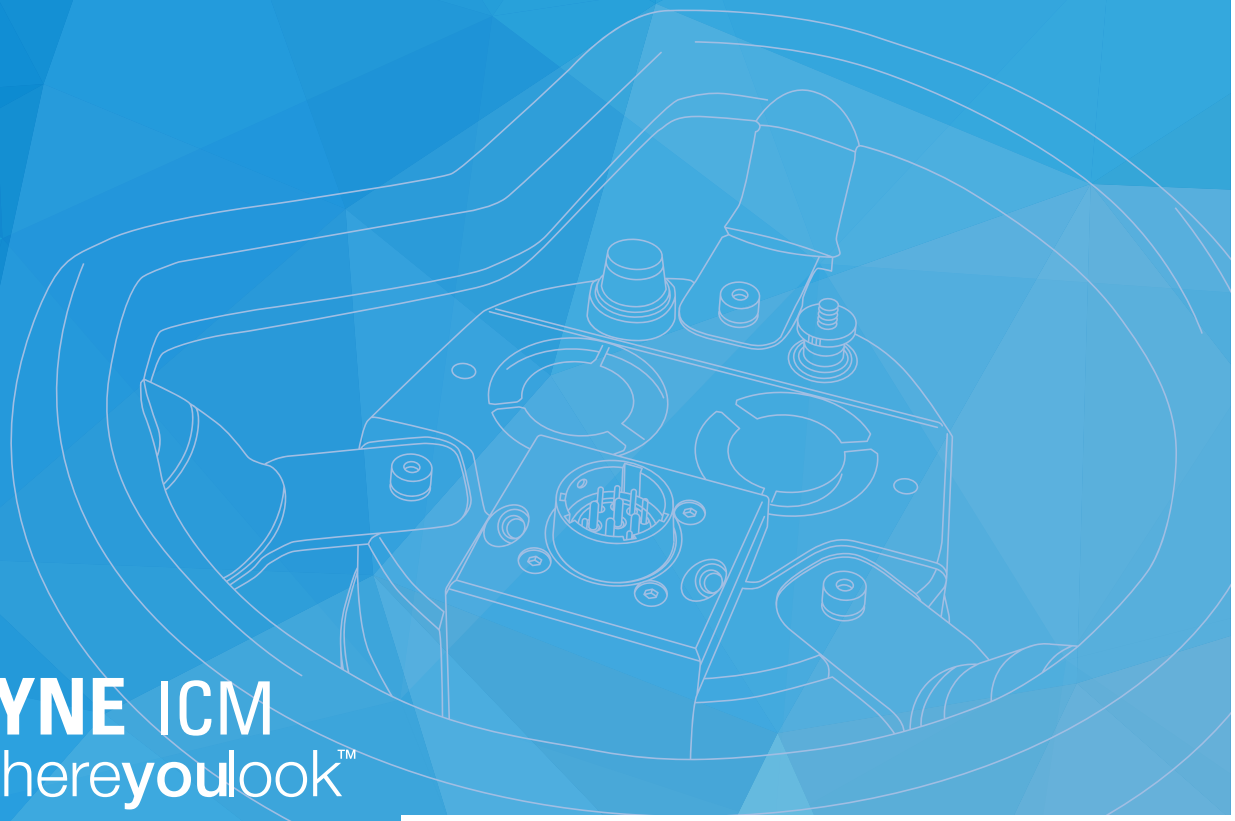
GET MORE OUT OF X-RAYS

A thousand applications, **one solution**



TELEDYNE ICM

Everywhere**you**look™

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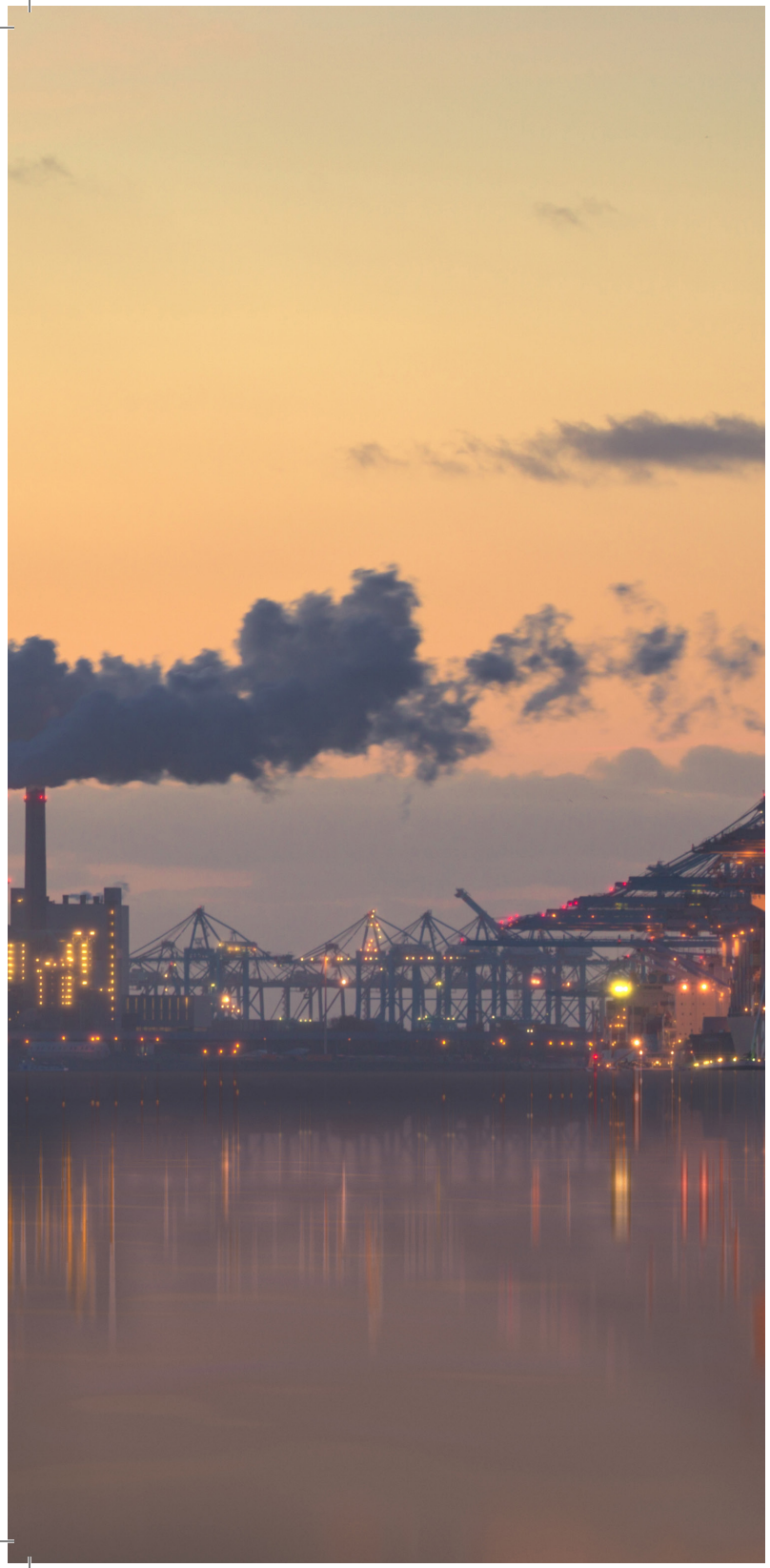


CPSERIES

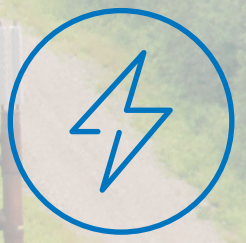
THE LIGHTEST PARTNER

CPSERIES

12 > 23 KG
26.5 > 50.7 LBS

100% DUTY CYCLE

MULTIPLE-OUTPUTS
CARROUSEL



10 TO 300 kV

	Unit	SITEX CP160D	SITEX CP200D	SITEX CP225D	SITEX CP275D	SITEX CP300D
BEAM	-	Directional	Directional	Directional	Directional	Directional
POWER SUPPLY	-	Mains	Mains	Mains	Mains	Mains
Output voltage range	kV	10 to 160	10 to 200	10 to 225	20 to 275	20 to 300
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	4.0	3.3	3.2
Maximum power at the anode	W	900	900	900	900	900
Constant power mode	-	Yes	Yes	Yes	Yes	Yes
Working cycle at 30°C (*)	%	100	100	100	100	100
Steel penetration	mm/in	29 / 0.8 *	42 / 1.7 *	47 / 1.9 *	60	66 / 2.6 *
Weight (exluding hand rings)	Kg/lbs	11.9 / 26.2	12 / 26.5	12.1 / 26.7	23 / 50.7	23 / 50.7
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 725 / 5.5 x 28.5	180x839 / 7.1 x 33	Ø 180 x 839 / 7.1 x 33
Leakage dose at 1 m at full output	mSv/h	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0
Optical focal spot according to EN 12543	mm/in	3.0 / 0.12	3.0 / 0.12	3.0 / 0.12	3.0 / 0.12	3.0 / 0.12
Maximum useful angle	°	60 x 40 elliptical	60 x 40 elliptical	60 x 40 elliptical	60x40 elliptical	60 x 40 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)
Waterproof level	-	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
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
Guard rings	-	2	2	2	2	2

