

# Digital X-Ray Market by Types (Computational Radiography, Digital Radiography), Major Products (Flat Panel Detectors, CMOS, CCD, Software, X-ray Contrast Media) & by Applications (Chest Imaging, Mammography, Dental) - Forecast to 2018

https://marketpublishers.com/r/D744BC15931EN.html

Date: May 2013

Pages: 140

Price: US\$ 5,650.00 (Single User License)

ID: D744BC15931EN

# **Abstracts**

Analog X-ray systems, which had major share in the market until 2005, are being replaced by advanced technologies such as computed radiography (CR) and digital radiography (DR). Advantages such as low dosage, better image quality, enhanced image storage, and immediate image analysis have made the latter more attractive over conventional analog systems. The availability of image detectors technologies like CCD, CMOS and flat panel detectors are being used to retrofit and convert the old existing analog X-ray units into CR and DR systems; this is driving the up-gradation of analog systems into digital.

Hospital and diagnostic centers are continuously adapting to the change in technology to provide better services for their patients. Concerns over excess radiation exposure, poor image quality, time required, and requirement of large space has forced many to adopt and upgrade into digital X-ray systems. Advancement and adoption of digital image processing software and picture archiving and communication system (PACS) has enhanced the ability of technicians in providing accurate diagnosis and better service to their patients.

The digital X-ray market is driven by technological advances in automation, growing aging population, and need for improved and faster imaging methods for higher patient throughput. The growing incidences of chronic disease like tuberculosis, pneumonia and other gastrointestinal disorders are propelling the market in both developed and developing countries. High costs and ionizing radiations are the main factors that



restrain the growth of this market, while intense competition and the economic downturn are key challenges.

The global X-ray market is expected to grow at a steady CAGR of 4.5% from 2013 to 2018. Among digital systems, digital radiography is the fastest growing at a CAGR of 5.43%. Mammography, fluoroscopy and other imaging applications like musculoskeletal, whole body imaging and neonatal imaging methods are fast-growing application markets. In the product category, complementary metal-oxide-semiconductor (CMOS) and flat panel image sensor markets are expected to experience high growth, owing to their distinct technical advantages over charge-coupled devices and film-based sensors.

Demographically, the markets in North America and Europe are expected to remain dominant in terms of market share, while Asia is poised to experience rapid growth. Untapped markets in Asia are expected to offer new growth opportunities in the forecast period. Increased expenditure on healthcare infrastructure is boosting the healthcare market in China. With dense population, the growing number of aging people, and increased adoption of digital X-ray systems, China is expected to supersede other Asian markets.

The report also profiles leading participants of this industry and their recent developments and strategic activities. These include Agfa HealthCare, (Belgium), Canon U.S.A (U.S.), Philips Healthcare (The Netherlands), Siemens Healthcare (Germany), CareStream Health (US), Fujifilm Medical Systems, Inc. (U.S.), GE Healthcare (U.K), AC X-ray Corp. (U.S), Imaging Dynamic Company (Canada), Konica Minolta (U.S), Swiss Ray International (U.S) UMG/DEL Medical (U.S), Varian Medical Systems (U.S), and iCro, Inc. (U.S).

# Scope of the Report:

This technical report categorizes the market for digital X-ray by types, product segments,- application, and geography. These markets are broken down into

segments and sub-segments, providing exhaustive value analysis for 2012and 2013, as well as forecast up to 2018. Each of the market is comprehensively analyzed at a granular level by geography (North America, Europe, Asia, and Rest of the World) to provide in-depth information on the global scenario.

# Global digital X-ray market, by type



C	computed Radiography	
С	Digital Radiography	
Global digital X-ray market, by major product segment		
С	Detectors (Flat panel detectors, CCD, CMOS)	
S	Software	
×	K-ray contrast media	
Global digital X-ray market, by application		
C	Chest Imaging	
N	Mammography	
	Dental	
F	Fluoroscopy	
C	Others	
Geographic Analysis		
Ν	North America	
E	Europe	
Δ	Asia	
F	Rest of the World (RoW)	



# **Contents**

# 1 INTRODUCTION

- 1.1 KEY TAKE AWAYS
- 1.2 REPORT SCOPE & SEGMENTATION
- 1.3 RESEARCH METHODOLOGY
- 1.4 KEY DATA POINTS FROM SECONDARY & PRIMARY RESOURCES
- 1.5 ASSUMPTIONS

