

# LANmark-OF Ruggedised Patch Cords

LANMARK-OF RUGGEDISED PATCH CORD DUPLEX LC DUPLEX LC OM4 LSZH XM VIOLET

**Aginode Ref:** N123R.7LLVX

- Ruggedized optical fiber patch cords
- LANmark-OF OM4 performance
- For FTTO, FTTD and installations requiring strong mechanical protection

## 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.



## STANDARDS

ISO/IEC 11801

## 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 than 5m and the cords are layed in crowded 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.

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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 Multimode 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.

# LANmark-OF Ruggedised Patch Cord Duplex LC Duplex LC OM4 LSZH Xm Violet

## Characteristics

### Construction characteristics

Colour	Violet
Connector type	Duplex LC-LC
Fiber optic type	OM4 50/125
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	30 dB

### Usage characteristics

Flame retardant	IEC 60332-1; IEC 60332-3
Minimum static operating bending radius	30 mm
Operating temperature, range	-10...50 °C