KIFTA TECHNOLOGIES

OFSS8000 DATASHEET

Horizon-DAS - Distributed Acoustic Sensor

The Horizon-DAS series of distributed vibration sensors is an extremely versatile monitoring system, with the capability to monitor a wide range of buried installations (perimeters, cables, pipelines, borders..). There are a range of units providing coverage from 5 to 100km and all with inbuilt intelligent classification engines for accurate location of intrusion events with minimal nuisance events and false alarms.

Features

Long distance monitoring – up to 100km per unit. Ability to monitor buried cable

Location of intrusion event to within 5m over long distances

Intelligent classification engine with motion recognition

Based on single fiber optic sensing cable. No individual sensors, no metal or moving parts

Robust and reliable instrumentation with no moving parts (fan free) and utilising high reliability telecom components

Benefits

Simple to stall and low overall cost of ownership

Ability to react to precise location of event for rapid action and effective troubleshooting.

High detection rate of all intrusion events with low nuisance and false alarm rates

Easy to install and low cost of ownership with low ongoing maintenance costs

High percentage system uptime giving complete coverage at all times

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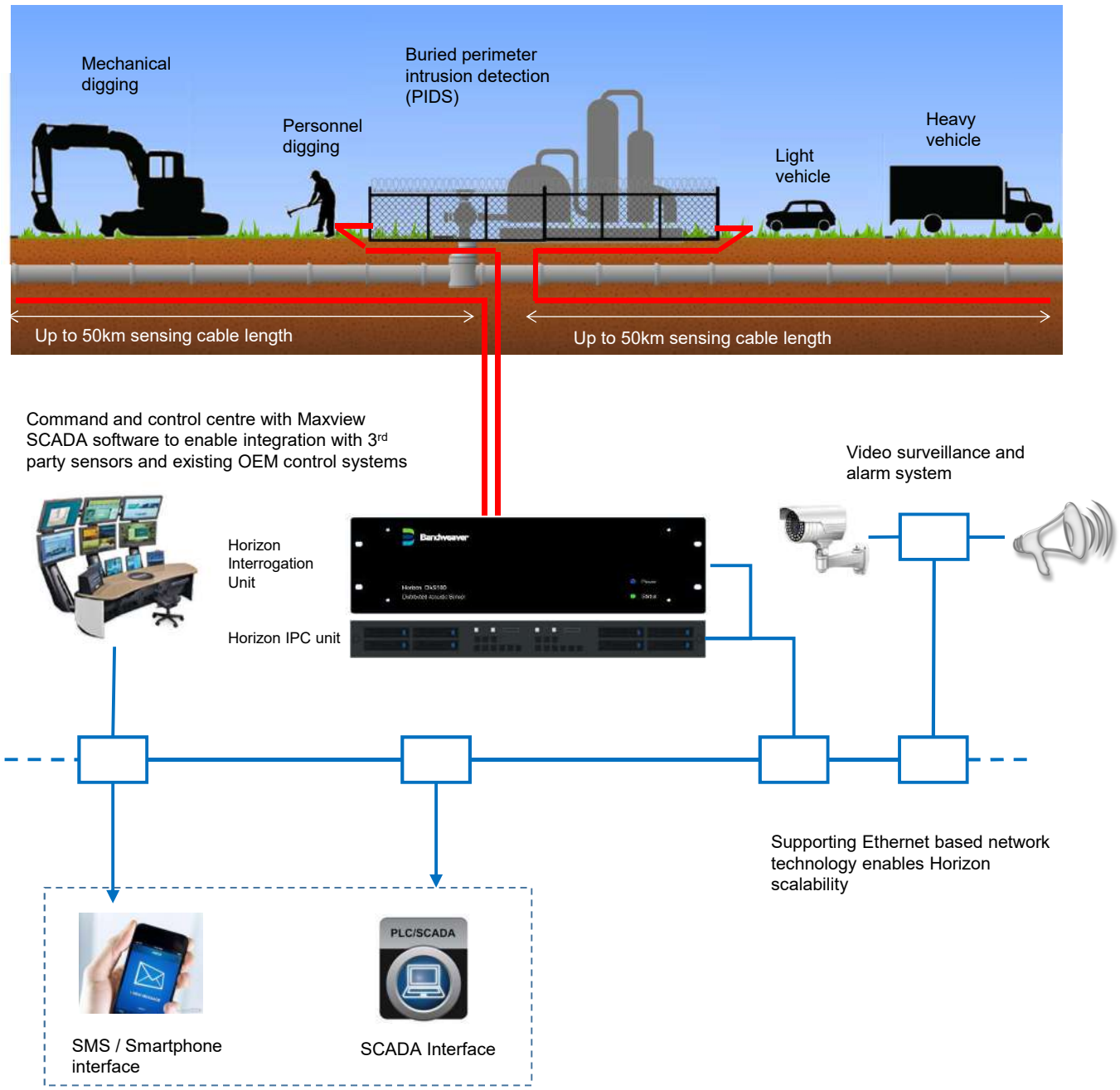
Horizon Model	DAS 5	DAS 10	DAS 20	DAS 40	DAS 50	DAS 100
Smart Zones	1000+ zone, fully configurable, independent of each other					
Event Classification	Personnel, Manual Digging, Vehicle, Mechanical Digging					
Range (per unit)*	5km	10km	20km	40km	50km	100km
Positional Accuracy	±5m					
Number of channels	1	2	1	2	1	2
Frequency range	1Hz-8kHz	1Hz-8kHz	1Hz-1.6kHz	1Hz-1.6kHz	1Hz-800Hz	1Hz-800Hz
Optical fiber type	G.652/ G.654 single mode optical fiber					
Response Time	2 to 10 seconds					
Voltage	100 ~ 240V (AC)					
Power consumption	25W					
Data Export	TCP/IP to IPC. Multiple interfaces via IPC/MaxView					
Operating temperature	-10 to 55˚C					
Laser Safety Class	Class 1M (EN60825-1) 2000 / Output power < 10mW					

