



DAS
Application Areas



DTS
Application Areas

Fiber Optic Sensing Cables Selection Guide

User Guide



Founded in 2003, SAMM Technology offers cutting-edge products and services in the fields of telecommunication infrastructure and data center by producing in line with the expectations and needs of its customers.

With more than 20 years of experience, SAMM Technology has become one of the important suppliers of Europe in terms of capacity, technology and innovation by continuously investing in production, technology, R&D and people.

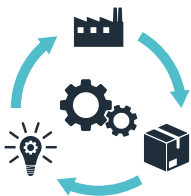
SAMM Teknoloji produces high performance fiber optic cables, fiber optic cable assemblies, data center infrastructure products and structured cabling solutions in its two factories located in the Gosb/Gebze industrial zone.

SAMM also has a ministry-approved research and development center since 2017.



20+ Years' Experience

With more than 200 employees and 2 factories, we have achieved several significant projects in telecommunication fiber optic infrastructure.



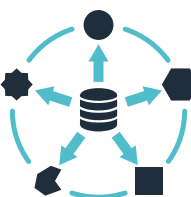
World Class Production

With systematic and scientific methods, we always focus on reaching the highest quality in our fiber optic cable production and assembly lines.



Connecting Continents

An advantageous shipping location, at the intersection of Asia, Europe and the Middle-East.



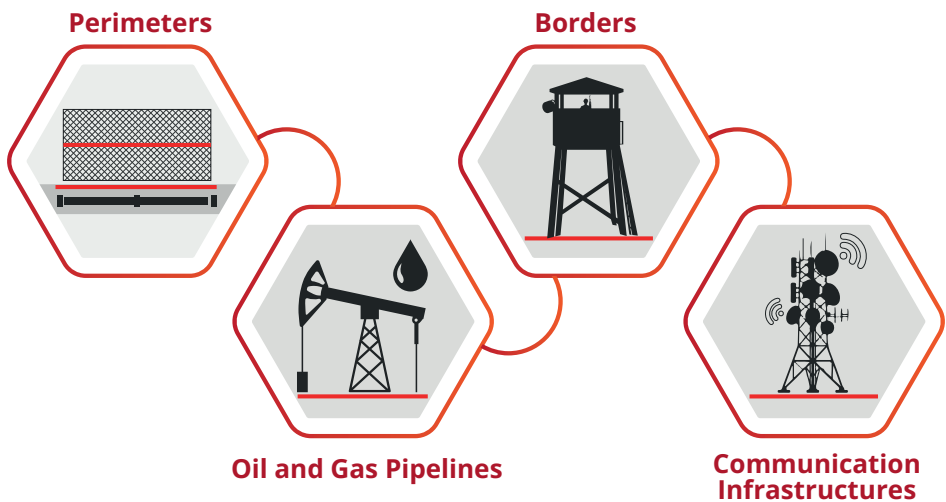
Innovative Solutions

We are passionate about responding to customer demand and keeping pace with the ever-evolving telecommunication and fiber optic technologies.

DAS (Distributed Acoustic Sensing)

Application Areas

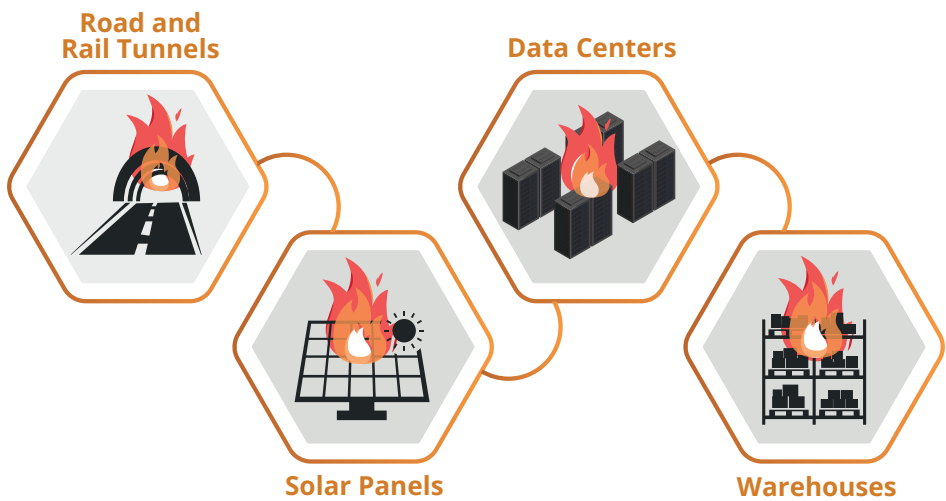
- Oil & Gas pipelines
- Border security and surveillance
- Perimeter security and surveillance
- Transportation (rail and road)
- Energy (Solar, wind farms)
- Prisons
- Marines & Ports
- Underwater asset management and monitoring



