SaferAI® 5G3D2D**

333 Lifting Monitoring System

The most accurate analysis, comes
from more reliable data



CITF 建造業創科基金

CITF Pre-approved Product
: PA-844



Proprietary 5G functions*

*5G enabled functions varies per project, please contact for more information
**Powered by Karta-X AI Assisted Construction Safety Analytic (KACSA®) Platform

333 LIFTING MONITORING SYSTEM

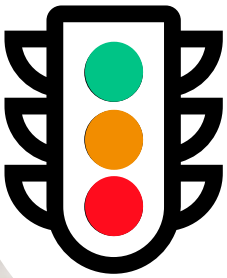
Stereo Camera





Custom-designed stereo camera tailored for harsh outdoor environments

Advanced AI - contribute towards leading indicator analytics



No risk and danger

Identified risk but no danger

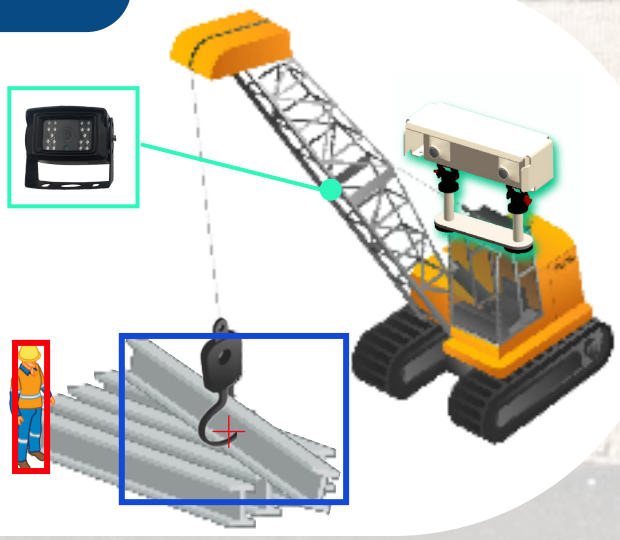
Identified risk and danger



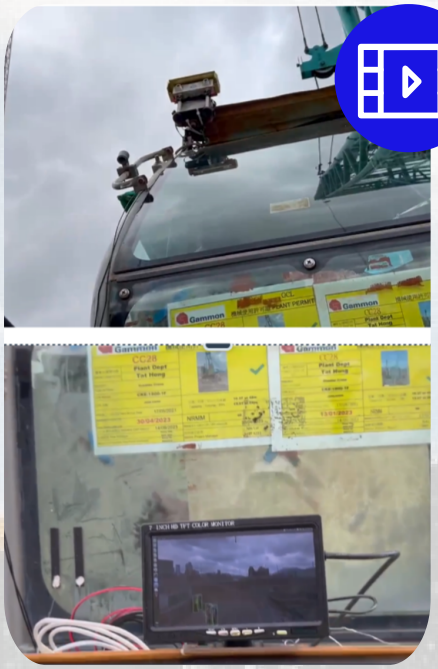
Combination of 1x3D and 1x2D camera

Alerts when **one 3D Camera** detected any worker hasn't left the danger zone (**within 3m of the object**) during lifting.

One 2D Camera has independent AI that can calculate worker **3m clearance + lifting activity**



APPLICATION



Edge processing unit with online capability installed inside the machine for **real-time AI processing**

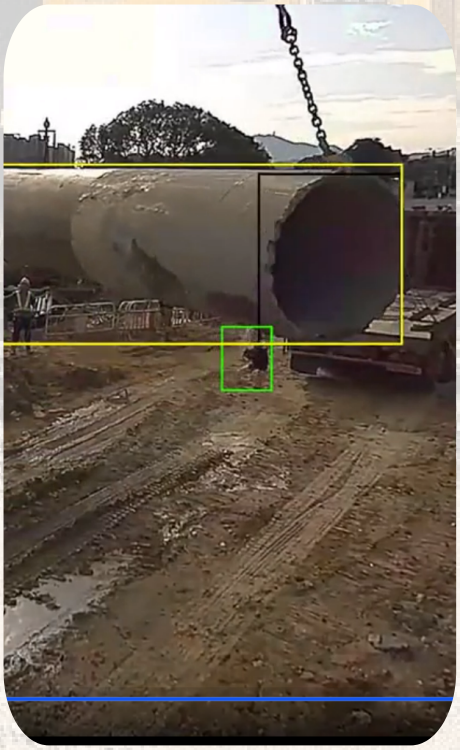


01 Live video feed to let drivers can stay informed about their surroundings

AI triggered live streaming for driver to monitor in real time.



