METABUILD

TRAFFIC DIGITAL TWIN

Artificial Intelligence

3D Map

Simmulation

Augmented Reality

DataHUB

Traffic

Virtual Reality

Monitoring

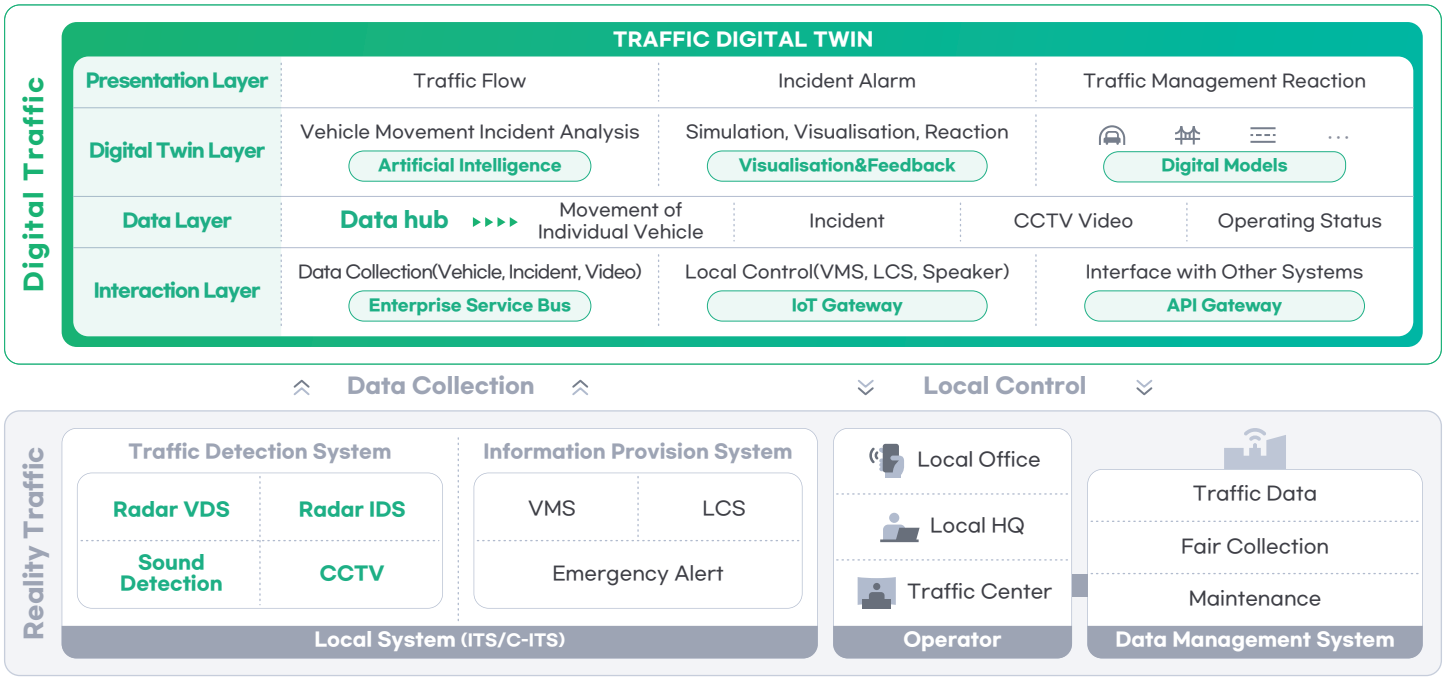
2D Map

Decision Making

H Q 62, Seochojungang-ro, Seocho-gu, Seoul, Korea (06640) R&D 208, Hyoryeong-ro, Seocho-gu, Seoul, Korea (06708)
T +82-2-598-3327~8, 3340 F +82-2-598-3329 E info@metabuild.co.kr www.metabuild.co.kr

