

## Global References – Fire Detection

Based on our HP / Agilent heritage, with over 25 years of fiber optic measurement leadership, we stand for high quality and well-designed solutions for distributed optical sensing systems (DTS, DAS, DVS). With thousands of successful installations worldwide, our solutions are safeguarding millions of meters within very valuable infrastructures.

Our systems are ideally suited for both small scale projects (short conveyor belts, tunnels, parking garages, oil storage tanks, dams and dykes or oil reservoirs), as well as large and prestigious projects such as the Eurotunnel, Mecca Royal Clock Tower, the Olympic City in Rio de Janeiro, offshore platforms, Pipelines, Refineries, LNG Terminals or the Fukushima Ground Freezing Project.

Key applications are:

- Power Cable Monitoring – Real time thermal rating of onshore and offshore HV cables
- Fire Detection – Special hazard buildings, tunnels, conveyors, cable galleries
- Pipeline Monitoring – Gas and liquid pipelines, leak detection, TPI
- Oil & Gas Well Sensing – Reservoir performance monitoring
- LNG Monitoring – Tank annulus, base slab, leakage detection
- Geothermal Monitoring – Geothermal wells, rivers, dams and dykes, ground water

The following show some of our reference projects in fire detection (incl. ongoing):

2017	Fire Detection – Road Tunnel (Turkey)	Eurasia Tunnel in Istanbul; 5 km subsea double deck road tunnel
2017	Fire Detection – Conveyor Belt (Finland)	Two four channel systems monitoring multiple conveyor belts in a pulp mill in Finland
2017	Fire Detection – Bus Station (Spain)	One LHD with 2.500 m cable for a bus station in Girona
2017	Fire Detection – Road Tunnel (Serbia)	Road tunnel in Serbia equipped with a four channel LHD and 5 km of steel sensor cable
2017	Fire Detection – Road Tunnel (UAE)	MTA Tunnel in Abu Dhabi equipped with an LHD system in redundancy; visualization with SmartVision
2017	Fire Detection – Rail Tunnel (India)	Delhi Metro Rail, Phase III Lot 2
2017	Fire Detection – Process Plant (Finland)	LHD system with 2 km range for fire detection in a poultry process plant in Finland
2017	Fire Detection – Road Tunnel (Egypt)	Ahmed Hamdi Tunnel, Suez Canal Development Project
2017	Fire Detection – Road Tunnel (Turkey)	Multiple road tunnels in Turkey, monitored for fires by six multi channel LHD systems

2017	Fire Detection – Road Tunnel (Spain)	Multiple road tunnels in Spain, monitored for fires by 6 LHD systems in single and dual ended configuration
2017	Fire Detection – Cable Trays (Finland)	Protecting cable trays in power plant in Kuopio; dual channel system with 2 km range
2016	Fire Detection – Road Tunnel (Taiwan)	Six road tunnels at Jing Mei Road protected by six dual channel LHD systems with a total of 13.4 km sensor cable
2016	Fire Detection – Parking Garage (Netherlands)	Parking Garage P5 at Schiphol Airport, Amsterdam, protected in full redundancy by two 4 km LHD units
2016	Fire Detection – Conveyor Belt (KSA)	Conveyor belts and Maaden Phosphate protected in full redundancy by two 2 km LHD dual channel system
2016	Fire Detection – Furnace (Taiwan)	one LHD unit with two channels monitoring in closed loop configuration (1.7 km cable)
2016	Fire Detection – Conveyor Belt (Japan)	Conveyor belts at Nippon Steel monitored by one LHD system
2016	Fire Detection – Aircraft Hangar (UK)	4 x dual channel LHD with 2 km monitoring two hangars in full redundancy; London
2016	Fire Detection – Coal Ships (Croatia)	Monitoring of conveyor belts and engine rooms on self-unloading coal ship; one LHD unit and 1.5 km cable
2016	Fire Detection – Road Tunnel (Greece)	Short Kastoria tunnel protected by one LHD unit in closed loop configuration (580 length)
2016	Fire Detection – Bus Terminal (Australia)	Bus terminal at Elizabeth Quay protected by one dual channel system with 4 km sensor cable
2016	Fire Detection – Road Tunnel (USA)	Louisville East End Tunnel monitored by two dual channel LHD systems
2016	Fire Detection – Utility Tunnel (Finland)	Three utility tunnels in Helsinki protected by three 6 km dual channel LHD units; plus one spare unit for 24 hours SLA
2016	Fire Detection – Fixed Roof Tanks (Oman)	Tank farm in Muscat monitored by four independent LHD systems with 4 km sensor cable
2016	Fire Detection – Conveyor Belt (Japan)	Conveyor belts monitored by three multichannel

