# LANmark-OF Ruggedised Patch Cords

**LANMARK-OF RUGGEDISED PATCH CORD DUPLEX SC DUPLEX LC SINGLEMODE LSZH XM YELLOW**

**Aginode Ref:** N123R.4CLYX

- Ruggedized optical fiber patch cords
- LANmark-OF SM performance
- For FTTO, FTTD and installations requiring strong mechanical protection



## STANDARDS

ISO/IEC 11801

## Construction

Each tight buffered fibre of the patch cord is protected by a metal spring. This results in a mechanical robust patch cord with a very high crush resistance.

Between the spring and the LSZH jacket aramid yarns are introduced to enhance the pulling force.

The spring is very flexible and this results in a patch cord with a bend radius of only 30mm.

The patch cord has a duplex cable construction with a diameter of 2 X 2.8 mm.

## Installation and Guarantees

The Ruggedised patch cord is designed for indoor or protected outdoor applications (Temperature: -10°C – 50°C; Humidity: 10% – 93% RH non-condensing; IP grade: IP65).

It complies to following fire performance standards: IEC 60332-1 and IEC 60332-3.

Typical Fibre To The Office (FTTO) installations use this robust patch cord for the connection between the ZD-boxes and the LANactive office switches. The length is hereby often more then 5m and the cords are layed in crowed trunking between all the other wires. Both expose the cord much more to mechanical stress. The metal spring inside the Ruggedised patch cords protects the fibres well. The small bend radius of 30mm allows to route the patch cord through many turns and the short connector boot of 19mm facilitates the connection to the LANactive switch.

*All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Aginode is indicative only and shall not be binding on Aginode or be treated as constituting a representation on the part of Aginode.*

Also Fibre To The Desk (FTTD) and other challenging environments that require a strong mechanical protection are installations that can benefit from of this new patch cord.

Aginode LANmark-OF optical fibre patch cords have been designed for indoor applications in support of high speed protocols.

High speed protocols supported include, but are not limited to

- Ethernet: 1GBase-SX, 1GBase-LX, 10GBase-SR, 10GBase-LR
- Fibre channel Serial: 4G, 8G and 16G

Details on the supported distances can be found in the LANmark-OF warranty modules.

## Characteristics

- Patch cord cable is according to IEC 60794-2-50
- Maximum insertion loss according to IEC 61300-3-4: 0.25 dB
- Typical insertion loss: 0.15 dB
- Minimum return loss according to IEC 61300-3-6: 30 dB for Multimode and 50 dB for Singlemode
- Color of Jacket: Aqua for OM3, Violet for OM4 and Yellow for Singlemode

## Design

Aginode LANmark-OF patch cords are designed according to the "Cross-Over" wiring principle to improve field installation (A1-B2, B1-A2). This conforms to the requirements of IEC 11801 and EN 50174-1:2009.

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# LANmark-OF Ruggedised Patch Cord Duplex SC Duplex LC Singlemode LSZH Xm Yellow

## Characteristics

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|---|---|
| **Construction characteristics** | |
| Colour | Yellow |
| Connector type | Duplex SC-LC |
| Fiber optic type | SingleMode 9/125 |
| Outer sheath | LSZH-FR |
| **Dimensional characteristics** | |
| Height | 2.8 mm |
| Nominal inner diameter | 2.8 mm |
| Width | 5.8 mm |
| **Mechanical characteristics** | |
| Crush resistance (IEC 60794-1-E3) | 500 N/cm |
| Maximum pulling force (IEC 60794-1-2-E1) | 400 N |
| **Transmission characteristics** | |
| Insertion Loss, maximum, dB | 0.25 dB |
| Return Loss, Minimum, dB | 50 dB |
| **Usage characteristics** | |
| Flame retardant | IEC 60332-1; IEC 60332-3 |
| Minimum static operating bending radius | 30 mm |
| Operating temperature, range | -10...50 °C |

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