**Range is dependent on the optical quality of the sensing cable route. This can be confirmed upon reviewing an OTDR trace. Maximum possible range in ideal conditions is 130km for a dual channel system (65km per channel)*

System Architecture

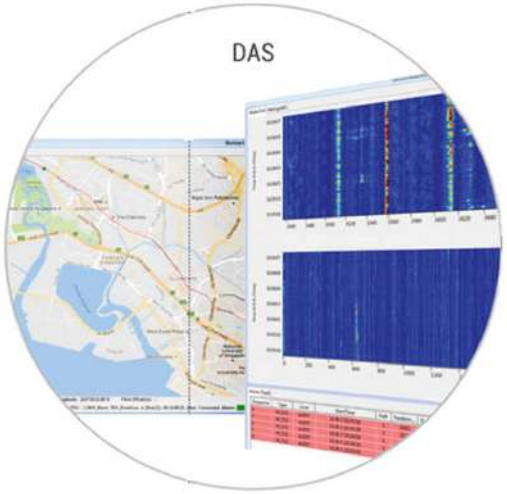
The Horizon system has an extremely flexible system architecture enabling it to integrate either with Kifta's Maxview SCADA software or with 3rd party security and control systems.

With the loose coupling architecture of Maxview it can integrate multiple systems across multiple sites with one coherent, customisable, easy to install user friendly interface



User Interface

The Horizon system utilises in-built software with advanced data analytics and intelligent classification engine. With the GIS mapping interface, alarming functionality and waterfall data analytics this can be used as a standalone solution or with Kifta's power Maxview SCADA software



Certifications, Standards and Approvals

Kiftat undertakes testing according to multiple international and industry specific standards. Below is a sample of some of the approvals undertaken within this industry segment.

CE 2014/30/EU 2014/35/EU	Electromagnetic Compatibility Directive Low Voltage Directive
IEC 60185-1 2007	Class 1M Laser Safety Directive
EN 61010-1 : 2010	Safety requirements for electrical equipment for measurement, control and laboratory use
FCC Part 15B EMC	American national standard for methods of measurement if radio noise emissions from Low-Voltage Electrical and Electronic Equipment
FDA 21 CFR 1002.11, 1002.13, 1010-105, 807, 812, 814	FDA radiation emitting products and procedures