		LHD units at Donghae Power Plant
2016	Fire Detection – Train Depot (USA)	Fire detection at Hudson Yard Overbuild Project; combination of 8 x DTS and 4 x DAS systems, 300 °C rated sensor cable, ~50 individual deluge zones
2016	Fire Detection – Road Tunnel (Greece)	9.2 km long dual tube Kallidromo tunnel protected by five LHD units in closed loop configuration
2016	Fire Detection – Road Tunnel (India)	Five dual channel LHD systems with 8 km range and 26 km sensor cable for fire detection in a tunnel; active control of ventilation system
2016	Fire Detection – Conveyor Belt (Japan)	One system for fire detection along coal conveyor belts at Mitsubishi Gas Thermal Power Plant
2016	Fire Detection – Coal Ships (Croatia)	Monitoring of conveyor belts and engine rooms on self-unloading coal ships; three LHD units and 3 x 1.5 km cable
2016	Fire Detection – Cable Trays (Hong Kong)	Two 8 km dual channel LHD units monitoring cable trays in the tunnel of Tsing Ma Bridge
2016	Fire Detection – Road Tunnel (Taiwan)	Tunnel to Song Shan Airport protected by one LHD unit in closed loop configuration (1.6 km cable)
2015	Fire Detection – Building (Taiwan)	Heat detection in National Palace Museum; one LHD unit with two loops
2015	Fire Detection – Road Tunnel (Finland)	Two 2.3 km tunnels in full redundancy and one 500 m tunnel protected by three LHD units; with Modbus integration and external relays
2015	Fire Detection – Road Tunnel (Vietnam)	1.5 km road tunnel monitored with one LHD unit
2015	Fire Detection – Substation (Taiwan)	One LHD unit protecting high voltage substation with 400 m sensor cable
2015	Fire Detection – Rail Tunnel (Malaysia)	Seven dual channel LHD units monitoring stations and concourse of Kuala Lumpur MRT
2015	Fire Detection – Road Tunnel (Israel)	New highway tunnel between Tel Aviv and Jerusalem, monitored by four LHD units in redundancy with 12 km sensor cable
2015	Fire Detection – Cable Trays (Korea)	Cable trays in steel plant monitored with 57 km sensor cable in total; with visualization software

2015	Fire Detection – Road Tunnel (Malaysia)	One dual channel LHD unit, monitoring 1 km sensor cable in closed loop (cable redundancy)
2015	Fire Detection – Cable Trays (Qatar)	Lusail Sports Stadium monitored by two LHD units in full redundant configuration
2015	Fire Detection – Road Tunnel (Qatar)	Al Rayyan tunnels in Qatar monitored by multiple LHD units in full redundancy
2015	Fire Detection – Freezer Warehouse (Sweden)	Freezer warehouse (130x80x40 m) monitored with 5.5 km sensor cable in redundant configuration; cable installed in multiple levels along the shelves
2015	Fire Detection – Parking Garage (Taiwan)	One LHD unit with 2.1 km sensor cable monitoring parking garage
2015	Fire Detection – Substation (China)	Supply tunnel of substations, including cable trays; at Jinxian, Jinxiang and Jinri substations, monitored by three LHD units
2015	Fire Detection – Rail Tunnel (Mexico)	Monterey Metro in Mexico protected by a dual channel 2 km LHD system
2015	Fire Detection – Parking Garage (China)	New parking garage with 7 floors, protected by two LHD controllers with automatic fire fighting system
2015	Fire Detection – Power Plant (Vietnam)	One LHD unit protecting power plant with 7 km looped cable
2015	Fire Detection – Substation (China)	Fire detection in several substations with four dualend controllers
2015	Fire Detection – Road Tunnel (USA)	Fully redundant configuration with 2 x 4 km dual channel LHD systems at I90 tunnels, Seattle; with alarm transmission over Modbus
2015	Fire Detection – Production Plant (Spain)	Sweets manufacturing plant; one LHD unit monitoring production lines
2015	Fire Detection – Rail Tunnel (China)	One four channel LHD system protecting Urumqi Railway Station, linked to low pressure water mist system
2015	Fire Detection – Rail Tunnel (Malaysia)	26 km sensor cable in MRT Tunnel, Kuala Lumpur; double redundancy by 9 LHD units
2015	Fire Detection – Floating Roof Tanks (Kuwait)	Tank farm with 10 tanks at Saudi Chevron; full redundant configuration
2015	Fire Detection – Utility Tunnel (UAE)	Saadiyat Island, utility tunnel monitored by one

