

# **Smart Construction Solution**

# An award-winning CITF Pre-approved Smart Site Safety System (4S) Solution



Empower your projects with Smart Construction — an integrated solution leveraging AI, IoT and 5G technologies to enhance safety, streamline operations and ensure compliance.

# **Combining Technology & Humanity**

- Foster a Safer and Healthier Site Environment
- Empower Real-time Monitoring and Enhance Operational Efficiency
- Achieve Environmental, Social and Governance (ESG) & Sustainability Goal

# Why Smart Construction?

- ✓ CITF Pre-approved Product (PA20-025, PA20-033)
- ✓ CIC Construction Innovation Award Winner
- ▼ ESG Recognition Scheme Subsidy List



#### **Contact Us**

Tel: 2281 8818 Email: business\_markets@smartone.com





Learn More

Follow Us









# **Smart Site Safety Systems**

# **Al Safety Monitoring System**

Utilizes advanced AI surveillance with facial recognition to detect PPE violations, unsafe behavior, fall incidents and unauthorized presence in real time, delivering proactive alerts to enhance worker safety and speed up accident response.





# **Environment & Health Stations**

# **SmartHealth Station**

On-site health stations capture and record workers' vital signs such as body temperature, blood pressure and heart rate, supporting early detection of health risks and fostering a safer, healthier workforce.

# **Dangerous Areas Access Control System**



Health status



Continuously measures temperature, humidity, air quality and noise levels. Enables supervisors to assess environmental risks, such as heatstroke, and take timely preventative actions.

# Monitors crane and excavator working zones

with real-time alerts to prevent unauthorized entry, boosting site control and protecting workers around heavy machinery.



Monitors toxin gas levels, tracks entry/exit activity and analyses live video and people counts in confined areas. Ensuring regulatory compliance and safeguarding workers in high-risk environments with accurate occupancy monitoring.



Real-time danger alert

**Centralized Safety Management Platform** 

A unified cloud-based dashboard that consolidates real-time site data, alerts, and reporting, empowering site managers to monitor safety performance from anywhere.



Workers' real time location

Dump truck

site condition

Real-time

### **Smart Padlock**

Mobile app-controlled locks with real-time access logs and alert notifications offer enhanced access security and traceability across sensitive areas of the site.



status

# **Construction Management Innovations**



# **Temporary Lift Shaft Safety System**

Detects and alerts site management when lift shaft gates are opened improperly or without authorization, minimizing fall risks and ensuring compliance with site safety protocols.

# **Smart Monitoring Technology**

# **Smart Wearables for Frontline Personnel**

Equipped with GPS, biometric sensors and SOS functionality, smart helmets and watches monitor worker location, vitals and safety conditions, enabling immediate incident alerts and improving lone-worker safety.





# **Dump Truck Management**

Digitally tracks dump truck routes and dumping activity, providing real-time detour alerts, detailed trip logs and automated receipt management, ensuring regulatory conformity and operational efficiency.



# Integration of Cutting-Edge Technology and Robust Network Infrastructure



# **Reliable Network Technology**

Seamless communication with 5G, Super Wi-Fi, LoRaWAN, etc.



### Al Camera Surveillance

Automated monitoring with smart video analytics for safety.



### **Smart IoT Sensors**

For construction efficiency, safety and project management.



### **ESG-Linked Performance**

Supports environmental monitoring and sustainability reporting.

**Seamless Connectivity** for Diverse Site Locations



**Solar Energy System**Sustainable energy solutions for construction



# **Regulatory Compliance**

Integrated systems comply with industry regulations and standards.



# **Unified Management Portal**

Central dashboard for data-driven site decisions.



