# 2 EXECUTIVE SUMMARY

# **3 TECHNOLOGY SNAPSHOT**

- 3.1 Technology Overview (Introduction, Evolution & Technology Segmentation)
- 3.2 Differences Between Digital X-Rays and Analog System
- 3.3 Technology Trends Overview
  - 3.3.1 Technology Trends By Type (CR&DR)
    - 3.3.1.1 CR & DR Advantageous & Dis-advantageous, Similarities & Differences
  - 3.3.2 Technology Trends By Product Segments
    - 3.3.2.1 Detector Types (Flat Panel Detectors (A-SI), CCD, CMOS)
    - 3.3.2.2 Software (Image Analysis and Visualization Systems)
    - 3.3.2.3 X-Ray Contrast Agents
- 3.4 Commercially Available Digital X-Rays Products

# **4 VALUE CHAIN ANALYSIS**

- 4.1 Value Chain Analysis Overview
- 4.2 Value Chain Analysis By Porter's Five Forces Model

# 5 MARKET LANDSCAPE ANALYSIS

- 5.1 Global Digital X-Ray Market Segmentation
- 5.2 Global Digital X-Ray Market Overview
  - 5.2.1 Global Digital X-Ray Market, By Geography
- 5.3 Market Dynamics Overview
  - 5.3.1 Market Dynamics Drivers
    - 5.3.1.1 Drivers Timeline
  - 5.3.2 Market Dynamics Restraints



- 5.3.2.1 Restraints Timeline
- 5.3.2 Market Dynamics Challenges
- 5.4 Global Digital X-Ray Market By Type
- 5.4.1 Computed Radiography By Geography
- 5.4.2 Digital Radiography By Geography
- 5.5 CR/DR Market, By Major Product Segments
  - 5.5.1 Flat Panel (A-SI) Detectors Market, By Geography
  - 5.5.2 CCD Detectors Market, By Geography
  - 5.5.3 CMOS Detectors Market, By Geography
  - 5.5.4 Image Analysis and Visualization Software Market, By Geography
  - 5.5.5 X-Ray Contrast Media Market, By Geography
- 5.6 CR/DR Market, By Application
  - 5.6.1 Chest Imaging Market, By Geography
  - 5.6.2 Dental Imaging Market, By Geography
  - 5.6.3 Mammography market, by geography
  - 5.6.4 Fluoroscopy Market, By Geography
  - 5.6.5 Other Market, By Geography
- 5.7 Global Impact of Digital X-Ray Systems
- 5.8 Market Share Analysis of Key Players

# 6 TECHNOLOGY ADOPTION & DEVELOPMENT POTENTIAL – BASED ON GEOGRAPHY

- 6.1 Geographic Adoption and Development Potential Overview
- 6.2 Technology Adoption & Development North America: U.S. & Canada
- 6.3 Technology Adoption & Development Europe: U.K., Germany, France, Italy & Spain
- 6.4 Technology Adoption & Development Asia: China, Japan & India
- 6.5 Technology Adoption & Development ROW: Australia, Russia & Brazil
- 6.6 Regions with High and Medium Adoption of Digital X-Rays

# 7 REGULATORY LANDSCAPE ANALYSIS

- 7.1 Regulatory Landscape Analysis Overview
- 7.2 Regulatory Landscape Analysis By Region, North America, Europe and Rest of the World
- 7.3 Regulatory Landscape Analysis By Country

# **8 COMPETITIVE LANDSCAPE ANALYSIS**



- 8.1 Competitive Landscape Overview
- 8.2 Key Product Launches (2010 2013)
- 8.3 Key Mergers & Acquisitions (2010 2013)
- 8.4 Key Partnerships/Collaborations/Agreements (2010 2013)

# 9 PATENT ANALYSIS

9.1 Patent Analysis (2008 – 2012)

# 10 KEY COMPANY PROFILES

- 10.1 AGFA HEALTHCARE
- 10.2 CANON U.S.A., INC.
- 10.3 PHILIPS HEALTHCARE
- 10.4 SIEMENS HEALTHCARE
- 10.5 CARESTREAM HEALTH
- 10.6 FUJIFILM MEDICAL SYSTEMS U.S.A., INC.
- 10.7 GE HEALTHCARE
- 10.8 TOSHIBA MEDICAL SYSTEMS CORPORATION.
- 10.9 HITACHI MEDICAL CORPORATION, LTD.
- 10.10 A/C X-RAY CORP.
- 10.11 IMAGING DYNAMICS COMPANY
- 10.12 KONICA MINOLTA MEDICAL IMAGING U.S.A., INC.
- 10.13 SIRONA DENTAL, INC.
- 10.14 SWISSRAY INTERNATIONAL, INC.
- 10.15 UMG/DEL MEDICAL
- 10.16 VARIAN MEDICAL SYSTEMS, INC.
- 10.17 ICRCO, INC.
- 10.18 KUBTEC X-RAY
- 10.19 NORTH STAR IMAGING, INC.
- 10.20 QUANTUM MEDICAL IMAGING
- 10.21 3DISC AMERICAS, INC.
- 10.22 AIR TECHNIQUES, INC.