DTS (Distributed Temperature Sensing)

Application Areas

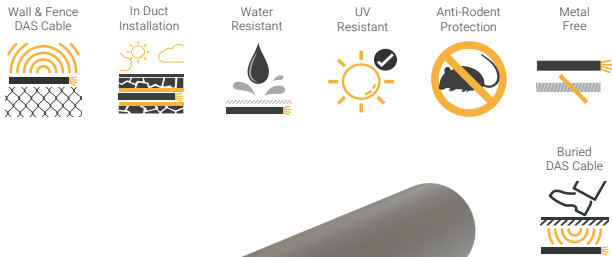
- Tunnels
- Cable trays
- Conveyors
- Power distribution apparatus
- Cooling towers
- Mines
- Pipelines
- Bridges, piers, marine vessels
- Aircraft hangars



CLT, Gel-Filled, Dry Core, Non-Metallic Armoured, SJ, PE, DAS Cable

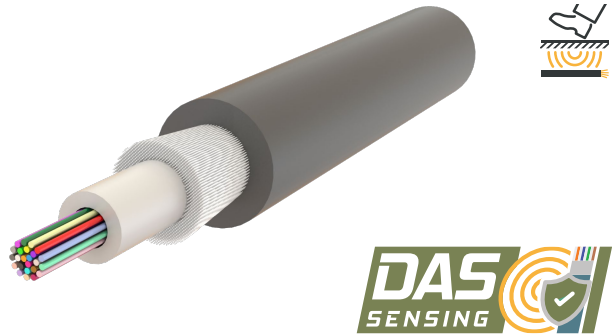
Design Type A-D1Q(ZN-GY)B2Y

Direct Buried, Fence and Wall Mounted Applications



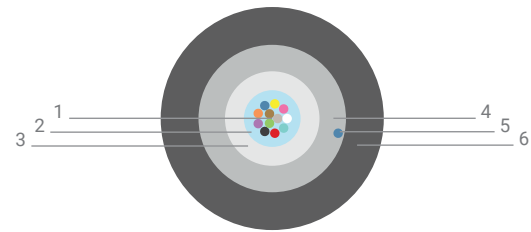
Properties

- Durable, high-performance outdoor fiber optic cable
- PE jacket with metal-free, all-dielectric structure
- Glass armouring for rodent protection
- Watertight and UV-resistant for harsh environments
- Ideal for DAS, pipelines, perimeter, and border monitoring
- Long-lasting solution for fence and wall installations
- Optimized sensitivity for intrusion events detection in FOTAS systems
- Suitable for direct buried applications



Cable Construction

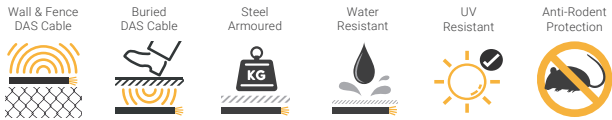
1	Fiber	Single-Mode (250 μ)
2	Tube Filling Compound	Thixotropic Gel
3	Loose Tube	PBT
4	Strength Member	Swellable Glass Yarn
5	Ripcord	Polyester
6	Outer Jacket	UV Resistant PE