		dual channel LHD
2015	Fire Detection – Road Tunnel (Hong Kong)	1.6 km two bore tunnel protected by one LHD unit in full redundancy at Hong Kong airport
2015	Fire Detection – Bus Depot (Australia)	One dual channel LHD unit, monitoring 2 km sensor cable in closed loop (cable redundancy)
2015	Fire Detection – Cable Trays (Korea)	Cable trays and conveyor belts monitored in biomass power plant by one 4 km dual channel DTS unit; with visualization software
2015	Fire Detection – Conveyor Belt (Korea)	Conveyor belts in biomass power plant monitored by one DTS with 3 km sensor cable; with visualization software
2015	Fire Detection – Road Tunnel (Israel)	Highway tunnel monitored by one LHD in closed loop configuration
2015	Fire Detection – Substation (Taiwan)	4 km dual channel LHD protecting Taiwan Power Linkuo Power Station
2015	Fire Detection – Utility Tunnel (France)	Monitoring technical tunnels in 500 m depth in full redundancy with 2 x 4 km dual channel LHD units
2015	Fire Detection – Road Tunnel (Australia)	3 km road tunnel monitored with two LHD units in full redundancy
2015	Fire Detection – Substation (China)	Fire detection in Jiangqing substation with one dualend controller
2015	Fire Detection – Rail Tunnel (Thailand)	14 km sensor cable in MRT Tunnel, Bangkok, monitored by 4 LHD units
2014	Fire Detection – Road Tunnel (Finland)	Freight transportation tunnel in Helsinki; 1 x dual-channel LHD
2014	Fire Detection – Substation (China)	Monitoring and protecting eight substations in Shanghai by eight individual LHD instruments
2014	Fire Detection – Rail Tunnel (Czech)	Underground Metro Prague, Line A at Motol, Petřiny, Dejvická, Malostranská, Můstek A, Muzeum A and Depo Hostivař stations (8 LHD units)
2014	Fire Detection – Cable Tunnel (Malta)	6.5 km cable utility tunnel; in addition to existing power cable monitoring system
2014	Fire Detection – Conveyor Belt (Germany)	Coal power plant in Wilhelmshaven, monitoring of hot running rollers; with SmartVision asset visualization

2014	Fire Detection – Substation (China)	Monitoring and protecting substation at Shanghai Center by one LHD instrument
2014	Fire Detection – Power Plant (Malaysia)	Monitoring and protecting switchgears and server cabinets in a coal power plant
2014	Fire Detection – Parking Garage (Netherlands)	3 km sensor cable, cable redundancy
2014	Fire Detection – Rail Tunnel (Czech)	Underground Metro Prague, Line B at Jinonice, Českomoravská, Nové Butovice, Černý Most, Smíchovské Nádraží and Depo Zličín stations (7 LHD units)
2014	Fire Detection – Road Tunnel (Germany)	Trappentretunnel, double-tubes; 4 x LHD instruments, fully redundant
2014	Fire Detection – Rail Tunnel (Finland)	8 x LHD instruments monitoring railway ring, 4 stations; fully redundant, with SmartVision asset visualization
2014	Fire Detection – Substation (China)	Monitoring and protecting substations at Shanghai Disney by five LHD instruments
2014	Fire Detection – Storage Hall (Germany)	One LHD for fire detection in a warehouse
2014	Fire Detection – Conveyor Belt (Malaysia)	one LDH unit monitoring conveyor belts with 2.6 km sensor cable
2014	Fire Detection – Conveyor Belt (Korea)	Conveyor belts in biomass power plant monitored by one DTS with 8 km sensor cable; with visualization software
2013	Fire Detection – Conveyor Belt (Spain)	2 km of coal conveyor belt in thermal power generation premises; steel cable in loop configuration (cable redundancy)
2013	Fire Detection – Road Tunnel (China)	One LHD instrument in dual-ended configuration for a 5.5 km traffic tunnel, in Shanxi
2013	Fire Detection – Conveyor Belt (Taiwan)	Fire Monitoring of conveyor belts with over 130 km sensor cable by 8 LHD instruments at China Steel factory
2013	Fire Detection – Substation (China)	Monitoring and protecting substations at Shanghai Film Plaza
2013	Fire Detection – Cable Tunnel (Singapore)	Jurong Rock Cavern Phase A, two cable tunnels with 2.0 km length each; One LHD

