

# TSFP-NBx-120

SFP, DWDM Tunable, Narrow Band (ITU 16 - 64),  
1G, 120km, SMF/LC

## Product Features:

- 1Gbps Tunable Transmitter
- APD Receiver
- ITU 16-64 Channel Coverage
- TOUGH Channel Spacing
- SMF Transmission Medium
- LC/UPC Connector
- Digital Diagnostics Monitoring (DDM)
- External Tuning Capability
- <2.5W Power Consumption



## Product Applications:

- 1000Base-ZX+

## Standards:

- Compliant with SFF-8472
- Compliant with SFF-8690
- RoHS 6 Compliant

## General Specifications:

Parameter	Min	Typical	Max	Unit
Operating Temperature	0	-	70	°C
Operating Humidity	-	-	2.0	W
Power Supply Current	-	600	700	mA
Power Supply Voltage	3.135	3.3	3.465	V
Operating Humidity	5	-	95	%
Storage Temperature	-40	-	85	°C
Transmission Distance	-	-	120	km
Data Rate (Total)	-	-	1.25	Gbps

# TSFP-NBx-120

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1G, 120km, SMF/LC



## Optical Characteristics: Transmitter

Parameter	Min	Typical	Max	Unit
Band 0 Frequency Range (ITU**)	191.60 (16)	-	191.90 (19)	THz
Band 1 Frequency Range	192.00 (20)	-	192.80 (28)	THz
Band 2 Frequency Range	192.90 (29)	-	193.60 (36)	THz
Band 3 Frequency Range	193.70 (37)	-	194.40 (44)	THz
Band 4 Frequency Range	194.50 (45)	-	195.20 (52)	THz
Band 5 Frequency Range	195.30 (53)	-	196.00 (60)	THz
Band 6 Frequency Range	196.10 (61)	-	196.40 (64)	THz
Channel Spacing	-	100	-	GHz
Frequency Accuracy	-12.5	-	12.5	GHz
Transmit Power	-1	-	4.0	dBm
Spectral Width	-	0.3	0.5	nm
Side Mode Suppression Ratio	35	-	-	dB
Extinction Ratio	9	-	-	dB
Tuning Speed	-	-	1	s

## Optical Characteristics: Receiver

Parameter	Min	Typical	Max	Unit
Receiver Wavelength	1520	-	1577	nm
Maximum Input Power	-7	-	-	dBm
Damage Threshold	5	-	-	dBm
Receiver Sensitivity	-	-	-30	dBm
Receiver Reflectance	-	-	-27	dB

## Product Ordering Information

Part Number	Description
TSFP-NB0-120	SFP, DWDM Tunable, Narrow Band 0 (ITU 16-19), 1G, 120km, C-Temp
TSFP-NB1-120	SFP, DWDM Tunable, Narrow Band 1 (ITU 20-28), 1G, 120km, C-Temp
TSFP-NB2-120	SFP, DWDM Tunable, Narrow Band 2 (ITU 29-36), 1G, 120km, C-Temp
TSFP-NB3-120	SFP, DWDM Tunable, Narrow Band 3 (ITU 37-44), 1G, 120km, C-Temp
TSFP-NB4-120	SFP, DWDM Tunable, Narrow Band 4 (ITU 45-52), 1G, 120km, C-Temp
TSFP-NB5-120	SFP, DWDM Tunable, Narrow Band 5 (ITU 53-60), 1G, 120km, C-Temp
TSFP-NB6-120	SFP, DWDM Tunable, Narrow Band 6 (ITU 61-64), 1G, 120km, C-Temp

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