CLT, Gel-Filled, Dry Core, Steel Armoured, DJ, PE, DAS Cable

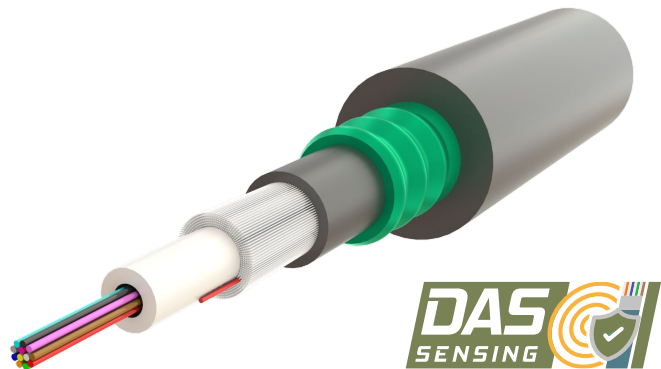
Design Type A-D1Q(ZN-GY)2Y(SR)2Y

Fence, Wall and Direct Buried Applications



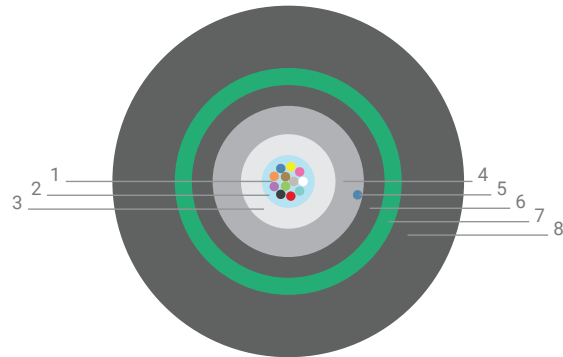
Properties

- Double PE-jacketed cable for enhanced crush resistance.
- Corrugated steel tape armouring for rodent protection.
- Glass yarns for high tensile strength.
- Fully water-blocked and UV-resistant for harsh conditions.
- Optimized for DAS systems.
- Direct burial, fence lines, and wall-mounted installations.
- Optimized sensitivity for intrusion events detection in FOTAS systems



Cable Construction

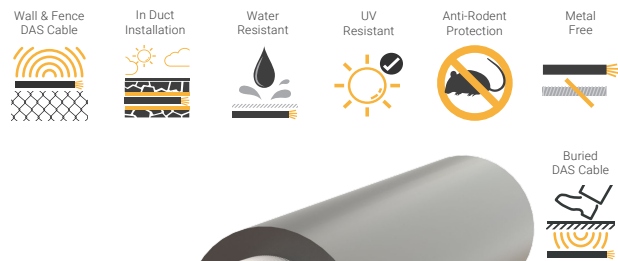
1	Fiber	Single-Mode (250 μ)
2	Tube Filling Material	Thixotropic Gel
3	Loose Tube	PBT
4	Strength Member	Swellable Glass Yarn
5	Ripcord	Aramid
6	Inner Jacket	UV Resistant PE
7	Armoured Material	Corrugated Steel Tape
8	Outer Jacket	UV Resistant PE