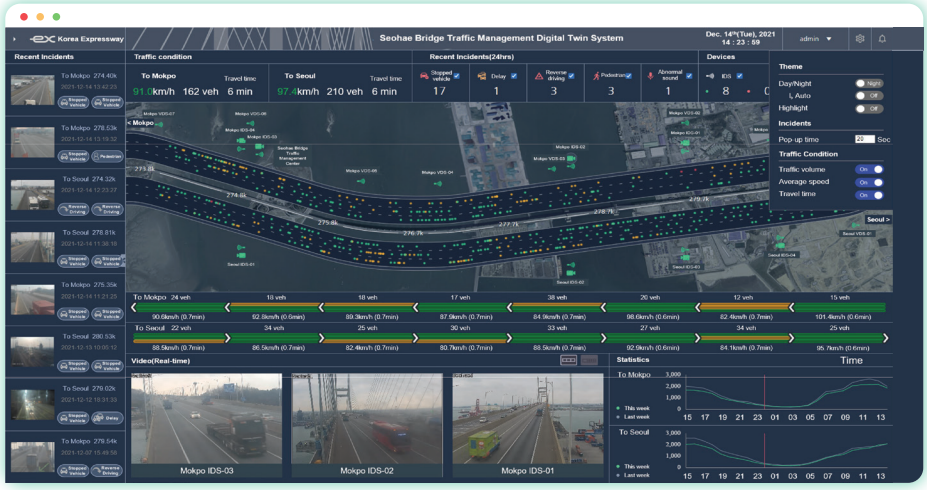
TRAFFIC DIGITAL TWIN
Connects Real Road & Digital Road

Traffic Digital Twin is an advanced traffic control platform that stores, manages, and analyzes traffic data collected in real-time through sensors such as radar and CCTV installed on the road, and transforms actual road traffic conditions as a virtual digital twin.



Main Function

Traffic Digital Twin integrates and analyzes radar detection data and other sensor data, and visualizes it on the digital twin screen in real time.



Digital Twin Map
- Real-time vehicle movement
- Pop-up message with the location of incident
- Location of local devices

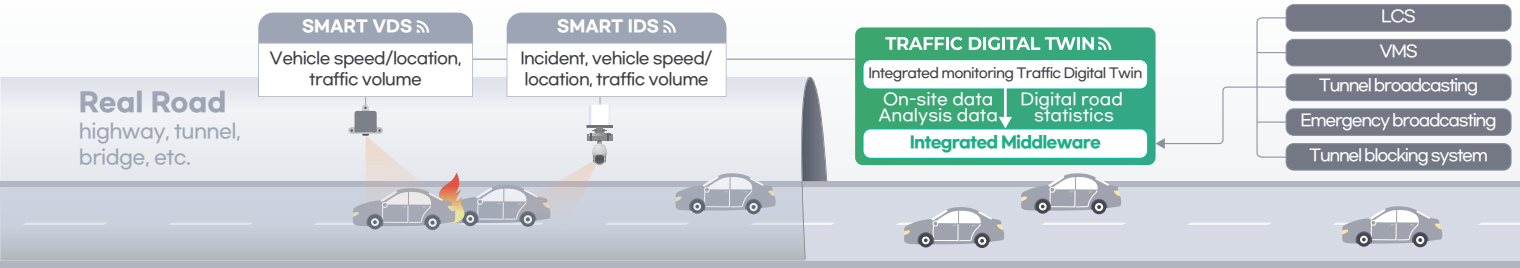
Summary
- Traffic condition (speed, traffic volume, travel time)
- Incident (recent incident, playback of incident video)
- Local devices & devices status information

Incident History
- Recent incidents
- Playback of auto focusing video

Traffic Condition Map
- Traffic condition(free flow, congestion) & travel time by direction/section

CCTV Monitoring
- Real-time CCTV streaming
- CCTV display layout setting
- Auto focusing in case of incident

Traffic Flow Statistics
- Provide visualization data of traffic condition statistics
- Compare traffic volume by time (last week/this week)



VDS : Vehicle Detection System
IDS : Incident Detection System

METABUILD Smart Radar Solution

METABUILD's Smart Radar Solution ensures excellent detection performance in various weather conditions, day and night and in various road environments such as city roads, highways, tunnels, and bridges.