		instrument with cable redundancy
2013	Fire Detection – Rail Tunnel (Malaysia)	Bukit Berapit Rail Tunnel, two tubes with 3.3 km length; LHD instrument with 2 channels and 4 km range, Modbus integration
2013	Fire Detection – Road Tunnel (China)	One LHD instrument in dual-ended configuration for a 4.7 km traffic tunnel, in Shanxi
2013	Fire Detection – Train Depot (Singapore)	Fire Detection in urban railway depot and washing station Gali Batu; 3 x dual channel LHD units
2013	Fire Detection – Conveyor Belt (China)	One LHD with 10 km range protecting an underground coal mine in Huainan, approx. 800 m below surface
2013	Fire Detection – Hangar (UAE)	One DTS with 2 optical channels and 4 km range; relay extension
2013	Fire Detection – Road Tunnel (Finland)	1 km sensor cable measured by one dual channel DTS protects traffic tunnel in Finland
2013	Fire Detection – Road Tunnel (Germany)	Jagdbergtunnel, 2 x LHD with 8 km and 2 ch, fully redundant; SCADA integration via Modbus
2013	Fire Detection – Cable Tunnel (Taiwan)	Power plant, protection with 4 x LHD instrument, full redundant closed loop configuration
2013	Fire Detection – Road Tunnel (Germany)	Two LHD units in full redundant configuration, 2.2 km sensor cable length
2013	Fire Detection – Road Tunnel (China)	Seven LHD instrument in single-ended configuration for traffic tunnels in Chongqing
2013	Fire Detection – Cable Tunnel (Korea)	4 km cable utility tunnel in Samsung factory
2013	Fire Detection – Tank Farm (Netherlands)	Fire monitoring in tank farm, ATEX zone 0; one DTS in loop configuration, including external relay extension
2013	Fire Detection – Rail Tunnel (Spain)	An 8 km long tunnel for high speed trains between North and South Madrid protected by an LHD system
2013	Fire Detection – Road Tunnel (Germany)	Two LHD units in full redundant configuration, 3 km sensor cable length; A448 Bochum Westtangente