# LIST OF TABLE

Tab - 1 GLOBAL DIGITAL X-RAY SYSTEMS MARKET, BY TYPE, 2012 – 2018 (\$BILLION)



- Tab 2 COMPUTED RADIOGRAPHY SYSTEMS MARKET, BY GEOGRAPHY, 2012 2018 (\$BILLION)
- Tab 3 DIGITAL RADIOGRAPHY SYSTEMS MARKET, BY GEOGRAPHY, 2012 2018 (\$BILLION)
- Tab 4 FLAT PANEL (a-si) DETECTORS MARKET, BY GEOGRAPHY, 2012 2018 (\$MILLION)
- Tab 5 CCD DETECTORS MARKET, BY GEOGRAPHY, 2012 2018 (\$MILLION)
- Tab 6 CMOS DETECTORS MARKET, BY GEOGRAPHY, 2012 2018 (\$MILLION)
- Tab 7 SOFTWARE MARKET, BY GEOGRAPHY, 2012 2018 (\$MILLION)
- Tab 8 X-RAY CONTRAST MEDIA MARKET, BY GEOGRAPHY, 2012 2018 (\$MILLION)
- Tab 9 GLOBAL DIGITAL X-RAY SYSTEMS MARKET, BY APPLICATION, 2012 2018 (\$BILLION)
- Tab 10 CHEST IMAGING MARKET, BY GEOGRAPHY, 2012 2018 (\$BILLION)
- Tab 11 DENTAL IMAGING MARKET, BY GEOGRAPHY, 2012 2018 (\$BILLION)
- Tab 12 MAMMOGRAPHY MARKET, BY GEOGRAPHY, 2012 2018 (\$BILLION)
- Tab 13 FLUOROSCOPY MARKET, BY GEOGRAPHY, 2012 2018 (\$BILLION)
- Tab 14 OTHERS MARKET, BY GEOGRAPHY, 2012 2018 (\$BILLION)

# LIST OF FIGURE

- Fig 1 GLOBAL DIGITAL X-RAY MARKET, 2012 2018 (\$BILLION)
- Fig 2 PORTER'S VALUE CHAIN ANALYSIS
- Fig 3 GLOBAL DIGITAL X-RAY MARKET 2012 2018 (\$BILLION)
- Fig 4 GLOBAL DIGITAL X-RAY MARKET, BY NO. OF INSTALLATIONS, 2012 2018 (UNIT)
- Fig 5 GLOBAL DIGITAL X-RAY SYSTEMS MARKET BY GEOGRAPHY, 2012 2018 (\$BILLION)
- Fig 6 GLOBAL DIGITAL X-RAY SYSTEMS MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 7 GLOBAL DIGITAL X-RAY SYSTEMS MARKET SHARE, BY TYPE, 2013
- Fig 8 GLOBAL COMPUTED RADIOGRAPHY SYSTEMS MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 9 GLOBAL DIGITAL RADIOGRAPHY SYSTEMS MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 10 FLAT PANEL (a-si) DETECTORS MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 11 CCD DETECTORS MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 12 CMOS DETECTORS MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 13 SOFTWARE MARKET SHARE, BY GEOGRAPHY, 2013



- Fig 14 CMOS DETECTORS MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 15 GLOBAL DIGITAL X-RAY SYSTEMS MARKET SHARE, BY APPLICATION, 2013
- Fig 16 CHEST IMAGING MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 17 DENTAL IMAGING MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 18 MAMMOGRAPHY MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 19 FLUOROSCOPY MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 20 OTHERS MARKET SHARE, BY GEOGRAPHY, 2013
- Fig 21 MARKET SHARE ANALYSIS, BY KEY PLAYER, 2013
- Fig 22 DIGITAL X-RAY MARKET CAGR, BY GEOGRAPHY, 2013 2018 (CAGR%)
- Fig 23 TECHNOLOGY ADOPTION & DEVELOPMENT POTENTIAL BY GEOGRAPHY
- Fig 24 DIGITAL X-RAY MARKET: REGULATORY LANDSCAPE
- Fig 25 KEY GROWTH STRATEGIES, 2013
- Fig 26 PATENTS PUBLISHED BETWEEN 2008 2012



# I would like to order

Product name: Digital X-Ray Market by Types (Computational Radiography, Digital Radiography), Major

Products (Flat Panel Detectors, CMOS, CCD, Software, X-ray Contrast Media) & by

Applications (Chest Imaging, Mammography, Dental) - Forecast to 2018

Product link: https://marketpublishers.com/r/D744BC15931EN.html

Price: US\$ 5,650.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

# **Payment**

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/D744BC15931EN.html">https://marketpublishers.com/r/D744BC15931EN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

To place an order via fax simply print this form, fill in the information below



and fax the completed form to +44 20 7900 3970