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

SITEX & XS

AFFORDABLE RUGGEDNESS

DIRECTIONAL, PANORAMIC & CRAWLER

50 TO 360 KV

RUGGEDIZED

AUTO-CORRECTION X-RAY BEAM

Quality, **performance**, **ruggedness**! All compacted into affordable portable X-Ray generators. The SITEX range definitely are the go-to-solution for many NDT users around the globe!

	Unit	SITEX D1802	SITEX D2506	SITEX D3006	SITEX D3206	SITEX D3605
BEAM	-	Directional	Directional	Directional	Directional	Directional
POWER SUPPLY	-	Mains	Mains	Mains	Mains	Mains
Output voltage range	kV	60 to 180	90 to 250	90 to 300	90 to 320	120 to 360
Tube current range	mA	1 to 3	1 to 6	1 to 6	1 to 6	1 to 5
Tube current at full output	mA	2.0	6.0	6.0	6.0	5.0
Maximum power at the anode	W	N.A.	N.A.	N.A.	N.A.	N.A.
Constant power mode	-	No	No	No	No	No
Working cycle at 30°C (*)	%	50	100	100	100	60
Steel penetration	mm/in	24 / 0.9 ***	54 / 2.1 ***	69 / 2.7 ***	73 / 2.9 ***	78 / 3.1 ***
Weight (exluding hand rings)	Kg/lbs	9.5 / 20.9	28 / 61.7	31 / 68.3	31 / 68.3	46 / 101.4
Overall dimensions	mm/in	Ø 250 x 573 / 9.8 x 22.6	Ø346 x 771 / 13.6 x 30.4	Ø 346 x 831 / 13.6 x 32.7	Ø 346 x 831 / 13.6 x 32.7	Ø 400 x 930 / 15.7 x 36.6
Leakage dose at 1 m at full output	mSv/h	< 2.0	< 10	< 10	< 10	< 10
Optical focal spot according to EN 12543	mm/in	0.8 x 0.8 / 0.03 x 0.03	2.5 x 2.5 / 0.1 x 0.1	2.5 x 2.5 / 0.1 x 0.1	2.5 x 2.5 / 0.1 x 0.1	2.6 x 2.6 / 0.1 x 0.1
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/in	Equiv. 3.5 / 0.1 (Al)	2.5 (Al) + 0.4 (Ni) / 0.1 + 0.02	2.5 (Al) + 0.4 (Ni) / 0.1 + 0.02	2.5 (Al) + 0.4 (Ni) / 0.1 + 0.02	2.5 (Al) + 0.4 (Ni) / 0.1 + 0.02
Waterproof level	-	IP65	IP65	IP65	IP65	IP65
Operating temperature	°C/F°	-25 to +70 / -13 to +158	-25 to +70 / -13 to +158	-25 to +70 / -13 to +158	-25 to +70 / -13 to +158	-25 to +70 / -13 to +158
Storage temperature	°C/F°	-40 to +80 / -40 to +176	-40 to +80 / -40 to +176	-40 to +80 / -40 to +176	-40 to +80 / -40 to +176	-40 to +80 / -40 to +176
Guard rings	-	2	2	2	2	2

(***) 700 mm FFD, 20 min, AA400, D=1.5 for SITEX and SITEXS

	Unit	SITEXS D2504
BEAM	-	Directional
POWER SUPPLY	-	Mains
Output voltage range	kV	70 to 250
Tube current range	mA	1 to 4
Tube current at full output	mA	4.0
Maximum power at the anode	W	N.A.
Constant power mode	-	No
Working cycle at 30°C (*)	%	100
Steel penetration	mm/in	50 / 2 ***
Weight (exluding hand rings)	Kg/lbs	19 / 41.9
Overall dimensions	mm/in	Ø 305 x 718 / 12 x 28.3
Leakage dose at 1 m at full output	mSv/h	< 10
Optical focal spot according to EN 12543	mm/in	2.5 x 2.5 / 0.1 x 0.1
Maximum useful angle	°	360 x (2x20)
Inherent filtration	mm/in	0.4 / 0.02 (Ni)
Waterproof level	-	IP65
Operating temperature	°C/F°	-25 to +70 / -13 to +158
Storage temperature	°C/F°	-40 to +80 / -40 to +176
Guard rings	-	2

