



INFINITY INNOVATION  
**ENITT**

# DISASTER SAFETY MANAGEMENT SOLUTION WITH ENITT

## e-DAS Distributed Acoustic Sensing

AI-based safety monitoring system with optical fiber acoustic distribution sensor



## e-DTS Distributed Temperature Sensing

AI-based safety monitoring system with fiber-optic distributed temperature sensor



## e-DSS Distributed Strain Sensing

AI-based safety monitoring system with fiber-optic distributed temperature sensor



## e-FOAE Fiber Optic Acoustic Emission

AI-based Safety monitoring system with optical fiber acoustic emission sensor



(주)에니트 T : +82 62)972-0830 F : +82 62)974-0830 E : enitt@enitt.co.kr

Head Office | 333, Cheomdangwagi-ro, Buk-gu, Gwangju, Republic of Korea  
 Seoul Branch | 4F, 23, Gangnam-daero 37-gil, Seocho-gu, Seoul, Republic of Korea  
 Joennam Branch | 679, Bitgaram-ro, Naju-si, Jeollanam-do, Republic of Korea

[www.enitt.co.kr](http://www.enitt.co.kr)

Copyright © ENITT Corp. All rights reserved.

[www.enitt.co.kr](http://www.enitt.co.kr)

**ENITT**



# The center of the Disaster Safety AI Solution

## e-DAS Distributed Acoustic Sensing

AI-based safety monitoring system with optical fiber acoustic distribution sensor



Monitoring of structural abnormalities through acoustic vibration data

The only product in Korea that can continuously measure long-distance sections (about 50km)

Real-time classification based on artificial intelligence deep learning

Securing price competitiveness of 50% or less compared to other companies

100% guarantee constant operating rate, 24-hour fast maintenance

### Application Field



### Product specification

Distance Range	50km	Minimum Sampling Rate	10kHz (up to 10km fiber length) 20kHz (up to 5km fiber length)
Channel Option	1	Performance Temperature	IEC 61757-3-2
Position Resolution	1m	Operating	0°C~ 50°C
Data Accuracy	±1m		

\* Product specifications are subject to change depending on purpose and environment.

## e-DTS Distributed Temperature Sensing

AI-based safety monitoring system with fiber-optic distributed temperature sensor



