

# FLATSCAN30<sup>®</sup>



## E.O.D. MOBILE SCANNER IS NOW A MATURE TECHNOLOGY...

The second generation of the E.O.D. scanner has its performances boosted by the latest state of the art technologies.

### FASTER:

- ▶ 3" BOOTING TIME
- ▶ 5" IMAGE CAPTURE
- ▶ 1 CLICK POST PROCESS

### MORE SECURE:

- ▶ 1 APPROACH SYSTEM
- ▶ PRACTICALLY DEAD ZONE FREE
- ▶ NO RF EMISSION (OPTION)

### MORE ENHANCED FEATURES...

- ▶ 30" IMAGE AREA
- ▶ 3 EDGES
- ▶ EXTRA-LONG LIFE BATTERY

### SECOND GENERATION

FLATSCAN30 is the second generation of ICM's highly innovative flat and portable photodiodes scanner system. As a result of improving the majority of its characteristics, the FLATSCAN30 is capable of identifying any threat both faster and in a more secure manner than ever. With 50% more photodiodes and an ultrafast FPGA micro-controller technology, the new FLATSCAN30 has a better image, is easier to use and is more reliable in harsh RF environment.

### LARGER ACTIVE AREA, SMALLER OVERALL SIZES

Within even smaller sizes than first generation, its active zone has been increased to 30" diagonal enabling inspections in just one scan and avoiding the operator to expose himself to threat a second time. Furthermore, the FLATSCAN30 is now an exclusive "3-Edge" system allowing objects to be fully scanned up to the extremity of the 3 FLATSCAN30 edges.

### MATERIAL DISCRIMINATION

As a hardware and software option, the FLATSCAN30 differentiates organic and non-organic material in as fast as 5 seconds capture.

### SEVERAL HUNDREDS SHOTS WITH A SINGLE BATTERY CHARGE

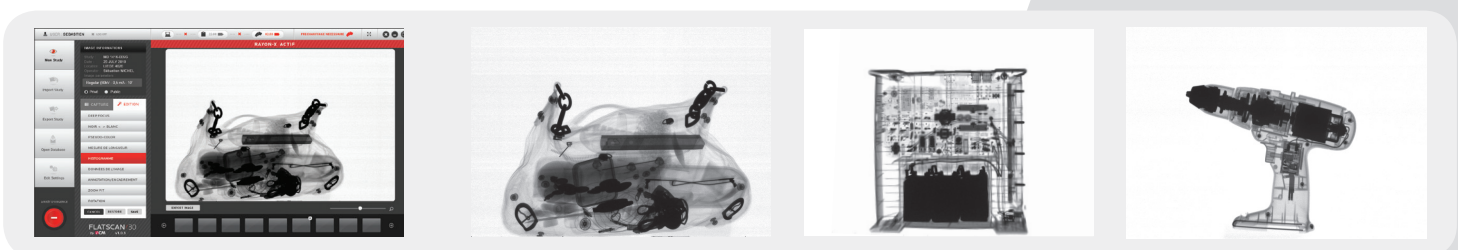
By using the very latest "free of memory effect" nanophosphate battery technology, the FLATSCAN30 can be used for hours and captures 500 images before it requires a new charge. Furthermore, to avoid unexpected disruption, the state of the battery is displayed in remaining hours onto the PC software.

### EXTENDED LIFETIME

The FLATSCAN30 has 768 units of 800 µm photodiodes (1,536 units of 400 µm optional), which are mounted on 12 chips. In case of dead pixel, every chip can be individually, simply and inexpensively replaced instead of being obliged to scratch the whole equipment as it is the case with 2D flat panels.

### INNOVATIVE SOFTWARE FEATURES

The user-friendly multilingual interface allows the operator to take and process his first pictures after just a few minutes training. The thumbnails bar is particularly helpful to visualize the different images taken during the operation. Moreover, the database-oriented storage system makes it possible to annotate, store, classify and retrieve images in a very intuitive way.