2013	Fire Detection – Road Tunnel (Singapore)	CTE Tunnel, 8 x 2 channel DTS with 4 km measurement range; two fully integrated racks
2013	Fire Detection – False Floor (Germany)	10 x LHD instruments monitoring in full redundancy a new office building, 2 stories
2012	Fire Detection – Conveyor Belt (India)	Protection of cable galleries and conveyors in power plant; 2 x 8 km closed loop configuration
2012	Fire Detection – False Floor (Hong Kong)	Three LHD units monitoring false floors in Civil Aviation Department
2012	Fire Detection – Rail Tunnel (India)	Fire Detection in Kashmir Tunnel, 13 km length, 10 LHD instruments, full redundant configuration
2012	Fire Detection – Rail Tunnel (Netherlands)	Linear Heat Detection in 3 metro stations of Rotterdam's Metro, 3 x independent LHD units
2012	Fire Detection – Road Tunnel (KSA)	3 tunnels at Riyadh Airport, 3 lines per tunnel; protected in full redundancy with 6 x LHD instruments and 12.000 meters of steel cable
2012	Fire Detection – Conveyor Belt (China)	Conveyor belt monitoring at port administration, dual-ended
2012	Fire Detection – Road Tunnel (Germany)	Two LHD units in full redundant configuration, 3 km sensor cable length
2012	Fire Detection – Rail Application (Spain)	2 km in new cover in “Sants Train Station entry”, 2 lines, one LHD instrument with safety cable in dual-ended configuration; Barcelona
2012	Fire Detection – Cable Trays (China)	Two LHD units permanently monitoring cable trays in Bao Steel Factory
2012	Fire Detection – Conveyor Belt (UK)	Conveyor belt monitoring in a steel mill near Middlesbrough
2012	Fire Detection – Rail Tunnel (Spain)	8 km high speed train tunnel "Serrano Tunnel" along Madrid city; LHD single-ended
2012	Fire Detection – Road Tunnel (China)	9 tunnels between Xiamen and Chendu monitored by LHD instruments
2012	Fire Detection – Tank Farm (UAE)	Fire monitoring in Fujirah tank farm, two DTS in loop configuration including software package
2012	Fire Detection – Cable Tunnel (Netherlands)	1.2 km cable, dual-ended (closed loop) configuration



2012	Fire Detection – Rail Tunnel (Spain)	2 km high speed train tunnel "Montmeló Tunnel" with 2 lines; double-ended configuration
2012	Fire Detection – Rail Tunnel (Czech)	Underground Metro Prague, Line C at Vyšehrad, Budějovická and Depo Kačerov stations (3 LHD units)
2012	Fire Detection – Conveyor Belt (Taiwan)	Fire Monitoring of conveyor belt with 1 km sensor cable in dual-ended configuration at China Steel factory
2012	Fire Detection – Offshore Platform (Germany)	Fire monitoring of offshore transformer rooms, four LHD units with 1.2 km sensor cable, full redundant configuration
2012	Fire Detection – Cable Tunnel (Netherlands)	Linear Heat Detection in a cable supply tunnel, 2.8 km in dual-ended loop configuration
2012	Fire Detection – False Floor (KSA)	Protecting crescent and upper tower parts at Mecca Royal Clock Tower (2 <sup>nd</sup> largest tower on earth); full redundant protection with 4 x 3 km dual-channel DTS instruments and 6 km sensor cable
2012	Fire Detection – Cable Tunnel (Japan)	Heat detection in cable duct at iron & steel works; 1 km loop
2011	Fire Detection – Conveyor Belt (Japan)	Conveyor Belt Monitoring at Nippon Steel – Kimitsu
2011	Fire Detection – Conveyor Belt (Japan)	Coal Conveyor belt monitoring, 1 x 3 km, 1 x 2 km multi-channel configuration
2011	Fire Detection – Road Tunnel (Singapore)	Woodsville Tunnel, 3 x dual channel LHD units
2011	Fire Detection – Rail Tunnel (KSA)	Metro protection in KSA, Canteen area
2011	Fire Detection – Rail Tunnel (Singapore)	22 LHD instruments for full redundant linear heat detection solution in Singapore Metro
2011	Fire Detection – LED Media Wall (KSA)	Protecting Media Wall at Mecca Royal Clock Tower (2 <sup>nd</sup> largest tower on earth); 11 km Full Redundant Protection
2011	Fire Detection – Conveyor Belt (Germany)	1.5 km Fire Detection in Coal Power Plant and Steel Factory in Duisburg
2011	Fire Detection – Power Plant (Taiwan)	12 km monitoring of power cables in supply tunnels, Taiwan Power Company, Gaogang /