MLT, Gel-Filled, Dry Core, Non-Metallic Armoured, SJ, PE, DAS Cable

Design Type AT-D1Q(ZN-GY)B2Y

Direct Buried, Fence and Wall Mounted Applications

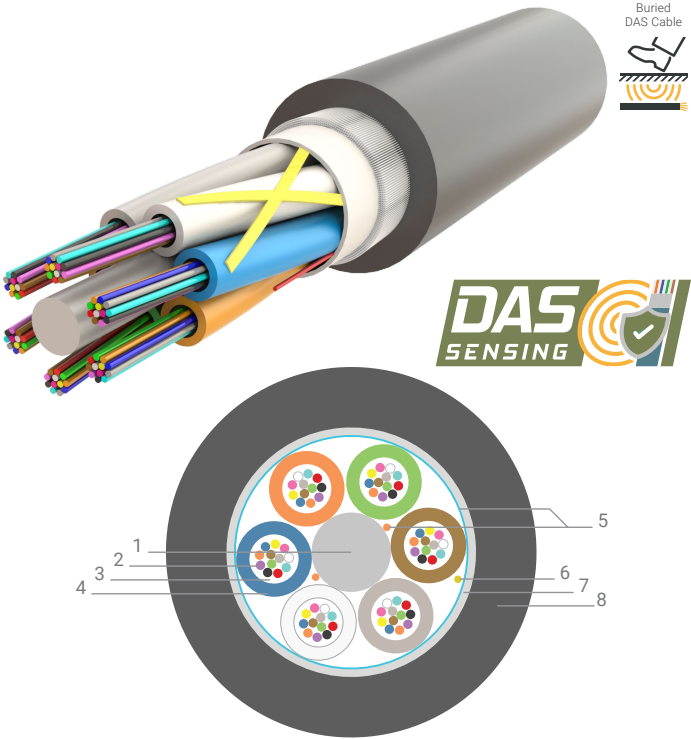


Properties

- Durable, high-performance outdoor fiber optic cable.
- PE jacket with metal-free, all-dielectric structure.
- Glass armouring for rodent protection.
- Watertight and UV-resistant for harsh environments.
- Ideal for DAS, pipelines, perimeter, and border monitoring.
- Long-lasting solution for fence and wall installations.
- Optimized sensitivity for intrusion events detection in FOTAS systems
- Suitable for direct buried applications

Cable Construction

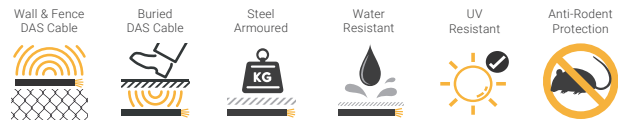
1	Central Strength Member	FRP
2	Fiber	SM/MM (250 μ)
3	Tube Filling Material	Thixotropic Gel
4	Loose Tube	PBT
5	Water Blocking	Tape & Yarn
6	Ripcord	Polyester
7	Strength Member	Swellable Glass Yarn
8	Outer Jacket	UV Resistant PE



MLT, Gel-Filled, Dry Core, Steel Armoured, DJ, PE, DAS Cable

Design Type AT-D1Q(ZN-GY)2Y(SR)2Y

Fence, Wall and Direct Buried Applications

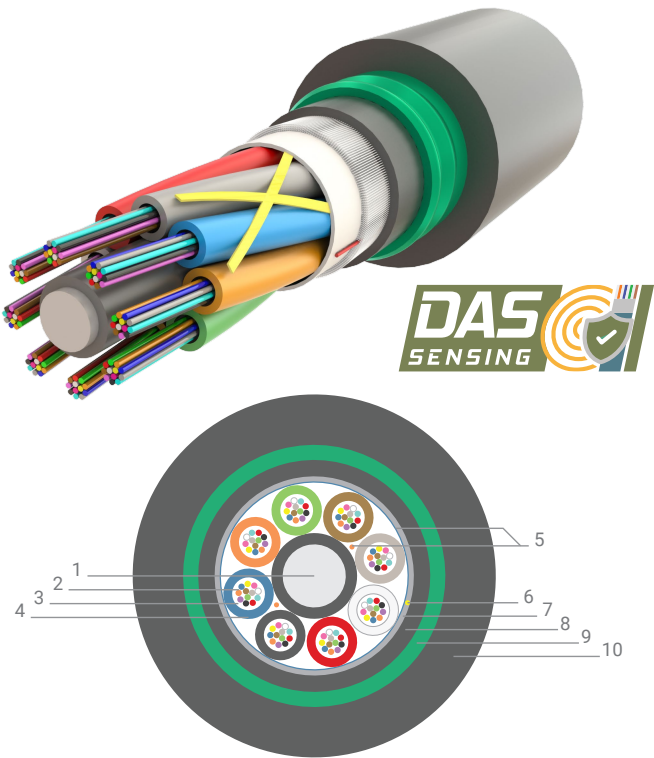


Properties

- Double PE-jacketed optimized for direct burial applications
- Direct burial, fence lines, and wall-mounted installations.
- Corrugated steel tape armouring for rodent protection.
- Glass yarns for high tensile strength.
- Fully water-blocked and UV-resistant for harsh conditions.
- Optimized sensitivity for intrusion events detection in FOTAS systems

