



CESAR²

Sub-appendix
Access specification
WAVELENGTH

V3.1
2020-12-01

Content

1. Product Wavelength	1
1.1 TECHNICAL SPECIFICATION Active Wavelength	1
1.1.1 Connection Specification	1
1.2 SELECTIVE CHARACTERISTICS (Variables)	2
1.3 TECHNICAL SPECIFICATION Passive Wavelength	3
1.3.1 Access Specification	3
1.4 Selective Characteristics Passive Wavelength	4
1.5 Measurement period	6

1. Product Wavelength

1.1 TECHNICAL SPECIFICATION Active Wavelength

The product type Wavelength, comprises the following products

Product category: Access	
Product type: Active Wavelength	
Attributes (Technical qualities)	Product: Active Wavelength
Type	CWDM / DWDM
Access type	Point to point
Transparent	Fully transparent for load, overhead and synchronisation
Delivery test	Yes

1.1.1 Connection Specification

One (1) Connection constitutes of a wavelength. A Connection has an A-end and a B-end in two different Nodes available for Buyers for plug in to customer owned equipment in a call-off interface.

1.2 SELECTIVE CHARACTERISTICS (Variables)

Following selectable variables for Wavelength products shall be available for Buyer to order.

Product category: Access	
Product type: Active Wavelength	
Variable (Selective characteristics)	Product: Active Wavelength
Capacity	Interface
1 Gbit/s	1000Base-X
10 Gbit/s ETHERNET LAN PHY, 10GBASE LAN PHY	10Gbase-ER, 10Gbase-LR
10 Gbit/s Fibre Channel	FC1200-SM-LL-L
40 Gbit/s Ethernet	40GBASE-LR4
100 Gbit/s Ethernet	100GBASE-LR4
Service levels	
SN0 - 99.5% Holiday free weekdays	Yes
SN1 - 99.7%	Yes
SN2 - 99.9%	Yes

1.3 TECHNICAL SPECIFICATION Passive Wavelength

Product type Wavelength include the following products

Product category: Access	
Product type: Passive Wavelength	
Attributes (Technical qualities)	Product: Passive Wavelength
Type	<p>CWDM: ITU-T standard G.694.2 16 of 18 channels used because of G.652-fiber characteristics. 39: 1390 nm and 45: 1450 nm unused. Primary use is SFP+ (10Gbps/channel)</p> <p>DWDM: ITU-T standard G.694.1 45 channels: 1530-1570nm. 0,8nm 100GHz channel width Primary use is SFP+ (10Gbps/channel)</p>
Connection type	Point to point
Transparent	Yes
Delivery test	Yes

1.3.1 Access Specification

One (1) Access constitutes of a wavelength. An Access has an A-end and a B-end in two different Nodes available for Buyers for plug into customer owned equipment in a call-off interface.

1.4 Selective Characteristics Passive Wavelength

Following Selective Characteristics for Wavelength products shall be available for Buyer to order.

Product category: Access		
Product type: Passive Wavelength		
Variables (selective characteristics)		
TYPE	CHANNEL	WAVELENGTH
CWDM	C27	1270 nm
CWDM	C29	1290 nm
CWDM	C31	1310 nm
CWDM	C33	1330 nm
CWDM	C35	1350 nm
CWDM	C37	1370 nm
CWDM	C41	1410 nm
CWDM	C43	1430 nm
CWDM	C47	1470 nm
CWDM	C49	1490 nm
CWDM	C51	1510 nm
CWDM	C53	1530 nm
CWDM	C55	1550 nm
CWDM	C57	1570 nm
CWDM	C59	1590 nm
CWDM	C61	1610 nm
DWDM	C17	1563,86 nm
DWDM	C18	1563,05 nm
DWDM	C19	1562,23 nm
DWDM	C20	1561,42 nm
DWDM	C21	1560,61 nm
DWDM	C22	1559,79 nm
DWDM	C23	1558,98 nm
DWDM	C24	1558,17 nm
DWDM	C25	1557,36 nm
DWDM	C26	1556,55 nm
DWDM	C27	1555,75 nm
DWDM	C28	1554,94 nm
DWDM	C29	1554,13 nm
DWDM	C30	1553,33 nm
DWDM	C31	1552,52 nm
DWDM	C32	1551,72 nm

DWDM	C33	1550,92 nm
DWDM	C34	1550,12 nm
DWDM	C35	1549,32 nm
DWDM	C36	1548,51 nm
DWDM	C37	1547,72 nm
DWDM	C38	1546,92 nm
DWDM	C39	1546,12 nm
DWDM	C40	1545,32 nm
DWDM	C41	1544,53 nm
DWDM	C42	1543,73 nm
DWDM	C43	1542,94 nm
DWDM	C44	1542,14 nm
DWDM	C45	1541,35 nm
DWDM	C46	1540,56 nm
DWDM	C47	1539,77 nm
DWDM	C48	1538,98 nm
DWDM	C49	1538,19 nm
DWDM	C50	1537,40 nm
DWDM	C51	1536,61 nm
DWDM	C52	1535,82 nm
DWDM	C53	1535,04 nm
DWDM	C54	1534,25 nm
DWDM	C55	1533,47 nm
DWDM	C56	1532,68 nm
DWDM	C57	1531,90 nm
DWDM	C58	1531,12 nm
DWDM	C59	1530,33 nm
DWDM	C60	1529,55 nm
DWDM	C61	1528,77 nm
Service levels		
SN0 - 99.5% Holiday free weekdays		Yes
SN1 - 99.7%		Yes
SN2 - 99.9%		Yes
Measurement period, read article 1.5		
Option 3 months		According to agreement.

1.5 Measurement period

Measurement period refers to a 12 months period and the period the Seller commits to perform Troubleshooting during service time according to agreed Service level for products specified in this service specification. Measurement period is used under Service level appendix.