(***) 700 mm FFD, 20 min, AA400, D=1.5 for SITEX and SITEXS

CRAWLER UNITS

PERFECTION ON WHEELS

PIPELINE INSPECTION

Some pipes can reach up to 12 m/39.4'', making welding inspections quite challenging even for expert radiographers. For such daunting tasks, we have adapted our star panoramic generators to pipeline crawlers which are small carriages running down pipelines to the welds needing inspections. Such technique enables quicker and easier inspection of extended pipeline sections.

Specially designed to be easily mounted on crawler systems, the compact and lightweight CPSERIES crawler units enable NDT experts to easily realize clear and sharp 360° radiographies of most pipelines in record time. Radiographers are now able to work quickly while reducing power consumption to a minimum. Our SITEX range has also received the crawler treatment, which enables you to inspect pipelines up to 60 mm/2.7" of steel at unprecedented low price points.

	Unit	SITEX C1802S	SITEX C3005	SITEXS C3205
BEAM	-	Panoramic	Panoramic	Panoramic
POWER SUPPLY	-	Mains	Mains	Mains
Output voltage range	kV	50 to 180	90 to 300	90 to 320
Tube current range	mA	1 to 3	1 to 5	1 to 5
Tube current at full output	mA	2.0	5.0	5.0
Maximum power at the anode	W	N.A.	N.A.	N.A.
Constant power mode	-	No	No	No
Working cycle at 30°C (*)	%	50	100	100
Steel penetration	mm/in	16.5 / 0.7 ***	60 / 2.4 ***	65 / 2.6 ***
Weight (exluding hand rings)	Kg/lbs	9.5 / 20.9	32 / 70.5	32 / 70.5
Overall dimensions	mm/in	Ø 250 x 653 / 9.8 x 25.7	Ø 346 x 831 / 13.6 x 32.7	Ø 346 x 831 / 13.6 x 32.7
Leakage dose at 1 m at full output	mSv/h	< 2.0	< 10	< 10
Optical focal spot according to EN 12543	mm/in	Ø 4 x 0.5 / 0.2 x 0.02	Ø 5 x 0.8 / 0.2 x 0.03	Ø 5 x 0.8 / 0.2 x 0.03
Maximum useful angle	°	360 x (2x20)	360 x (2x20)	360 x (2x20)
Inherent filtration	mm/in	Equiv. 3.5 / 0.1 (Al)	2.5 (Al) + 0.4 (Ni) / 0.1 + 0.02	2.5 (Al) + 0.4 (Ni) / 0.1 + 0.02
Waterproof level	-	IP65	IP65	IP65
Operating temperature	°C/F°	-25 to +70 / -13 to +158	-25 to +70 / -13 to +158	-25 to +70 / -13 to +158
Storage temperature	°C/F°	-40 to +80 / -40 to +176	-40 to +80 / -40 to +176	-40 to +80 / -40 to +176
Guard rings	-	2	2	2

(***) 700 mm FFD, 20 min, AA400, D=1.5 for SITEX and SITEXS

CRAWLER UNITS

	Unit	SITEX CP160CR	SITEX C1802	SITEX C3003
BEAM	-	Panoramic	Panoramic	Panoramic
POWER SUPPLY	-	Battery	Battery	Battery
Output voltage range	kV	40 to 160	50 to 180	90 to 300
Tube current range	mA	0.5 to 2	1 to 3	1 to 5
Tube current at full output	mA	2.0	2.0	3.0
Maximum power at the anode	W	320	N.A.	N.A.
Constant power mode	-	Yes	No	No
Working cycle at 30°C (*)	%	100	50	100
Steel penetration	mm/in	28 / 1.10 ***	11 / 0.4 ***	54 / 2.1 ***
Weight (exluding hand rings)	Kg/lbs	9.9 / 21.8	9.5 / 20.9	32 / 70.5
Overall dimensions	mm/in	Ø 120 x 688 / 4.7 x 27.1	Ø 250 x 653 / 9.8 x 25.7	Ø 346 x 831 / 13.6 x 32.7
Leakage dose at 1 m at full output	mSv/h	< 2.0	< 2.0	< 10
Optical focal spot according to EN 12543	mm/in	Ø 4 x 0.5 / 0.2 x 0.02	Ø 4 x 0.5 / 0.2 x 0.02	Ø 5 x 0.8 / 0.2 x 0.03
Maximum useful angle	°	360 x (2x20)	360 x (2x20)	360 x (2x20)
Inherent filtration	mm/in	Equiv. 3.5 / 0.1 (Al)	Equiv. 3.5 / 0.1 (Al)	2.5(Al)+0.4(Ni)/0.1+0.02
Waterproof level	-	IP66	IP65	IP65
Operating temperature	°C/F°	-30 to +60 / -22 to +140	-25 to +70 / -13 to +158	-25 to +70 / -13 to +158
Storage temperature	°C/F°	-40 to +70 / -40 to +158	-40 to +80 / -40 to +176	-40 to +80 / -40 to +176
Guard rings	-	/	/	/

