

# Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m

Part Code: 201-213

sales@excel-networking.com  
excel-networking.com

CIBSE TM65 Embodied Carbon: 0.189 kg CO2e



## Main Features

- / 100% Optically Tested
- / Low Loss Connectors
- / Bend insensitive construction
- / Test Certificate Included
- / Zirconia ceramic UPC ferrules
- / CIBSE TM65 Embodied Carbon: 0.189 kg CO2e

## Product Overview

Excel OS2 9/125 µm simplex patch leads are manufactured from the highest quality 900 µm G657A2 buffer/jacket optical fibre, terminated with ceramic ferrule connectors. Each cable has strain relief boots to prolong and maintain performance levels of the assembly. A label containing a unique batch number is fixed to the centre of cable for quality and traceability purposes.

## Product Specifications

| Feature | Values |
|---------|--------|
|---------|--------|

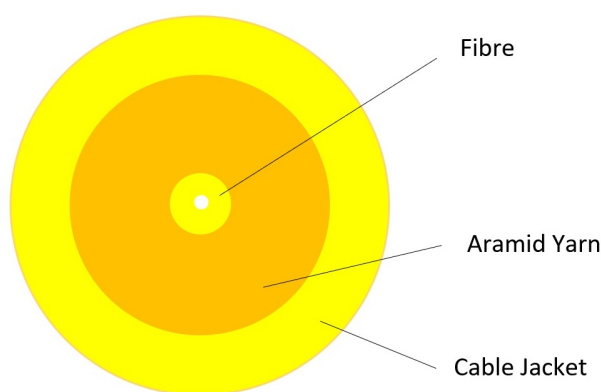
# Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m

Part Code: 201-213

sales@excel-networking.com  
excel-networking.com

|  |             |
|--|-------------|
| Fibre type                                 | Single mode |
| Category                                   | OS2         |
| Number of Cores                            | 1           |
| Cable type                                 | Simplex     |
| Length                                     | 3 m         |
| Type of connector connection 1             | SC          |
| Type of connector connection 2             | SC          |
| Outer sheath colour                        | Yellow      |
| Strain relief boot                         | Push-on     |
| Flame retardant according to IEC 60332-1-2 | yes         |
| Low smoke (acc. IEC 61034-2)               | yes         |

## Cross-section diagram

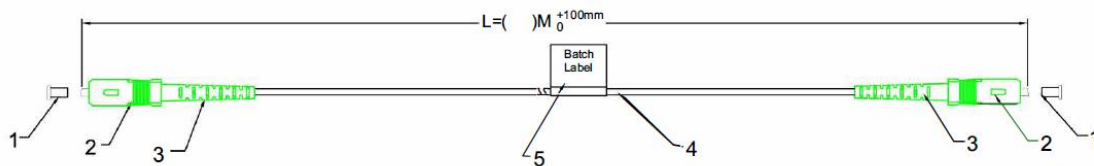


# Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m

Part Code: 201-213

sales@excel-networking.com  
excel-networking.com

## Product drawing



## Cable specifications

| Features                     | Values                          |
|------------------------------|---------------------------------|
| Cable Construction           | <b>Simplex</b>                  |
| No. of Fibres                | <b>1</b>                        |
| Cable Dimensions             | <b>3 mm</b>                     |
| Colour                       | <b>Yellow</b>                   |
| Strength members             | <b>Aramid Yarn</b>              |
| Temperature range            | <b>-20 °C - +70 °C</b>          |
| Connector Material           | <b>Composite</b>                |
| Minimum bend radius (loaded) | <b>10 x cable diameter</b>      |
| Connector Ferrule            | <b>2.5 mm Zirconium ceramic</b> |
| Ferrule End Face             | <b>APC Polish</b>               |
| Connector Insertion Loss     | <b>Max. 0.3dB</b>               |

# Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m

Part Code: 201-213

sales@excel-networking.com  
excel-networking.com

## Fibre specifications

| Features  | Values                        |
|---|-------------------------------|
| Mode Field diameter at 1310nm                   | 8.4 - 9.2µm                   |
| Mode Field diameter at 1550nm                   | 9.3-10.3µm                    |
| Cladding diameter                               | 125.0 ± 0.7µm                 |
| Cladding Non-circularity                        | ≤ 0.7%                        |
| Primary Coating diameter                        | 235 - 245µm                   |
| Coating-Cladding Concentricity Error            | ≤ 12µm                        |
| Coating Non-circularity                         | ≤ 6.0%                        |
| Core-Cladding Concentricity Error               | ≤0.5µm                        |
| Max. attenuation at 1310nm                      | ≤0.35 dB/km                   |
| Max. attenuation at 1383nm                      | ≤0.35 dB/km                   |
| Max. attenuation at 1460nm                      | ≤0.25 dB/km                   |
| Max. attenuation at 1490nm                      | ≤0.23 dB/km                   |
| Max attenuation at 1550nm                       | ≤0.21 dB/km                   |
| Max attenuation at 1625nm                       | ≤0.23 dB/km                   |
| PMD (typical value)                             | 0.04 ps/km                    |
| Cut-off wavelength                              | 1260nm                        |
| Zero dispersion wavelength                      | 1300-1324 nm                  |
| Zero dispersion slope                           | ≤0.092 ps/nm <sup>2</sup> .km |
| Refractive Index at 1310nm                      | 1.466                         |
| Refractive Index at 1550nm                      | 1.467                         |
| Macro-Bend Loss - 10 turns, 15mm radius, 1625nm | ≤0.03dB                       |

# Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m

Part Code: 201-213

sales@excel-networking.com  
excel-networking.com

|   |                   |
|---|-------------------|
| Macro-Bend Loss - 10 turns, 15mm radius, 1550nm | ≤ <b>0.1dB</b>    |
| Macro-Bend Loss - 1 turn, 10mm radius, 1550nm   | ≤ <b>0.1dB</b>    |
| Macro-Bend Loss - 1 turn, 10mm radius, 1625nm   | ≤ <b>0.2dB</b>    |
| Macro-Bend Loss - 1 turn, 7.5mm radius, 1550nm  | ≤ <b>0.5dB</b>    |
| Macro-Bend Loss - 1 turn, 7.5mm radius, 1625nm  | ≤ <b>1.0dB</b>    |
| Coating Strip Force (typical)                   | <b>1.5N</b>       |
| Coating Strip Force (peak)                      | <b>1.3 - 8.9N</b> |

## Standards

| Applicable standard           | Detail  |
|-------------------------------|---|
| BS EN 60332-1-2:2004+A11:2016 | Tests on electric and optical fibre cables under fire conditions - Test for vertical flame propagation for a single insulated wire or cable. Procedure for 1 kW pre-mixed flame |
| IEC 60793-1-1:2022            | Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance   |
| IEC 60793-2:2015              | Optical fibres - Part 2: Product specifications - General   |
| IEC 60793-2-10:2017           | Sectional specification for A1 multimode fibres   |
| IEC 60793-1-20:2014           | Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry  |
| IEC 60793-1-21:2001           | Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry  |
| IEC 60793-1-22:2001           | Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement  |
| IEC 60793-1-30:2010           | Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test  |
| IEC 60793-1-31:2010           | Optical fibres - Part 1-31: Measurement methods and test  |

# Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m

Part Code: 201-213

sales@excel-networking.com  
excel-networking.com

|                                    |   |
|------------------------------------|---|
|                                    | procedures - Tensile Strength   |
| ITU-T G.652:2016                   | Characteristics of a single-mode optical fibre and cable  |
| ITU-T G.657:2016                   | Characteristics of a bending-loss insensitive single-mode optical fibre and cable   |
| EN 50173-1:2018                    | Information technology. Generic cabling systems - General requirements  |
| EN 50173-2:2007 + A1:2010          | Information technology. Generic cabling systems - Office premises   |
| IEC 61754-1:2013                   | Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 1: General and guidance  |
| IEC 61754-2:1996                   | Fibre optic connector interfaces - Part 2: Type BFOC/2,5 connector family   |
| IEC 61754-4:2013                   | Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4: Type SC connector family  |
| IEC 61754-4-100:2015               | Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4-100: Type SC connector family - Simplified receptacle SC-PC connector interfaces |
| IEC 61754-20:2012                  | Fibre optic connector interfaces - Part 20: Type LC connector family  |
| ISO/IEC 11801-1:2017               | Information technology - Generic cabling for customer premises: Part 1 General Requirements   |
| Directive 2011/65/EU (RoHS II)     | Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment — compliant. Applies within EU member states).  |
| Directive (EU) 2015/863 (RoHS III) | Amending Directive 2011/65/EU to add four phthalates (DEHP, BBP, DBP, DIBP) to Annex II — compliant.  |
| Directive 2008/98/EC (WFD)         | Waste Framework Directive — compliant. Implemented in the UK through the Waste (England and Wales) Regulations 2011 (SI 2011 No. 988).  |
| ECHA SCIP Database                 | Compliant; product does not contain SVHCs (Substances of Very High Concern) as defined under REACH Article 33(1). Submission obligations met under EU REACH and                         |

# Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m

Part Code: 201-213

sales@excel-networking.com  
excel-networking.com

## UK REACH.

Regulation (EU) 2019/1021 (POPs)

EU Regulation on Persistent Organic Pollutants — compliant. For Great Britain, compliance is aligned with the Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (SI 2020 No. 1355).

UK SI 2012 No. 3032

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (UK RoHS) — compliant for Great Britain. Retained EU law, as amended by the Product Safety and Metrology (Amendment etc.) (EU Exit) Regulations 2019.

## Part Code Table

| Part Code | Description  |
|-----------|--|
| 201-211   | Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 1 m  |
| 201-212   | Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 2 m  |
| 201-213   | Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 3 m  |
| 201-214   | Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 5 m  |
| 201-216   | Excel Enbeam OS2 Fibre Optic Patch Lead G.657.A1 SC/APC-SC/APC SM 9/125 SX Yellow 10 m |