

NanoCore®

2 Through 32 fibers

HITACHI
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Product Highlights

- REACH & RoHS 2 compliant.
- Made in USA.
- All multimode, and singlemode cables (except OM1) utilize bend-insensitive optical fibers.
- 250 micron loose tube design allows for higher fiber strand counts in a smaller overall diameter cable.
- Ideal for MPO (MTP™) style connectors.
- Each fiber is color coded for easy identification.
- Flexible and easy to handle.
- Lightweight, flexible Aramid yarns enhance strength.
- Now available with a smaller outside diameter.
- When necessary, color-coded binders separate fiber strands into bundles of 12.

Options

- Enhanced bend insensitive OS2 optical fiber is available (ITU-T G.657.B3 & G.657.A2).
- Standard jacket colors are:
Yellow: OS2
Orange: OM1 & OM2
Aqua: OM3 & OM4
Note: Erika Violet for OM4 is available
- 16 Fiber colors are available.
- Colored threads are used to bundle fibers.

Applications

- OM5 supports applications utilizing Short Wave Division Multiplexing (SWDM).

Standards

- TIA/EIA-568-C.3
- ISO/IEC 11801, 2nd edition
- Telcordia GR-409-CORE
- OS2 glass is compliant to ITU-T G.657.A1

NanoCore® Interconnect (Single Jacket) Micro Distribution (Plenum) (UL) OFNP c(UL) OFNP FT6

PART NUMBERS BY FIBER COUNT

FIBERS	Cable OD mm	FIBERS/ BUNDLE or TUBE	62.5 UM OM1	50 UM OM2	50 UM OM3	50 UM OM4	50 UM OM4+	50 UM OM5	8.3 UM OS2
2	2.0	-	62241-2	62242-2	62243-2	62244-2	62412-2	62749-2	62239-2
2	3.0	-	61537-2	61506-2	61507-2	61883-2	62411-2	62750-2	61538-2
4	2.0	-	62241-4	62242-4	62243-4	62244-4	62412-4	62749-4	62239-4
4	3.0	-	61537-4	61506-4	61507-4	61883-4	62411-4	62750-4	61538-4
6	2.0	-	62241-6	62242-6	62243-6	62244-6	62412-6	62749-6	62239-6
6	3.0	-	61537-6	61506-6	61507-6	61883-6	62411-6	62750-6	61538-6
8 DJ	4.8	-	62675-8	62676-8	62449-8	62450-8	62677-8	62678-8	62460-8
12	2.0	-	62241-12	62242-12	62243-12	62244-12	62412-12	62749-12	62239-12
12	3.0	-	61537-12	61506-12	61507-12	61883-12	62411-12	62750-12	61538-12
12	3.8	-	62372-12	62373-12	62374-12	62375-12	62382-12	62751-12	62371-12
12 DJ	4.8	-	62675-12	62676-12	62449-12	62450-12	62677-12	62678-12	62460-12
16	3.0	-	62683-16	62684-16	62685-16	62686-16	62687-16	62688-16	62689-16
16*	3.0	8 X 2	62692-16	62693-16	62694-16	62695-16	62696-16	62697-16	62698-16
16 DJ	4.8	-	62675-16	62676-16	62449-16	62450-16	62677-16	62678-16	62460-16
24*	3.0	12 X 2	62241-24	62242-24	62243-24	62244-24	62412-24	62749-24	62239-24
24*	3.8	12 X 2	62372-24	62373-24	62374-24	62375-24	62382-24	62751-24	62371-24
24*	4.5	12 X 2	61537-24	61506-24	61507-24	61883-24	62411-24	62750-24	61538-24
24 DJ*	4.8	12 X 2	62675-24	62676-24	62449-24	62450-24	62677-24	62678-24	62460-24
32*	3.6	8 X 4	62332-32	62333-32	62431-32	62335-32	62711-32	62712-32	62336-32
32*	3.6	16 X 2	62489-32	62490-32	62491-32	62492-32	62493-32	62715-32	62494-32
12	3.0 x 6.47	6	62753-12	61546-12	61539-12	61882-12	62430-12	62752-12	61547-12
24	3.0 x 6.47	12	62753-24	61546-24	61539-24	61882-24	62430-24	62752-24	61547-24

SPECIFICATIONS BY FIBER COUNT

FIBERS	FIBERS/ BUNDLE or TUBE	CABLE OD		RECOMMENDED MAXIMUM LOADS						CABLE WEIGHT	
				INSTALL		OPERATION		COMPRESSION	IMPACT		
		in.	mm	lbs	N	lbs	N	N/cm	N-m	lbs/kft	Kg/Km
2	-	0.078	2.0	50	222	15	67	35	0.74	2.5	3.7
2	-	0.118	3.0	100	445	30	134	100	0.74	5.5	8.2
4	-	0.078	2.0	50	222	15	67	35	0.74	2.6	3.8
4	-	0.118	3.0	100	445	30	134	100	0.74	5.6	8.3
6	-	0.078	2.0	50	222	15	67	35	0.74	2.7	4.0
6	-	0.118	3.0	100	445	30	134	100	0.74	5.6	8.3
8 DJ	-	0.189	4.8	150	668	45	200	35	2.94	14.3	21.3
12	-	0.078	2.0	50	222	15	67	35	0.74	2.9	4.4
12	-	0.118	3.0	100	445	30	134	100	0.74	5.9	8.8
12	-	0.150	3.8	150	668	45	200	35	2.94	9.1	13.6
12 DJ	-	0.189	4.8	150	668	45	200	35	2.94	14.5	21.6
16	-	0.118	3.0	150	668	45	200	100	0.74	5.2	7.7
16*	8 X 2	0.118	3.0	150	668	45	200	100	0.74	5.2	7.7
16 DJ	-	0.189	4.8	150	668	45	200	35	2.94	14.7	21.9
24*	12 X 2	0.118	3.0	150	668	45	200	100	0.74	5.7	8.5
24*	12 X 2	0.150	3.8	150	668	45	200	35	2.94	9.7	14.5
24*	12 X 2	0.177	4.5	150	668	45	200	100	2.94	13.1	19.5
24 DJ*	12 X 2	0.189	4.8	150	668	45	200	35	2.94	15	22.3
32*	8 X 4	0.142	3.6	150	668	45	200	100	2.94	7.3	10.9
32*	16 X 2	0.142	3.6	150	668	45	200	100	2.94	7.3	10.9
12	6	.118 x .255	3.0 x 6.47	128	569	38	171	100	2.94	11.3	16.8
24	12	.118 x .255	3.0 x 6.47	128	569	38	171	100	2.94	11.4	17.0