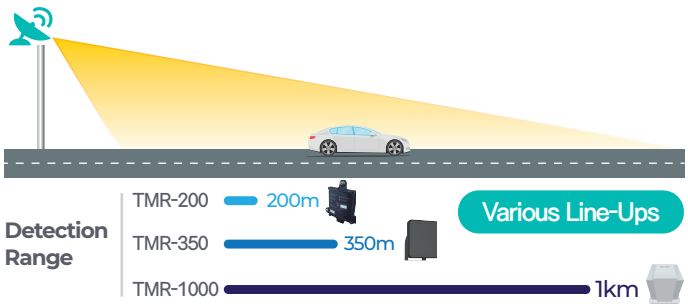
TMR-200

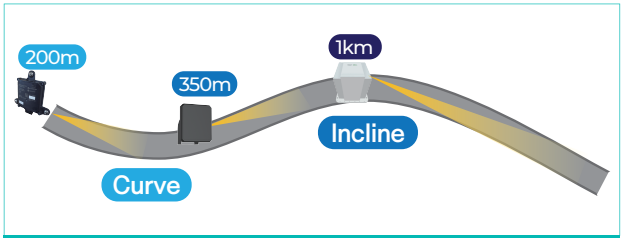
TMR-350

TMR-1000

It provides a lineup of short-range (<200m), medium-range (<350m), and long-range (<1km) radars that can implement optimal coverage across a variety of road geometries.

Detection Range

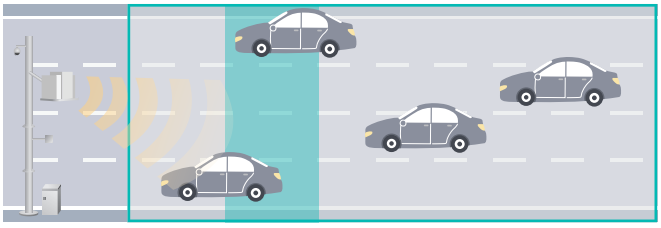


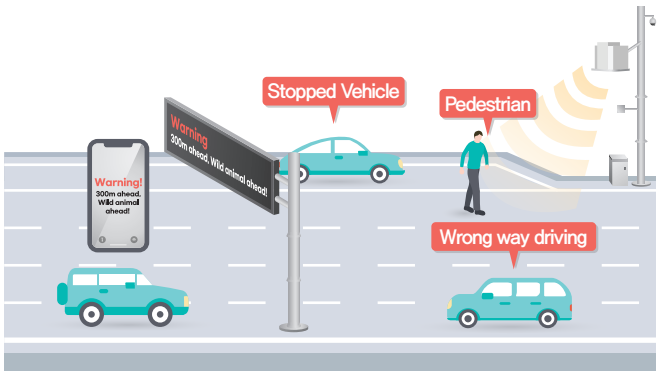


Optimal detection coverage in various geometries

Features

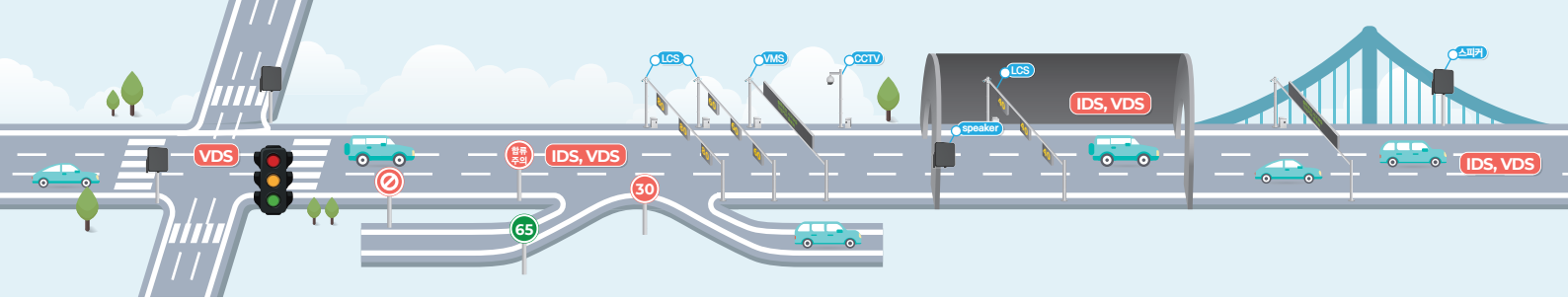
Metabuild's radars detect the location and speed of vehicles on the road, calculate traffic volume and average speed. also, The radars detect stopped vehicles, wrong way driving vehicles, and pedestrians,, etc. in real time.



