



About Us

With over 25 years experience of manufacturing optical fibres, Prysmian is able to offer an extensive product portfolio made to achieve the highest levels of quality and performance.

With a deep understanding of present and future market requirements, Prysmian's product range is targeted at the differing needs of the customer.

Prysmian is in the unique position of having access to all three major manufacturing processes; MCVD (Modified Chemical Vapour Deposition), OVD (Outside Vapour Deposition) and VAD (Vapour Axial Deposition).

This enables Prysmian to obtain an optimised range of products for different applications.

Enquiries

The optical characteristics of CasaLight™ can be tailored to meet your precise specifications. Whatever your requirements, if you need more information or would like to place an order, please call Prysmian Telecom Cables and Systems on +39 02 6449 7568.

CasaLight™

The G.657 compliant optical fibre optimized for excellent performance bend

- > Low macrobending loss
- > Compatibility with G.652
- > Neon™ Plus coating



dega design group

CasaLight™



Prysmian Telecom Cables and Systems is a world leader in optical networking, offering a comprehensive range of vertically integrated products and services.

We create everything from in-house local area networks to international communication links spanning oceans and continents.

Benefits and Features

> Excellent bend performance

CasaLight™ is fully compliant with ITU-T G.657 class A, the new international recommendation defining the tougher performance requirements for optical fibres in today's Optical Access Networks. Its optimized design allows CasaLight™ to exhibit excellent macrobending performance even when used under extreme conditions.

> Compatibility

CasaLight™ is also in compliance with ITU-T Recommendation G.652 and has satisfied all IEC testing requirements for transmission, mechanical and environmental performance. CasaLight™ has optimal spliceability with G.652 fibers thanks to its very similar chemical composition and to its best-in-class geometrical parameters. This makes CasaLight™ a fibre truly compatible both with other fibre types and with optical systems employed globally.

> Neon™ Plus coating

CasaLight™ is available with Neon™ Plus, the latest generation of coatings, based on the highly acclaimed Neon™ coating used by Prysmian worldwide for more than 10 years. This Neon coating system adopted by CasaLight™ (and by all other fibres manufactured by Prysmian) additionally provides enhanced resistance to 'high power' effects which can result in coating burns and glass fusion in certain amplified systems under severe bend conditions.

Mechanical specifications

CasaLight™ is proof tested at an elongation greater than or equal to 1%. This fibre is characterized in terms of Weibull plot and n value (Stress Corrosion Susceptibility Factor), with typical values above 19 (Dynamic Test).

CasaLight™: the product designed for Optical Access Networks taking optical fibre technology closer to the end user

Characteristics

Challenges arising from deployment conditions in Optical Access Networks demand innovation. The fibre must be optically more flexible and versatile, in order to provide compact installation solutions in the congested environments typically met in urban areas.

The solution is CasaLight™, the G.657.A optimized fibre with excellent bend loss performance. Materials (glass and coating) used in the production of CasaLight™ are the same as those used for standard (ITU-T G.652) fibres, therefore guaranteeing easy and efficient splicing and providing complete compatibility with existing networks, tools and equipment.

DIMENSIONAL SPECIFICATIONS

Glass geometry	Unit	
Cladding diameter	µm	125.0 ± 0.7
Cladding non circularity	%	≤ 1.0
Core/cladding concentricity error	µm	≤ 0.5

Coating geometry	Unit	
Primary Coating Material		Acrylate Neon™ Plus
Outer coating diameter	µm	245 ± 5
Coating/cladding concentricity error	µm	≤ 10

OPTICAL SPECIFICATIONS

Attenuation coefficients	Unit	
@ 1310 nm	dB/km	≤ 0.35
@ 1383 nm	dB/km	≤ 0.35
@ 1550 nm	dB/km	≤ 0.21
@ 1625 nm	dB/km	≤ 0.25

Macrobending attenuation	Unit	
1 turn, 20 mm diameter at 1550 nm	dB	≤ 0.5
10 turns, 30 mm diameter at 1550 nm	dB	≤ 0.05
10 turns, 30 mm diameter at 1625 nm	dB	≤ 0.5

Dispersion coefficients	Unit	
In the range 1285 – 1330 nm	ps/(nm.km)	≤ 3.5
@ 1550 nm	ps/(nm.km)	≤ 18
@ 1625 nm	ps/(nm.km)	≤ 22
Zero dispersion wavelength (λ ₀)	nm	1302 to 1322
Slope S ₀ at λ ₀	ps/(nm ² .km)	≤ 0.089
Polarization mode dispersion (PMD)	ps/√km	≤ 0.1
PMD link design value*	ps/√km	≤ 0.07

* Link design value definition complies with IEC 61282-3.

Mode Field Diameter	Unit	
@ 1310 nm	µm	8.8 ± 0.4

Cable cut-off wavelength (λ _{cc})	Unit	
	nm	≤ 1260

Note: Other fibre grades are available to match your need. CasaLight™ is available with bulk coloured coating upon request.

Any questions? Our team of experienced technical staff is ready to talk to you. See contact details.