



## Part Number: GIMTA08

### Indoor Distribution 08 Fibers G657A1-OS2

#### Product Description

Indoor Mini Breakout Tight Optical Cable 08 x 9/125-G657A1-OS2 I-V(ZN)H

#### Technical Drawing

#### Fiber properties - EMEA

##### Introduction

This document provides technical data on the fibers used in Optical Fiber Cables produced in the EMEA region.

##### Optical Characteristics

Characteristics Single-Mode – Matched-Cladded optical fibers according to ITU

EMEA P/N Coding, Position 5	Fibre-Type	Mode-Field (Cladding) Diameter (µm)	Wave-length (nm)	Dispersion (ps/(nm·km))	PMD <sup>A</sup> (ps·km)	Cable Cut-off Wave-length (nm)
7	9/125 G.655 C&D	8.4 ± 0.6 125 ± 0.7	1550 1625	≤ 4.5 ≤ 7.9	≤ 0.04	≤ 1260
8	9/125 G.652D & G.657A1 BI OS2	9.2 ± 0.4 125 ± 0.7	1310 1550 1625	≤ 3.2 ≤ 17	≤ 0.06	≤ 1260
A	9/125 G.657A1 BI	8.9 ± 0.4 125.0 ± 0.3	1310 1550 1625	≤ 3.5 ≤ 18	≤ 0.06	≤ 1260
F	9/125 G.657A2 BI	8.9 ± 0.4 124.8 ± 0.3	1310 1550 1625	≤ 3.5 ≤ 18	≤ 0.2	≤ 1260
I	9/125 G.657B3 BI	8.8 ± 0.4 125 ± 0.4	1310 1550 1625	≤ 3.5 ≤ 18	≤ 0.06	≤ 1260

Note A: Link design value

Characteristics Multi-Mode – Graded-Index optical fibers according to IEC 60793

EMEA P/N Coding, Position 5	Fibre-Type	Core/Cladding Diameter (µm)	Wave-length (nm)	Band-width (MHz·km)	Ethernet Performance (m)				Num. Apert. (µm)
					1 GBE	10 GBE	40 Gbps WDM	100 Gbps WDM	
1	62.5/125 OM1	62.5 ± 2.5 125 ± 1	850 1300	≥ 200 ≥ 600	230 550	33 300			0.275 ± 0.015
2	50/125 OM2 BI	50 ± 2.5 125 ± 1	850 1300	≥ 500 ≥ 500	600 600	63 300			0.20 ± 0.015
D	50/125 OM3 BI	50 ± 2.5 125 ± 1	850 1300	≥ 1500 ≥ 500	1000 550	300 300			0.20 ± 0.015
E	50/125 OM4 BI	50 ± 2.5 125 ± 1	850 1300	≥ 3500 ≥ 500	1100 550	550 300			0.20 ± 0.015
C	50/125 OM5 BI	50 ± 2.5 125 ± 1	850 1300	≥ 3500 ≥ 500			440	150	0.20 ± 0.015

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#### Technical Specifications

Construction Type:	Distribution
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#### Product Overview

Environmental Space:	Indoor - Euroclass Cca
Suitable Applications:	Structured (premises) wiring systems: building backbone (riser) and/or horizontal cabling (Fibre To The Desk). Support all computer network applications such as FDDI, Gigabit Ethernet and ATM

#### Construction

##### Fiber Cable Construction

Fiber Type	Fiber Grade acc. ITU-T	Fiber Count
OS2	G657A1	8

Fiber Color Coding:	TIA coding (Gxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red, Black
Fiber Color Coding 2:	Europe coding (Gxxxxx.0): Red, Natural, Yellow, Blue, Green, Violet, Brown, Black

#### Buffer Specification

Buffer Construction	Buffer Material	Buffer Diameter
Tight	LSZH - Low Smoke Zero Halogen	0.9 mm

Cable Core Water Tight:	Yes
Bulk Cable Weight:	28 kg/km

#### Jacket Specifications

Number of Jackets:	Single Jacket
Type of Armor:	Non-Armored

#### Outer Jacket Material

Material	Nominal Diameter	Ripcord
LSZH - Low Smoke Zero Halogen	5.3 mm	0

#### Optical Characteristics

Fiber Core Diameter:	9 µm
Max Attenuation at 1310 nm:	0.39 dB/km
Max Attenuation at 1550 nm:	0.24 dB/km

#### Mechanical Characteristics

##### Mechanical Tests

Description	Tested Standard	Requirement/Value	According to Family Specification
Cable Min. Bend Radius Installation (Short Term)	IEC 60794-1-21-E6	106 mm	IEC 60794-2-20
Cable Min. Bend Radius Operation (Long Term)	IEC 60794-1-21-E11	53 mm	IEC 60794-2-20
Cable Max. Tensile Strength Operation (Long Term)	IEC 60794-1-21-E1	400 N (90 lbf)	IEC 60794-2-20
Cable Max. Crush Resistance Installation (Short Term)	IEC 60794-1-21-E3	5 kN/m	
Cable Max. Crush Resistance Operation (Long Term)	IEC 60794-1-21-E3	3 kN/m	IEC 60794-2-20

#### Temperature Range

Operating Temp Range:	-5 °C to +55 °C
Installation Temp Range:	-5 °C to +50 °C
Storage Temp Range:	-30 °C to +70 °C

#### Standards

UL Rating/Flame Test:	Non-UL Rated
ISO/IEC Flammability:	IEC 60332-1-2
CPR Euroclass:	Cca-s1a,d1,a1
REACH:	Compliant
ISO/IEC Compliance:	IEC 60794
EU Directive 2011/65/EU (ROHS II):	Compliant
UV/ Sunlight Protection:	yes

#### History

##### Variants

Item #	Color	Length
GIMTA08.002100	Orange	2,100 m

Update and Revision:	Revision Number: 0.64 Revision Date: 07-25-2019
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