Cable Construction

1	Central Strength Member	FRP
2	Fiber	Single-mode or Multi-mode
3	Tube Filling Material	Thixotropic Gel
4	Loose Tube	PBT
5	Water Blocking	Tape & Yarn
6	Ripcord	Aramid
7	Strength Member	Swellable Glass Yarn
8	Inner Jacket	UV Resistant PE
9	Armoured Material	Corrugated Steel Tape
10	Outer Jacket	UV Resistant PE



Steel Spiral Tube, SJ, LSZH, Steel Braided Sensing Cable - 2 Fibers

Design Type **U-VT6(ST)(SB)H-2U060**

Pipeline, Data Center, Tunnel, Industrial Process Lines

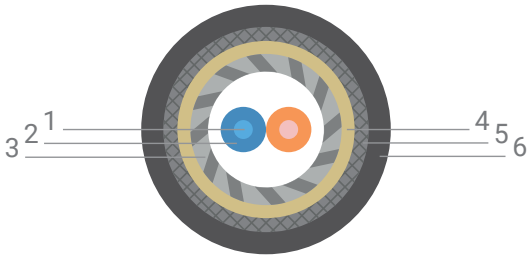


Properties

- Built-in 2-core sensing cable in spiral stainless steel soft pipe.
- Reinforced with aramid yarn for added tensile strength.
- Stainless steel braiding for efficient heat transfer.
- LSZH outer sheath meets flame retardant standards.
- Operational temperature range: -40°C to +150°C.
- Max. temperature range (short terms): +750°C, 180 minutes
- Ideal for distributed temperature sensing (DTS) systems.
- Designed for high fire hazard environments.
- Optimized sensitivity for thermal events detection in DTS systems

Cable Construction

1	Fiber	50/125μ, multi-mode fiber
2	Buffer	Tight (600μ)
3	Steel Tube	SUS spring tube
4	Strength Member	Aramid Yarn
5	Armoured Material	Braided Steel
6	Outer Jacket	UV Resistant LSZH



Non-Metallic DTS Cable, CLT, Gel-Free, Dry Core, SJ, LSZH - 2 Fibers

Design Type **U-B1Q(ZN-AY)H**

Pipeline, Data Center, Tunnel, Industrial Process Lines

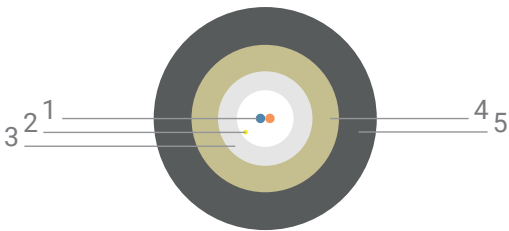


Properties

- Built-in 2-core sensing cable in thermoplastic tube
- Reinforced with aramid yarn for added tensile strength.
- LSZH outer sheath meets flame retardant standards.
- Operational temperature range: -40°C to +150°C.
- Ideal for distributed temperature sensing (DTS) systems.
- Designed for high fire hazard environments.
- Optimized sensitivity for thermal events detection in DTS systems

Cable Construction

1	Fiber	50/125μ, multi-mode fiber
2	Tube Filling Compound	Water Swellable Yarn
3	Loose Tube	LSZH
4	Strength Member	Swellable Aramid Yarn
5	Outer Jacket	UV Resistant LSZH