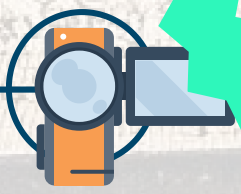
SaferAI®
5G3D2D





NEW

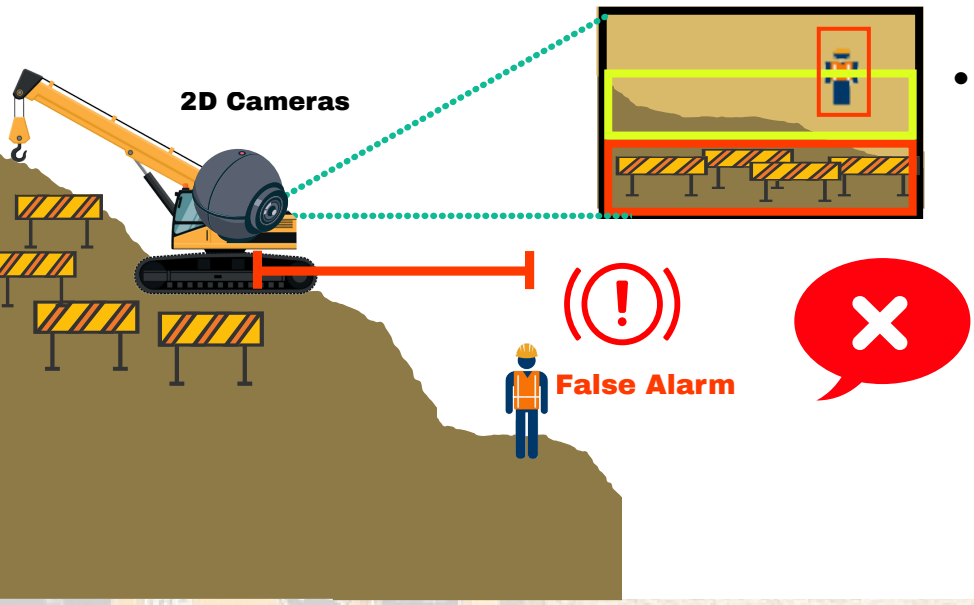
02 Continuous Recording is available!



TECHNOLOGY & INNOVATION

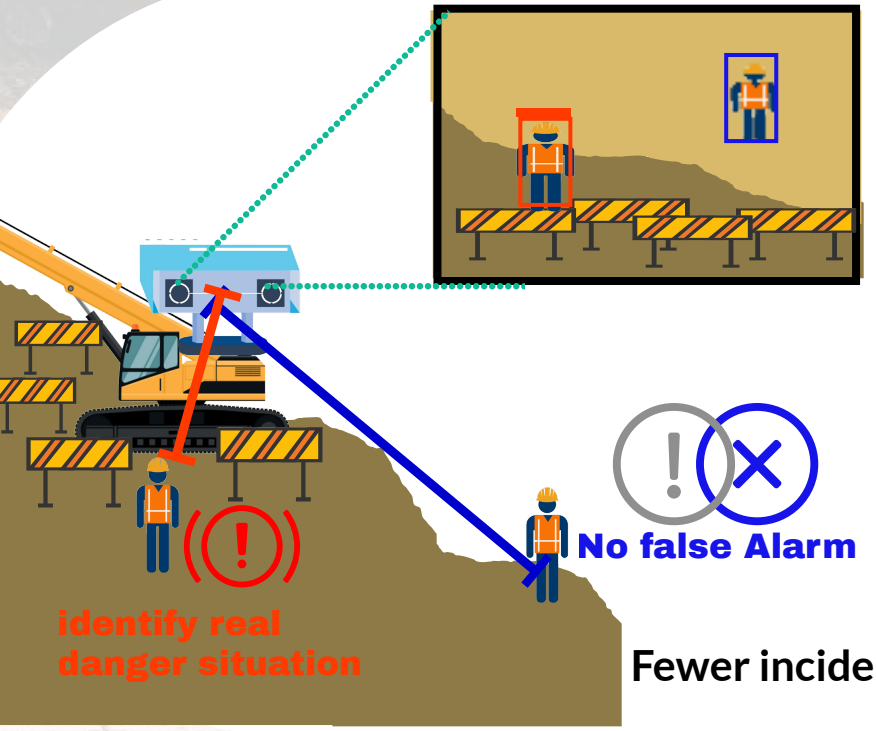
BENEFITS OF 3D CAMERA WHEN COMPARING WITH 2D CAMERA

Traditional 2D Camera



- An object which is close to the 2D cameras **may look like it entered** the detection zone but it is **actually not**.

SaferAI® 5G3D



- **Analyze the actual distance** of the worker from the camera. Accurately **identify real danger situations**.

Fewer incidents occur and money-saving!

EXCLUSIVE

SaferAI®

BENEFITS WITH OUR PROPRIETARY 5G TECHNOLOGY

Seamless Streaming



Network Awareness

"Avoid over-stressing connected networks"

Performance Enhanced



24/7 Continuous Video Recording

"Capture both AI video and continuous recording"

Energy-saving



Battery Awareness

"Save both device network and device battery"

4S ENGINE, 1 CMP PLATFORM

Risk-focused, Data-driven



TECHNICAL SPECIFICATION

Number of Cameras	**Jib Arm**	**2D Camera x1**
	Crane Cabin	**3D Camera x1**
Network		Sub6 5G
Product Code		5G3D2D

Camera (3D)	Field-of-View	fov >= 100 degrees	
	Physical Dimensions (H x W x D)	177 x 215 x 86mm	
	Depth detection	Detection range	1~24 meters
		Process latency	＜100ms
		Any Object accuracy	1~4m≥96% 4~24m≥75%
	Worker detection	Worker detection	Person 1.2m to 1.8m subject to the installation height and tilting angle
		Process latency	＜40ms
		Any Object accuracy	1~16m≥90% 16~24m≥75%
	Operating Temperature	-30°C - 60°C	
	IP Rating	IP66	
Camera (2D)	Resolution	1920 x 1080	
	FOV	> 100 degrees horizontal	
	Physical Dimensions (H x W x D)	80 x 50 x 70mm	
	Weight	500g per camera	
	Operating Temperature	-10°C - 50°C	
	Detection Range	24m (max) x FOV	
	Low Light Vision	supported	
	IP Rating	IP66	
	No. of Camera	1	
Controller Box	Physical Dimensions (H x W x D)	400 x 200 x 300mm	
	Weight	6kg	
Edge AI	AI processor	Embedded AI Processor	
	Camera connectivity	LAN, Mobile Network	
	CPU	Arm-based Processor	
	Power	DC24V <80W (Optional DC12V / AC220)	
	Storage	256GB (up to 5TB optional)	
	Memory	8GB	
	Video encode/decode	H.264, H.265 (hardware)	



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