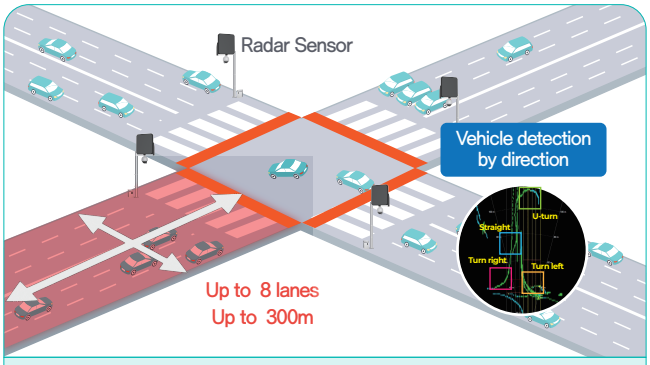


Traffic Flow | Traffic Monitoring | Traffic Analysis | Cooperate ITS | Traffic Incident

METABUILD

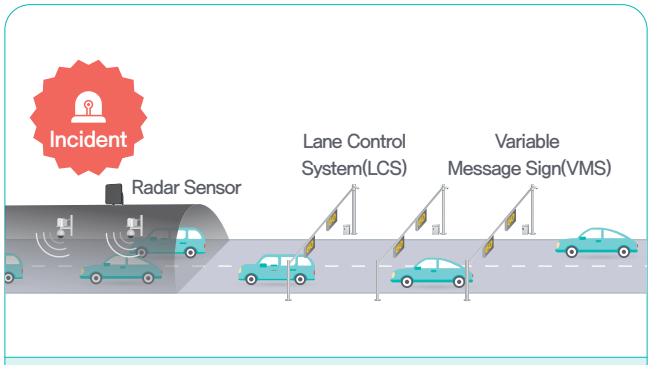


Services



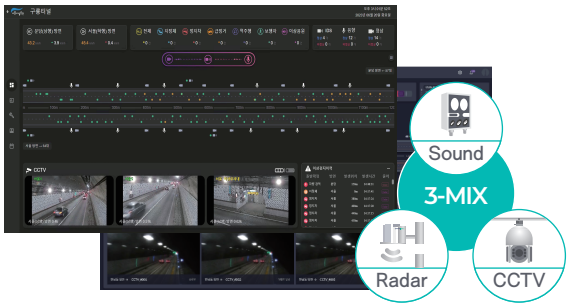
Intersection Signal Control Service

Signal optimization, responsive signaling, dilemma zone resolution, speed control of child protection zone, etc.



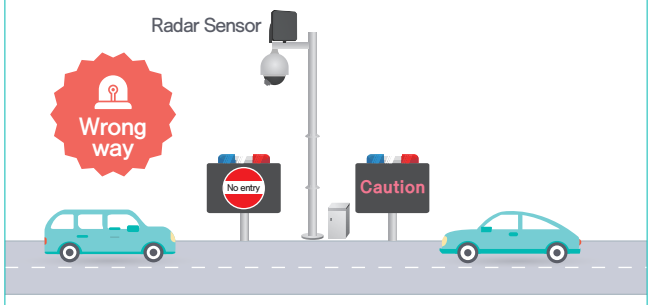
Tunnel and Bridge Safety Support Service

Tunnel and bridge safety support, traffic flow management through lane/speed control



3-MIX Tunnel Accident Detection Service

Automatic accident detection through 3-MIX fusion such as radar, video, and sound



Reverse Driving Prevention Service

Prevention of traffic accidents through detection and warning of wrong way driving vehicles

Specification

Type	Frequency	Update Time	Max. distance	Distance accuracy	Speed accuracy	Detection lane	No. of objects detected	IP Rating	Interface	Note
TMR-200	24GHz ISM	40ms	200m	± 0.2m	± 0.2km/h	6 lanes	256	6K9K	TCP/IP	-
TMR-350	60~61GHz MIMO	100ms	350m	± 0.3~0.8m	± 0.15km/h	8 lanes	256	IP67	TCP/IP	Left/right turn detection
TMR-1000	34~35GHz	100ms	1,000m	± 2m	± 2km/h	6 lanes	256	IP67	TCP/IP	-

METABUILD

H Q 62, Seochojungang-ro, Seocho-gu, Seoul, Korea (06640)
R&D 208, Hyoryeong-ro, Seocho-gu, Seoul, Korea (06708)
T +82-2-598-3327~8, 3340 F +82-2-598-3329 E info@metabuild.co.kr www.metabuild.co.kr