Cable Characteristics

Notes: Part number rows in upper table directly correspond to cable characteristic rows in the same location of the lower table.

*These cable designs utilize color-coded binders to separate subunits.

DJ: Dual jacket design.

Micro Distribution

Multimode and Singlemode

NanoCore® Interconnect (Single Jacket) Micro Distribution (Plenum) (UL) OFNP c(UL) OFNP FT6

Optical Specifications

TIA/EIA-568-C.3 | ISO/IEC 11801, 2nd edition | Telcordia GR-409-CORE

Fiber type	Max. Attenuation (dB/km)		Min OFL Bandwidth (MHz-km)		Min EMBc Bandwidth (MHz-km)		Gb Ethernet distance (m)		10 Gb Ethernet distance (m)	
	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)
OM1	3.5	1.0	200	500	220	N/A	300	550	33	N/A
OM2	2.8	1.0	700	500	950	N/A	750	550	150	N/A
OM3	2.8	1.0	1500	500	2000	N/A	1000	550	300	N/A
OM4	2.8	1.0	3500	500	4700	N/A	1100	550	550	N/A
OM4+	2.8	1.0	3500	500	5350	N/A	N/A	N/A	600	N/A
OM5*	2.8	1.0	3500	500	4700	N/A	1100	550	550	N/A
	1310nm (SM)		1550nm (SM)		1310nm (SM)		1550nm (SM)		1310nm (SM)	
	1310nm (SM)	1550nm (SM)	1310nm (SM)	1550nm (SM)	1310nm (SM)	1550nm (SM)	1310nm (SM)	1550nm (SM)	1310nm (SM)	1550nm (SM)
OS2	0.5	0.5	N/A	N/A	N/A	N/A	> 25,000	> 40,000	10,000 - 25,000	40,000

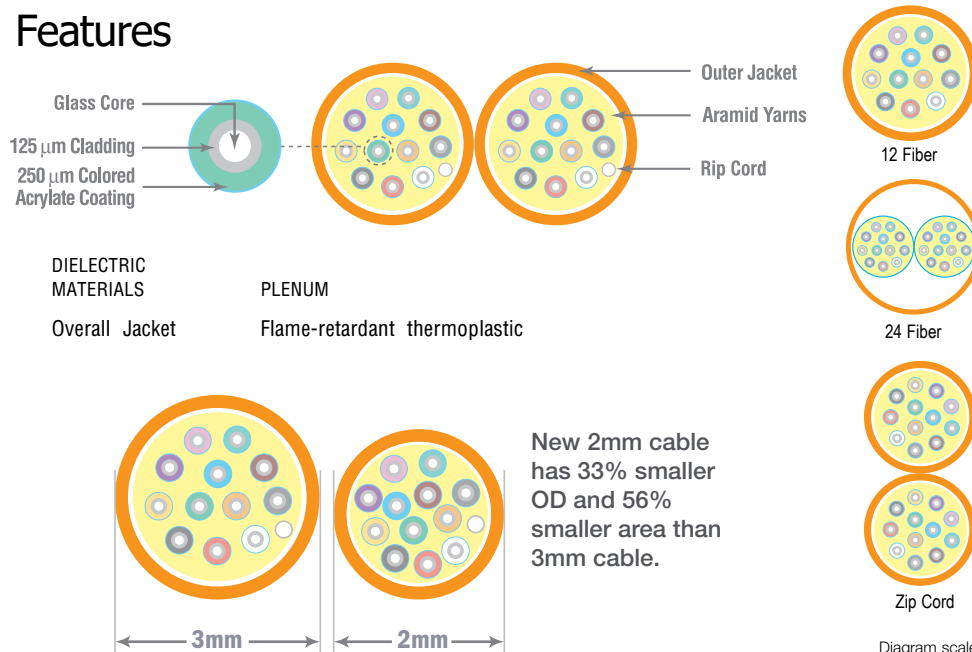
Hitachi Cable America reserves the right to revise any specifications.

*OM5 optical fiber tested by glass manufacturer and exceeds the requirements of all applicable industry standards.

Cable Temperature Ranges

Storage: -40° to 70°C (-40° to 158°F)
Installation: 0° to 60°C (32° to 140°F)
Operating: 0° to 70°C (32° to 158°F)

Features



Mechanical Specifications

- Bend radius, no load
= 10x cable overall diameter
- Bend radius, load
= 15x cable overall diameter

plus
CORNING®
ClearCurve® Optical Fiber

FIBER