(***) 700 mm FFD, 20 min, AA400, D=1.5 for SITEX and SITEXS

CPBATTERY

COMPACTNESS AT ITS BEST

CPBATTERY

7 - 9.2 KG
15.4 - 20.3 LBS

40 TO 160 kV

MICRO FOCAL SPOT
0.8X0.5 MM

BATTERY OPERATED

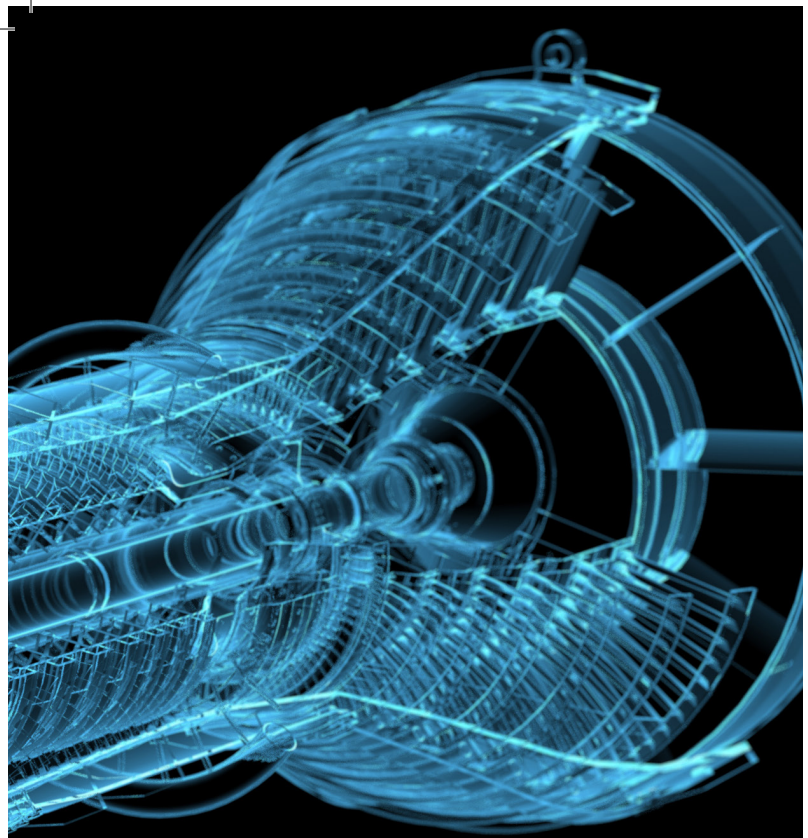
PETROCHEMICAL

With all its small and crooked pipelines going up several meters, petrochemical installations are complex places to inspect. A compact and light x-ray generator is paramount for such tasks. Based on this observation, our team of engineers concentrated the power of the constant potential technology into battery operated x-ray sources, the CP120B and CP160B. With its small focal spot, lightweight and small size, the CP Battery range remains the tool of choice for such inspections.

CP BATTERIES

	Unit	CP120B	CP160B
BEAM	-	Directional	Directional
POWER SUPPLY	-	Battery	Battery
Output voltage range	kV	40 to 120	40 to 160
Tube current range	mA	0.1 to 1.0	0.1 to 0.5
Tube current at full output	mA	1.0	0.5
Maximum power at the anode	W	120	80
Constant power mode	-	Yes	Yes
Working cycle at 30°C (*)	%	/	/
Steel penetration	mm/in	10 / 0.4 **	21 / 0.8 **
Weight (exluding hand rings)	Kg/lbs	7.0 / 15.4	9.2 / 20.3
Overall dimensions	mm/in	Ø 124 x 440 / 4.9 x 17.3	Ø 124 x 490 / 4.9 x 19.3
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	°	50 x 50	60 x 60
Inherent filtration	mm/in	Equiv. 3.5 / 0.1 (Al)	Equiv. 3.5 / 0.1 (Al)
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 +176
Guard rings	-	/	/

