AI for Human Benefit, Everywhere

HANDMED

AI based Handheld X-Ray Camera

MEDIHUB HANDHELD CAMERA

intel | OpenVINO | JLK

HANDMED

AI based portable chest X-Ray analysis solution

Summary

Lung cancer is a cancer that occurs in the tissues of main bronchus, bronchioles, and alveoli. It accounts for the highest percentage of major cancer deaths worldwide. Lung cancer, unlike other major cancers, has a particularly high mortality rate due to its high incidence, metastasis, and absence of certain early symptoms. As such, lung cancer is a high-risk disease, but early detection through regular diagnosis is the best method to cure if detected early and taken appropriate treatment measures.

HANDMED assists specialists to diagnose 16 types of lung lesions regardless of time & place, by conveniently integrating JVIEWER-X, an AI-based chest X-ray image analysis solution, and a portable X-ray machine.

Key Components & Performance

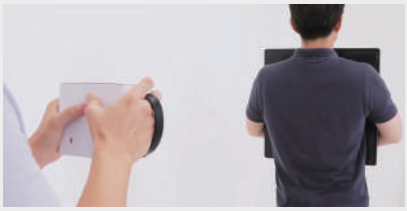
- Single organization data **AUC 99%**
- East to carry
- Analysis Time : within 3s per scan
- Wireless X-ray machine like a regular camera
- Low output radiation
- Simple image input/output function through PACS interworking module
- 16 different detailed abnormality scores including TB
- Heatmap visualization of abnormal lesion
- Analysis result report
- Trained over 1.1 miliion chest X-Ray date with full
- AI model based on the state-of-the-art Convolutional Neural Network algorithm
- The function of checking results and outputting reports through its own UI

Unique Functionality

AI based Solution + **AUC 99%** High Accuracy + Fast Analysis + Easy to Use

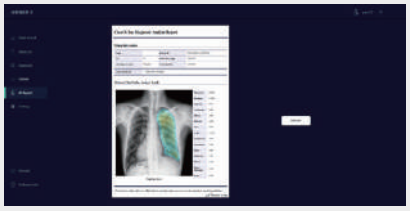
- Visualization of Heat-map format for lung image analysis results
- Providing quantitative scores for chest X-ray image analysis of AI
- More than 1 million validated chest X-ray data learning
- Providing tools for lesion indication and modification
- Providing statistical data on patient information and AI analysis results by period.

How it works



Take Chest X-Ray with portable camera

Abnormality Lesion Visualization & Abnomality Scores



View & Download Analysis Result Report

Camera Spec

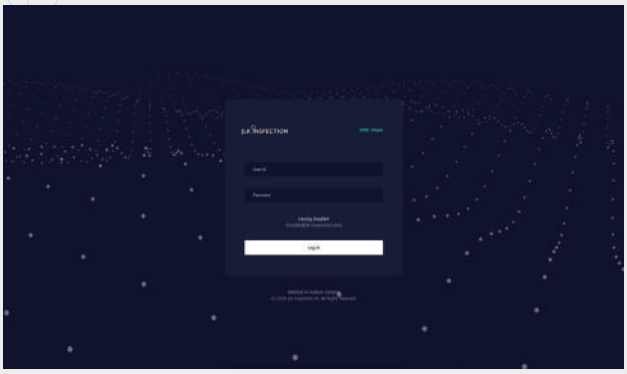
※ No Electric Power Supply / Internet Need, Get Report Anywhere & Anytime

X-Ray Unit Input Power	DC 5~12V, 2.1A	**Output Power**	120W
Battery Charger Input Power	DAC 100~240V, 50~60HZ, 1A	**Power Supply**	DC 11.1V (Battery)
Tub kV/mA	60kV/2mA [Fixed]	**Focal spot size**	0.4mm
Weight	1.8kg		

Input / Output

- **Input Data** Patient's chest X-ray DICOM File
- **Output Information** Chest X-Ray analysis report

Solution UI

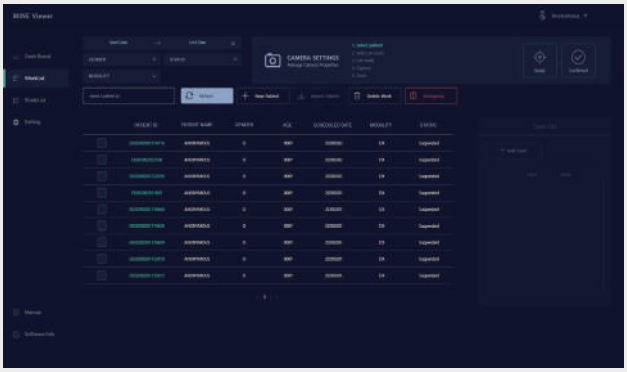


LOGIN

Only licensed users can use the product. Enter the ID & Password authorized by the administrator.

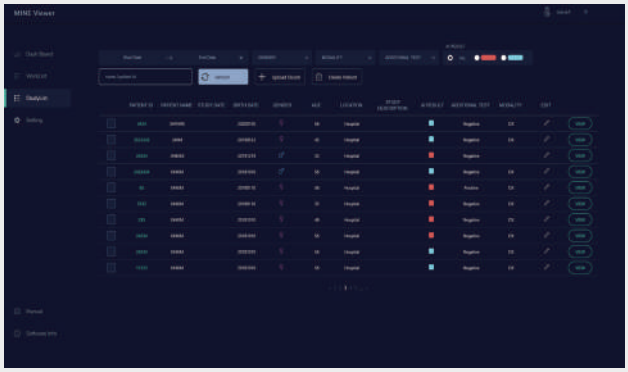
DASHBOARD

The subject information is listed with statistical data by period. All resulted through AI analysis.



WORK LIST

Add a new subject by uploading X-ray image data to the subject information.

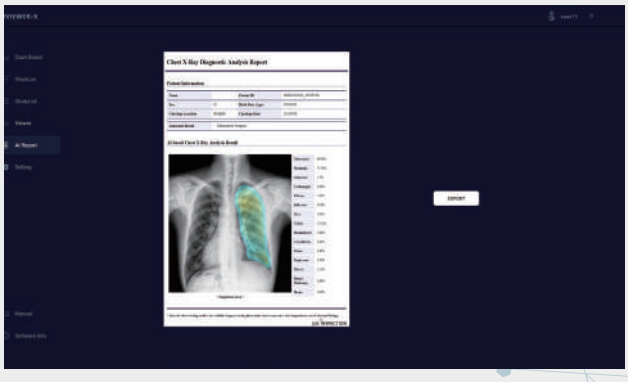


STUDY LIST

Check and edit the subject's information, and the result of the image analysis.

AI VIEWER

AI Results Visualization with abnormality score.



REPORT

View the AI-based chest X-ray analysis report and download it in PDF file.

PACS &DICOM standard-based medical image viewer

AI based Pneumonia diagnosis result visualization

AI R&D Center

JLK Tower, 5 Teheran-ro 33-gil, Gangnam-gu, Seoul, Republic of Korea

+82-70-4651-4051

JLK, Inc.

#204, 10, Yangcheongsongdae-gil, Ochang-eup, Cheongwon-gu, Cheongju-si, Chungcheongbuk-do, Republic of Korea

JLK US, Inc.

3003 N 1st ST #322, San Jose, CA 95134, USA

jlk_usa@jlkgroup.com

JLK Japan Co., Ltd.

#208, 6 Chome 10-6 Otsuka Bunkyo-ju, Tokyo, Japan

jlk_japan@jlkgroup.com