Ordering Codes

Order Code	Fiber Count	Tube Count	Filler Count	Tube Diameter (mm) nom.	Cable Diameter (mm) nom.	Cable Weight (Kg/Km) nom.
004F-A-D1Q(ZN-GY)B2Y-1D250-1x4-2D-BK-Fca-1.2kN	4	1	0	2.5	5.9	31
008F-A-D1Q(ZN-GY)B2Y-1D250-1x8-2D-BK-Fca-1.2kN	8	1	0	2.5	5.9	31
012F-A-D1Q(ZN-GY)B2Y-1D250-1x12-2D-BK-Fca-1.2kN	12	1	0	2.5	5.9	31
024F-A-D1Q(ZN-GY)B2Y-1D300-1x24-2D-BK-Fca-1.2kN	24	1	0	3.0	6.3	35
004F-A-D1Q(ZN-GY)2Y(SR)2Y-1D250-1x4-2D-BK-Fca-1.5kN	4	1	0	2.5	9.3	92
008F-A-D1Q(ZN-GY)2Y(SR)2Y-1D250-1x8-2D-BK-Fca-1.5kN	8	1	0	2.5	9.3	92
012F-A-D1Q(ZN-GY)2Y(SR)2Y-1D250-1x12-2D-BK-Fca-1.5kN	12	1	0	2.5	9.3	92
024F-A-D1Q(ZN-GY)2Y(SR)2Y-1D300-1x24-2D-BK-Fca-1.5kN	24	1	0	3.0	9.8	100
012F-AT-D1Q(ZN-GY)B2Y-6D200-1x12-2D-BK-Fca-2.7kN	12	1	5	2.0	9.8	70
024F-AT-D1Q(ZN-GY)B2Y-6D200-2x12-2D-BK-Fca-2.7kN	24	2	4	2.0	9.8	71
036F-AT-D1Q(ZN-GY)B2Y-6D200-3x12-2D-BK-Fca-2.7kN	36	3	3	2.0	9.8	74
048F-AT-D1Q(ZN-GY)B2Y-6D200-4x12-2D-BK-Fca-2.7kN	48	4	2	2.0	9.8	73
060F-AT-D1Q(ZN-GY)B2Y-6D200-5x12-2D-BK-Fca-2.7kN	60	5	1	2.0	9.8	76
072F-AT-D1Q(ZN-GY)B2Y-6D200-6x12-2D-BK-Fca-2.7kN	72	6	0	2.0	9.8	76
012F-AT-D1Q(ZN-GY)2Y(SR)2Y-6D200-1x12-2D-BK-Fca-2.7kN	12	1	5	2.0	13.3	159
024F-AT-D1Q(ZN-GY)2Y(SR)2Y-6D200-2x12-2D-BK-Fca-2.7kN	24	2	4	2.0	13.3	160
036F-AT-D1Q(ZN-GY)2Y(SR)2Y-6D200-3x12-2D-BK-Fca-2.7kN	36	3	3	2.0	13.3	163
048F-AT-D1Q(ZN-GY)2Y(SR)2Y-6D200-4x12-2D-BK-Fca-2.7kN	48	4	2	2.0	13.3	162
060F-AT-D1Q(ZN-GY)2Y(SR)2Y-6D200-5x12-2D-BK-Fca-2.7kN	60	5	1	2.0	13.3	163
072F-AT-D1Q(ZN-GY)2Y(SR)2Y-6D200-6x12-2D-BK-Fca-2.7kN	72	6	0	2.0	13.3	164
002F-U-VT6(ST)(SB)H-2U600-2x1-M3-RD-Eca-0.6 kN	2	1	0	2.0	3.4	22
002F-U-VT6(ST)(SB)H-2U600-2x1-M3-BK-Eca-0.6 kN	2	1	0	2.0	3.4	22
002F-U-B1Q(ZN-AY)H-1B250-1x2-M3-BK-Eca-0.8 kN	2	1	0	2.5	4.8	21
002F-U-B1Q(ZN-AY)H-1B250-1x2-M3-RD-Eca-0.8 kN	2	1	0	2.5	4.8	21

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