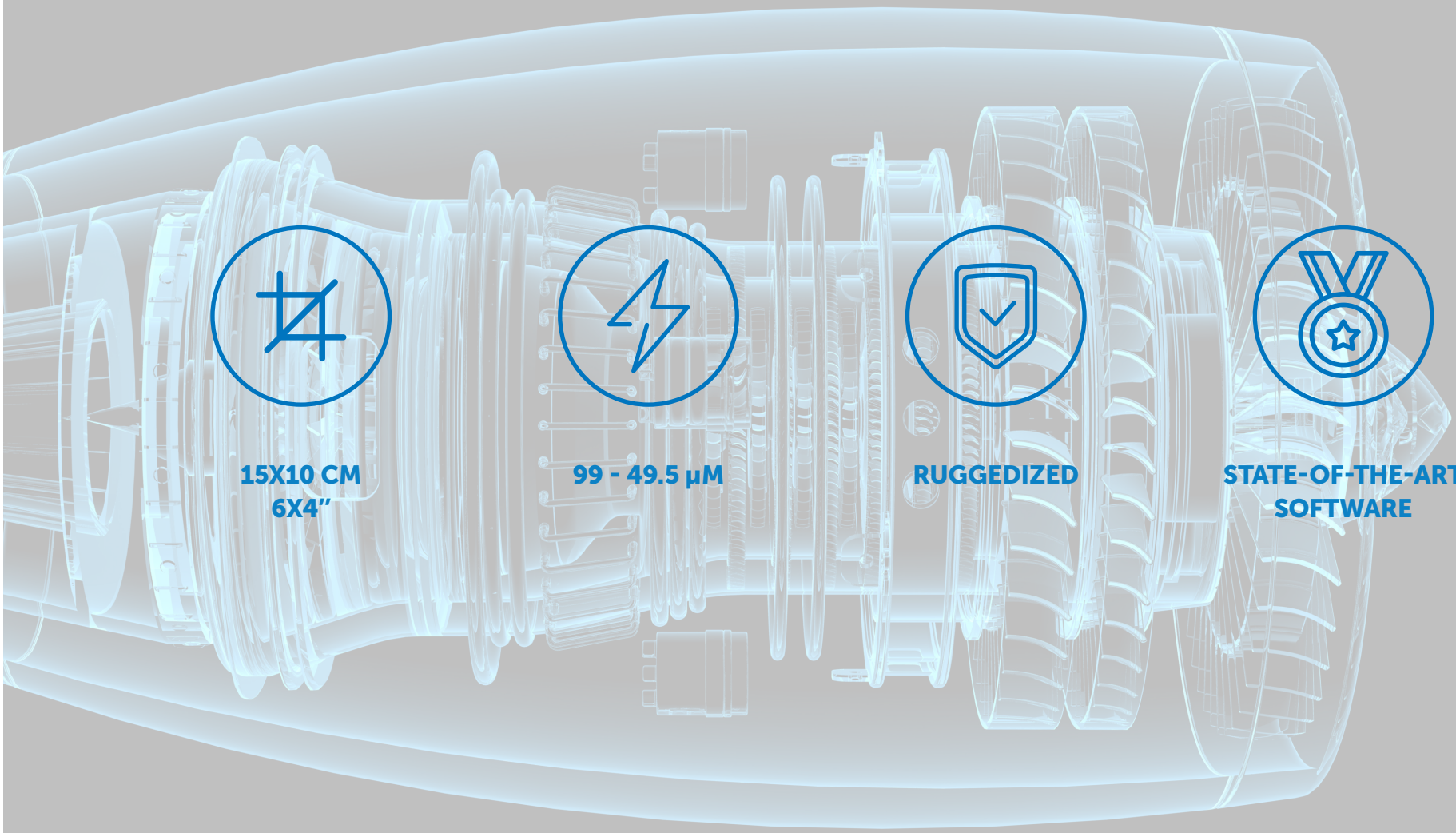
(**) 400 mm FFD, 1min, AA400, D=2 for CPB



X-RAY DETECTORS

THE FUTURE IS NOW

X-RAY DETECTOR



15X10 CM
6X4”