		Wujia, two LHD instruments
2011	Fire Detection – Cable Trays (Romania)	National Stadium in Bucharest, monitoring 2.5 km cable trays powering playing field lights
2011	Fire Detection – Road Tunnel (Spain)	Barranco de la Batalla Tunnel in Alcoy, Alicante, 2 km in loop configuration
2011	Fire Detection – Rail Tunnel (France)	Eurotunnel Part 2, 16 LHD instruments for fire detection and triggering water mist system, Calais – Folkstone
2011	Fire Detection – Road Tunnel (Spain)	Las Pedrizas, Málaga, 1.5 km dual-channel
2011	Fire Detection – Tank Farm (Korea)	Floating Roof Tank Monitoring
2011	Fire Detection – Conveyor Belt (Spain)	6 km coal conveyor belt in Compostilla Thermal Electricity Complex, 13 km sensor cable, loop configuration
2011	Fire Detection – Conveyor Belt (South America)	Conveyor Belt Monitoring in mines in Chile, dual-channel configurations
2011	Fire Detection – Tank Farm (France)	Fixed Roof Tank Monitoring for flammable substances, 3.8 km sensor cable in ATEX area Zone 0
2011	Fire Detection – Road Tunnel (Spain)	Canyelles, 1.7 km traffic tunnel, near Barcelona
2011	Fire Detection – Road Tunnel (Spain)	Santiago de Compostela, 1 km tunnel in loop configuration
2011	Fire Detection – Tank Farm (KSA)	4 and 8 km LHD instrument, fixed roof tank monitoring in ATEX Zone 0 area
2011	Fire Detection – Conveyor Belt (Japan)	Conveyor Belt Monitoring at Nippon Steel – Nagoya
2011	Fire Detection – Cruise Ship (Italy)	Linear Heat Detection on balconies on a Costa Victoria cruise ship; precise visualization & location per balcony
2011	Fire Detection – Power Plant (Russia)	Fire Detection in a Nuclear Power Plant
2011	Fire Detection – Conveyor Belt (Spain)	0.5 km conveyor belt in Coke Sile
2011	Fire Detection – Road Tunnel (Greece)	Fire detection in double tube tunnel Igoumenitsa-Ioannina, approx. 1,5 km cable, redundant loop configuration
2010	Fire Detection – Road Tunnel (China)	Shanghai Dapu Road two tunnels 2.7 km

2010	Fire Detection – Road Tunnel (China)	HeBei ChenTang highway road tunnel project – 1 x 8 km tunnel
2010	Fire Detection – Road Tunnel (China)	ShanXi Jincheng to Houma highway road tunnel project 3.4 km tunnel and 3 km tunnel
2010	Fire Detection – Power Plant (Korea)	Boryung Fire Electric Power
2010	Fire Detection – Road Tunnel (France)	La Mescla and Reveston Tunnel, Maritime Alps
2010	Fire Detection – Road Tunnel (China)	Shanghai LongYao Road tunnels 4 km
2010	Fire Detection – Road Tunnel (China)	HeBei province ChenChao Highway road tunnel project 6 x 4 km, 1 x 8 km tunnel
2010	Fire Detection – Rail Tunnel (Italy)	Metro System Napoli
2010	Fire Detection – Rail Tunnel (Czech)	Metro Prague two control rooms
2010	Fire Detection – Conveyor Belt (Turkey)	Coal Power Plant ZETES, 24 km
2010	Fire Detection – Road Tunnel (China)	ZheJiang Qing Cun Road tunnel – First Under Qian Tang River tunnel, 5.4 km tunnel
2010	Fire Detection – Road Tunnel (Turkey)	Kemer Tunnel, Antalya, 2 Tunnels with 2 km
2010	Fire Detection – Road Tunnel (Spain)	Ranadoiro Tunnel, Asturias, 1 Tunnel, 1.9 km
2010	Fire Detection – Cable Trays (Japan)	Heat Detection of power cables in culvert of cold plate factory at Nippon Steel
2010	Fire Detection – Road Tunnel (China)	HongYou - Wushan to Fengjie - Chongqing to Yichang
2010	Fire Detection – Road Tunnel (France)	Tunnel Cap Estel, Cote d'Azur, Nice
2010	Fire Detection – Road Tunnel (Spain)	Los Yébenes Road Tunnel, Toledo
2010	Fire Detection – Rail Tunnel (France)	Eurotunnel Part 1, Calais – Folkstone; 16 DTS instruments
2010	Fire Detection – Conveyor Belt (Germany)	Underground Coal Mine with RAG
2010	Fire Detection – Cable Trays (KSA)	Princess Nora University Riyadh 60 km power utility tunnel
2010	Fire Detection – Road Tunnel (China)	HeBei BaoFu highway road tunnel project – 3 x 4 km
2009	Fire Detection – Road Tunnel (UK)	Road Tunnel “Hindhead”
2009	Fire Detection – Cable Trays (Japan)	Culvert Temp Monitoring at rail production Work