Structure abnormality monitoring through temperature data

Supports 1m unit spatial resolution

Immunity to electromagnetic noise by sensing method using optical fiber

Real-time classification based on artificial intelligence deep learning

Fast 24-hour maintenance ensures 100% always-on operation

### Application Field



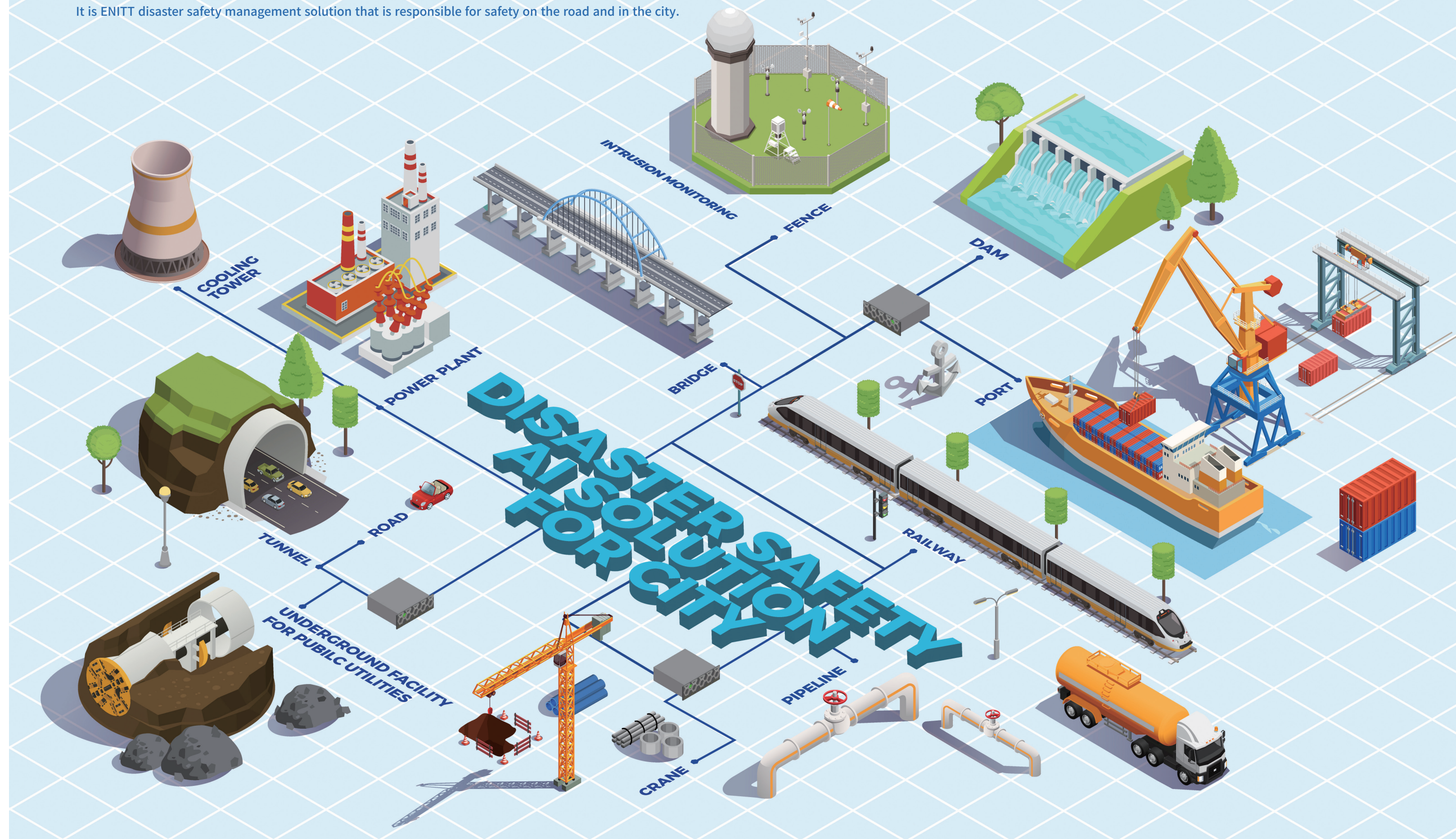
### Product specification

Distance Range	16km(MMF), 30km(SMF)	Temperature Accuracy	±1°C
Channel Option	8	Minimum Sampling Rate	20kHz (up to 5km fiber length)
Spatial Resolution	1m	Performance Authentication	IEC 61757-3-2
Temperature Resolution	-20°C~ 90°C (Depending on sensing fiber coating material)	Operating Temperature	0°C~ 50°C

\* Product specifications are subject to change depending on purpose and environment.

The more points connect to lines and lines to faces, the safer we are.

It is ENITT disaster safety management solution that is responsible for safety on the road and in the city.



## e-DSS Distributed Strain Sensing

AI-based safety monitoring system with high-precision temperature/strain sensor of optical fiber



Improving precision by fusion with LiDAR technology for the first time in Korea

Monitoring of structural anomalies through high-resolution strain distribution measurement

Continuous status monitoring possible without dead zone for all installed sections

Precise safety diagnosis possible due to high position resolution

Real-time classification based on artificial intelligence deep learning

Fast 24-hour maintenance ensures 100% always-on operation

System construction and maintenance cost reduction by securing cost competitiveness

### Application Field



### Product specification

Measurement Intervals	100mm	Data Update Time	10sec
Measuring Sensor Length	100m	Temperature Compensation Range	-20~80°C
Strain Measurement Range	±3,000µε	Temperature Compensation Precision	±2
Strain Resolution	5µε	Abnormal State Analysis Time Required	30sec

\* Product specifications are subject to change depending on purpose and environment.

## e-FOAE Fiber Optic Acoustic Emission

AI-based Safety monitoring system with optical fiber acoustic emission sensor



Non-electrical cable that does not require a separate power cable

Simultaneous measurement of up to 16 channels

24/7 remote monitoring possible

Strong sensitivity that does not require an amplifier for external stimulus detection signals

Capable of measuring up to 1km long distance

Real-time classification based on artificial intelligence deep learning

Fast 24-hour maintenance ensures 100% always-on operationdetection signals

System construction and maintenance cost reduction by securing cost competitiveness

### Application Field



### Product specification

Measurement Frequency Range	100~400kHz	Number of Measurement Channels	16
Sensor Operating Temperature	-20~80°C	Sampling Speed	1MS/s
Measuring Distance	1000m		

\* Product specifications are subject to change depending on purpose and environment.