99 - 49.5 µM

RUGGEDIZED

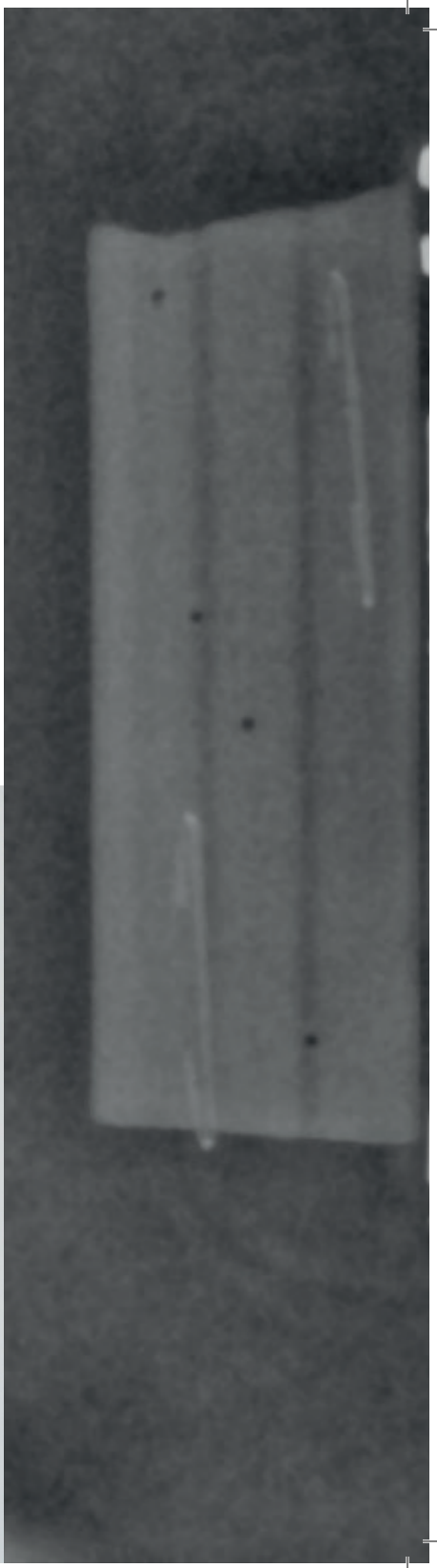
STATE-OF-THE-ART SOFTWARE

DIGITAL RADIOGRAPHY (DR)

The tide is turning within the radiographic world. Digital Radiography (DR) is slowly taking over the X-Ray realm and pushing silver films out of the door. While saving tremendous amount of time and money not developing films, DR also enables you to edit, record and send your inspections to whomever, whenever and wherever you want.

X-RAY DETECTOR

"***Time is money"***, this old adage is still very true today. Service inspection companies and quality inspection teams are always looking to conduct inspections in more efficient ways and at reduced costs. While developing films far away from inspection sites is always time consuming, costly and uncertain, DR panels enable you to analyze and edit images in real time. With its 10x15 cm/4x6'' CMOS detector, 49.5 & 99 µm resolution, and ruggedized design, Teledyne ICM's Go-Scan one-stop digital solution is the ultimate example of DR technology. Backed by custom tablet-supported software, Go-Scan meets the needs of almost any NDT technician.




Go-Scan
by
TELEDYNE ICM

DETECTORS

	Unit	GO-SCAN 1510 HR	GO-SCAN 1510 XR	GO-SCAN 3025	GO-SCAN 4335
GENERAL					
Technology	-	CMOS Active Pixel	CMOS Active Pixel	a-Si	a-Si
Pixel pitch	µm	99	49.5	120	154
Pixel capacity mode	#	2	1	1	1
Active area	mm/in	102 x 153 / 4 x 6	114 x 145 / 4.5 x 5.7	30 x 25 / 11.8 x 9.8	43 x 35 / 16.9 x 13.8
Active resolution	pxl	1032 x 1548	2304 x 2940	2560 x 2048	2816 x 2304
BANDWITH					
Data interface	-	GigE & Wi-Fi	GigE & Wi-Fi	GigE or Wi-Fi	GigE or Wi-Fi
ADC conversion	bits	14	14	16	16
Frame rate– 1x1 (GigE)	fps	up to 30	up to 9	1	1
POWER CONSUMPTION					
Power supply	-	Battery	Battery	Battery	Battery
Power consumption	W	15	15	< 8 / 17	< 8 / 17
Battery performance	-	Approx. 7 hours	Approx. 7 hours	Approx. 8 hours	Approx. 8 hours
INTEGRATION					
Dimension detector head	mm/in	238 x 154 x 25 / 9.4 x 6.0 x 1.0	238 x 154 x 25 / 9.4 x 6.0 x 1.0	33.9 x 28.7 x 18.8 / 13.34 x 11.29 x 7.4	46.4 x 38.8 x 18.8 / 18.26 x 15.27 x 7.4
Overall dimension (control box included)	mm/in	238 x 154 x 80 / 9.4 x 6.0 x 3.1	238 x 154 x 80 / 9.4 x 6.0 x 3.1	-	-
Detector head weight	[Kg]/[lb]	1.6 / 3.5	1.6 / 3.5	3.5 / 6.6	5.9 / 13
Overall weight (control box included)	Kg/lbs	3.5 / 7.7	3.5 / 7.7	-	-
ENVIRONMENTAL					
Operating temperature	°C/F°	-20, 50°C / -4, +122°F	-20, 50°C / -4, +122°F	-20, 50°C / -4, +122°F	-20, 50°C / -4, +122°F
Storage temperature	°C/F°	-20, 60°C / -4, +140°F	-20, 60°C / -4, +140°F	-20, 60°C / -4, +140°F	-20, 60°C / -4, +140°F
Humidity	% R.H.	20 to 80	20 to 80	30 to 75	30 to 75
X-ray energy range	kV	10..225	10..225	10..300	10..300