		at NS-Yahata
2009	Fire Detection – Offshore Platform (Germany)	Offshore platform (offshore windpark)
2009	Fire Detection – Parking Garage (Germany)	Europort II Kehlheim
2009	Fire Detection – Road Tunnel (Korea)	Borae Ryung Tunnel, 2 lines with 2 km
2009	Fire Detection – Road Tunnel (China)	ChongQing Highway, totaling over 50 km of monitoring distance
2009	Fire Detection – Tank Farm (Switzerland)	Gas storage tanks of a solar manufacturer
2009	Fire Detection – Road Tunnel (UK)	Road Tunnel “Hatfield”, two 2-lane bores, full redundant setup
2009	Fire Detection – Cable Tunnel (Korea)	KEPCO power utility tunnel
2009	Fire Detection – Composting Facility (Italy)	Monitoring of organic compost generation area
2009	Fire Detection – Cable Tunnel (Taiwan)	Power Utility Tunnel, one channel with 2 km sensor cable
2009	Fire Detection – Road Tunnel (Turkey)	Road Tunnel Chain “Pozanti”, 8 Tunnels with more than 20km
2009	Fire Detection – Conveyor Belt (Italy)	Coal Power Plant , Brindisi
2009	Fire Detection – Conveyor Belt (Japan)	at NS-Yahata two lines with 2 km each
2009	Fire Detection – Chemical Plant (Italy)	I.C.R., Reggio Emilia, 4.900m <sup>2</sup> Production area is ATEX classified
2009	Fire Detection – Cable Trays (Germany)	National Library, Berlin
2009	Fire Detection – Road Tunnel (Italy)	N28 Tunnels “Monte Uliveto” & “Torria”
2009	Fire Detection – Road Tunnel (Czech)	City Tunnel Prague
2009	Fire Detection – Building (Finland)	Heritage-Protected Church
2008	Fire Detection – Cable Trays (Japan)	Nippon Petroleum-Mizushima Refinery
2008	Fire Detection – Parking Garage (Netherlands)	Parking Garage Wereldhaven 3 torens. L 110 m x W 35 m = 3850 m <sup>2</sup> with 3 fire zones
2008	Fire Detection – Conveyor Belt (Japan)	JFE-Fukuyama Steel; conveyer belt monitoring with 64 point probes – 4 km loop installation

2008	Fire Detection – Stock Pile (Spain)	Silo La Coruna coal storage dome, with more than 10 million tons of coal
2008	Fire Detection – Road Tunnel (Norway)	IF / Tyco mega fire tests of up to 100 MW
2008	Fire Detection – Road Tunnel (Italy)	Massimo Visconti Tunnel 2 tubes 3000 m each
2008	Fire Detection – Power Plant (China)	ShanXi HanCheng, Power plant, fire alarm monitoring
2008	Fire Detection – Road Tunnel (Italy)	Tunnel Galleri di Moena, 1.300 m
2008	Fire Detection – Road Tunnel (China)	ShanDong Province: 6 high way tunnels, total of 48 km with 6 DTS instruments
2008	Fire Detection – Tank Farm (China)	ShangHai JinShan, Chemical group, T103 oil tank temperature monitoring.
2007	Fire Detection – Cable Tunnel (Taiwan)	Fire Detection of Underground City Tunnel in Taipei
2007	Fire Detection – Road Tunnel (Sweden)	SP Boras Sweden / Tyco, extensive fire detection and suppression tests (2.4 to 16.8 MW, in 1:1 scale)
2007	Fire Detection – Road Tunnel (China)	LiaoNing, FuXin-ChaoYang high way, tunnel fire alarm monitoring
2006	Fire Detection – Conveyor Belt (Germany)	ATEX Zone 0 installation; early detection of smoldering fire in close proximity of conveyer belt systems; RAG
2006	Fire Detection – Road Tunnel (Switzerland)	Fire test in test tunnel, Hagerbach