATURES

Real-time adjustable dynamic filter Adjustable Teledyne filter Automatic & manual histogram equalization DICONDE Compliant Emboss Black & white Pseudo-colours Grey level input value HDR Smart measurement tool SNR / SNRn CNR / CNRn SRb / iSRb / automatic IQI recognition Wall thickness measurement Annotation / Highlight	Image editing
Automatic & manual histogram equalization DICONDE Compliant Emboss Black & white Pseudo-colours Grey level input value HDR Smart measurement tool SNR / SNRn CNR / CNRn SRb / isRb / automatic IQI recognition Wall thickness measurement	Real-time adjustable dynamic filter
DICONDE Compliant Emboss Black & white Pseudo-colours Grey level input value HDR Smart measurement tool SNR / SNRn CNR / CNRn SRb / iSRb / automatic IQI recognition Wall thickness measurement	Adjustable Teledyne filter
Emboss Black & white Pseudo-colours Grey level input value HDR Smart measurement tool SNR / SNRn CNR / CNRn SRb / automatic IQI recognition Wall thickness measurement	Automatic & manual histogram equalization
Black & white Pseudo-colours Grey level input value HDR Smart measurement tool SNR / SNRn CNR / CNRn SRb / automatic IQI recognition Wall thickness measurement	DICONDE Compliant
Pseudo-colours Grey level input value HDR Smart measurement tool SNR / SNRn CNR / CNRn SRb / iSRb / automatic IQI recognition Wall thickness measurement	Emboss
Grey level input value HDR Smart measurement tool SNR / SNRn CNR / CNRn SRb / iSRb / automatic IQI recognition Wall thickness measurement	Black & white
HDR Smart measurement tool SNR / SNRn CNR / CNRn SRb / iSRb / automatic IQI recognition Wall thickness measurement	Pseudo-colours
Smart measurement tool SNR / SNRn CNR / CNRn SRb / iSRb / automatic IQI recognition Wall thickness measurement	Grey level input value
SNR / SNRn CNR / CNRn SRb / iSRb / automatic IQI recognition Wall thickness measurement	HDR
CNR / CNRn SRb / iSRb / automatic IQI recognition Wall thickness measurement	Smartmeasurementtool
SRb / iSRb / automatic IQI recognition Wall thickness measurement	SNR / SNRn
Wall thickness measurement	CNR / CNRn
	SRb / iSRb / automatic IQI recognition
Annotation / Highlight	Wall thickness measurement
	Annotation / Highlight



Stitching of multiple images



iSRb calculation and automatic IQI recognition

Mirroring / Rotation
Pixel map generation and edition
Real-time Image acquisition
Exposure time calculator
Stitching tool
Monitoring and modifying parameters during inspection
During the inspection, possibility to adapt parameters and apply filters
Superpower Zoom (up to 5000%)
Drag&drop external images from Windows into the image editor
Automatic file export
ROI filtering
Gamma sources support
"No detector" mode
Advanced reporting and data export tools (custom tags, tags edition, new data export features)
Extended detector range support



Wall thickness measurement



With Teledyne Filter

Without Teledyne Filter

3

PORTABLE X-RAY SYSTEMS Digital Radiography Solutions for NDT Applications



SAFETY WARNINGS. The Goods can cause death, personal injury or property damage if they are used, operated, maintained, stored or disposed of improperty. In particular, the Goods may emit x-ray radiation, so adequate safety precautions must be taken to minimize exposure. At a minimum, Buyer should adhere to the ALARA (as low as reasonably achievable) principle and should comply with all applicable regulations relating to protection against x-ray emissions.

TELEDYNE ICM

Zoning Les Plenesses / Rue du Progrès 3 / B-4821 Andrimont (Dison) - Belgium +32 (0)87 44 01 50 / icm.sales@teledyne.com