	Unit	POWERBOX
kV, mA and time setting steps	kV, mA, sec	1.0, 0.1, 1.0
Exposure time range	min, sec	1 sec to 99 min 59 sec
Constant power mode	-	Yes
Adjustable pre-warming time	sec	3 to 99
Pilot light indicator (Power ON, X-ray ON, Securities)	-	3
Independant START and STOP buttons	-	Yes
Two position safety key rotary switch	-	X-ray ON / STANDBY
Two position main rotary switch	-	Mains ON / OFF
Dual high brightness graphic Vacuum Fluorescent Displays (VFD)	-	2 (off) 64 pixels x 128 pixels each
Preheating is function of selected kVs (kV max by default)	-	Automatic
Exposure time calculator (material, FFD, film, density, kV, mA, time)	-	Optional
User-defined data enabling exposure time calculation	-	Optional
Programmable safety interlocks	-	3
Clear indication of the precise carrousel system position	-	Lead cap, laser pointer, Be window, Al filter, custom diaphragm
Type of power supply	-	Mains, Power generator, Battery (option)
Supply voltage range – SELECTOR FREE – Auto resettable fuses	VAC	From 90 to 264
Supply frequency range – SELECTOR FREE	Hz	From 45 to 66
Input power factor when at full output	%	99
Input current at full power, 230 VAC	A	6.0
Storage ambient temperature range	°C/F°	-40 to +70 / -40 to 158
Working ambient temperature range	°C/F°	-30 to +55 / -22 to 131
Protection Class	-	IP65
Weight	Kg/lbs	7.9 / 17.4
Dimensions without handle	mm/in	351 (W) x 151 (H) x 344 (D) 13.8 (W) x 151 (H) x 13.5 (D)

	Unit	SCU 2.0
SUPPLY CHARACTERISTICS		
Supply voltage range	VAC	90 to 264
Supply frequency range	Hz	45 to 66
Maximum input power	kVA	2
Cos(phi) / power factor at full power 230Vac	-	0.98 / 0.98
Type of power supply	-	Mains, generator set, inverter
MEASURES AND REGULATION		
kV accuracy	%	± 0.5
mA accuracy	%	± 0.5
kV selection step	kV	1
mA selection step	mA	0.1
Time selection step	s	1
Timer range	min:sec	00:15 to 99:59
WEIGHT, DIMENSIONS AND ENVIRONMENT		
Operating weight	Kg/lbs	14.6 / 32.2
Overal size	mm^3/in^3	355/14 (W) x 157/6 (H) x 525/20.7 (D)
Operating temperature range	°C/F°	-25 to +55 / -13 to 131
Storage temperature range	°C/F°	-40 to +80 / -40 to 176
Ingress protection	-	IP65
CONTROLS AND DISPLAY		
System	-	Industrial PC boards
Control of mains voltage and frequency	-	Yes
Control of ambient temperature	-	Yes
Logging of shots history	-	Yes
Pre-warning time	s	3 to 99
Pilot light indicators	-	3 (green, red, yellow)
Independent START and STOP buttons	-	YES
Two positions safety key rotary switch	-	Stanby - X-ray
Two position main rotary switch	-	Mains On-Off
Vacuum Fluorescent Display	Line x char.	2 x 20 with anti-reflection screen