# FLATSCAN30® technical specifications :

## FLATSCAN30

<b>Sensor type</b>	Linear diode array
<b>Resolution</b>	40 AWG / 1.8 lp/mm
<b>Pixel size</b>	800 µm (400 optional)
<b>Dynamic range (Grey Levels)</b>	14 bit (16-384)
<b>Active area</b>	614 (W) x 460 (H) mm <sup>2</sup> / 24 (W) x 18 (H) in / 30 in diagonal
<b>Maximum penetration<sup>1</sup></b>	25 mm of steel (guaranteed with CP120B) / 29 mm of steel (typical with CP120B) 30 mm of steel (guaranteed with CP160B) / 34 mm of steel (typical with CP160B)
<b>Number of "covered sides"<sup>2</sup></b>	3 (Left, right and bottom)
<b>Uncovered active area</b>	5 mm (from bottom) / 7 mm (from sides)
<b>Booting time</b>	3 sec
<b>Image acquisition time: min/max</b>	5 / 275 sec
<b>Battery life</b>	4 h (standby mode, no RF) > 500 Images (5s, no RF)
<b>External dimensions</b>	628 x 642 x 42 mm <sup>3</sup> / 24.7 x 25.2 x 1.65 in <sup>3</sup>
<b>Weight</b>	9,5 kg / 20.9 lbs
<b>Operating temperature</b>	-10 to +50 °C / +14 to +122 °F
<b>Storage temperature</b>	-10 to +70 °C / +14 to +158 °F
<b>Communication protocols</b>	Bluetooth / Wi-Fi 802.11n (cable optional for zero RF radiation)

CP120B & CP160B	CP120B	CP160B
<b>Waveform</b>	Constant potential	Constant potential
<b>Maximum KV</b>	120 KV (KV adj.: 40 to 120 KV)	160 KV (KV adj.: 40 to 160 KV)
<b>Maximum mA</b>	1.0 mA	0.5 mA
<b>Exposure time</b>	adjustable from 1 s. to 300 s.	adjustable from 1 s. to 300 s.
<b>Pre-warming time</b>	adjustable from 0 s. to 99 s.	adjustable from 0 s. to 99 s.
<b>Focal spot sizes</b>	0.8 x 0.5 mm <sup>2</sup> / 0.031 x 0.019 in. <sup>2</sup>	0.8 x 0.7 mm <sup>2</sup> / 0.031 x 0.027 in. <sup>2</sup>
<b>Beam angle</b>	50° x 50°	60° x 60°
<b>Tube life</b>	> 10 years of daily use	> 10 years of daily use
<b>Leakage dose at 1m</b>	1250 µSv/h	2000 µSv/h
<b>1 battery (Li-Ion)</b>	37 V 1400 mAh	37 V 1400 mAh
<b>Max. capacity / 1 battery<sup>2</sup></b>	14 min cont. X-ray generation	14 min cont. X-ray generation
<b>Charger type</b>	Intelligent fast battery charger	Intelligent fast battery charger
<b>Charging time</b>	1h	1h
<b>Weight (including battery)</b>	7 kg / 15.3 lbs	9.2 kg / 20.1 lbs

## Imaging Station (PC)

<b>Type</b>	Notebook LATITUDE E6520
<b>Processor</b>	Intel Core -i5-2520M (2.5GHz Dual-Core)
<b>Screen</b>	15.6" High Definition
<b>Ram</b>	4GB 1333MHz
<b>HDD</b>	320 GB - 7200 RPM

## Carrying Cases Type

<b>IP66 Hermetic case for X-Ray source &amp; accessories</b>	830 x 550 x 310 mm <sup>3</sup> / 32.7 x 21.6 x 12.2 in. <sup>3</sup>
<b>Backpack for detector daily use</b>	750 x 650 x 100 mm <sup>3</sup> / 29.5 x 25.6 x 3.9 in. <sup>3</sup>
<b>Flycase for detector air transport</b>	800 x 750 x 190 mm <sup>3</sup> / 31.5 x 29.5 x 7.5 in. <sup>3</sup>

## Options

<b>Wireless repeaters</b>	
<b>Spare batteries for the detector or X-ray source</b>	50 m or 100 m Ethernet cable for zero RF emission
<b>200 m fibre optical cable for zero RF emission</b>	
<b>Process Free Films (8"X10", 10"X12" or customized sizes)</b>	30 m ON/OFF cable for the use of PF Films
<b>Personal dosimeters</b>	
<b>Hermetic envelope for the detector that is being used</b>	
<b>Materials separation software</b>	
<b>Trippods and stands</b>	
<b>External camera</b>	

## Software Features

<b>Pan, Zoom, Distances Measurement</b>	
<b>Reverse black and white</b>	
<b>Pseudo colour</b>	
<b>Deep focus</b>	
<b>Histogram</b>	
<b>Low battery alarm</b>	
<b>X-Ray source parameters adjustable (KV, mA and time)</b>	
<b>Materials discrimination (optional)</b>	

<sup>1</sup> Distance between X-ray source and image cap. unit: 15 cm

<sup>2</sup> Equivalent to 200 Images

#104A - All specifications are non contractual and subject to change without prior notice.

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