

SFP 1 Gb

Module Type	Designation Telecoms / ITU	Connector	Fiber Type	Wave length	Link Budget	Launch Power Max (dBm)	Launch Power Min (dBm)	Rx Power Max (dBm)	Rx Power Min (dBm)	Target Distance Telecoms / ITU
1000 BASE SFP	DC	LC	MM	850nm	7.0	0	-8.0	0	-17	300m
1000 BASE SFP	LC	LC	SM	1310nm	7.0	-3	-11.0	-3	-19	10 km
1000 BASE SFP	DC	LC	SM	1310nm	18	0	-3	-3	-21.0	80 km
1000 BASE SFP	DC	LC	SM	1550nm	24	0	0	-3	-24	70 km
1000 BASE SFP	DCX	LC	SM	1550nm	30	0	0	-3	-30	120 km
1000 BASE SFP	TC	RJ45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2. Non Zero Dispersion Shifted Fibre and Cable Characteristics

Tabel 13. G.655.C (Reduce Slope)

Fibre attributes		
Attribute	Detail	Value
Mode field diameter (Note 5)	Wavelength	1550 nm
	nominal values	8.6 μm
	Tolerance	$\pm 0.4 \mu\text{m}$
Cladding Diameter	Nominal	125 μm
	Tolerance	$\pm 1 \mu\text{m}$
Core concentricity error	Maximum	0.8 μm
Cladding noncircularity	Maximum	2.0 %
Cable cut-off wavelength	Maximum	1450 nm
Macrobend loss	Radius	30 mm
	Number of turns	100
	Maximum at 1625 nm	0.05 dB
Proof stress	Minimum	0.69 GPa
Chromatic dispersion coefficient Wavelength range: 1530 – 1565 nm	λ_{min} and λ_{max}	1530 nm and 1565 nm.
	Min. value of D_{min}	2.0 ps/nm.km
	Max. value of D_{max}	6.0 ps/nm.km
	Sign	Positive or Negative
Uncabled fiber PMD Coefficient	Maximum	(See note 1 & 2)
Cable attributes		
Attribute	Detail	Value
Attenuation coefficient (Note 3)	Maximum at 1550 nm	0.215 dB/km
	Maximum at 1625 nm	0.30 dB/km
PMD coefficient (Note 1)	M	20 cables
	Q	0.01 %
	Maximum PMD_0	0.10 ps/ $\sqrt{\text{km}}$ (Note 4)
NOTE 1	According to 6.2, a maximum PMD_0 value on uncabled fibre is specified in order to support the primary requirement on cable PMD_0 .	
NOTE 2	Larger PMD_0 values (e.g. $\leq 0,5 \text{ ps}/\sqrt{\text{km}}$) can be agreed for particular applications between the manufacturer and user.	
NOTE 3	The attenuation coefficient at 1550 nm shall be maximum 0.215 dB/km and attenuation coefficient at 1625 nm shall be maximum 0.30 dB/km according to TELKOM requirement.	
NOTE 4	The cabled PMD coefficient shall be 0.10 ps/ $\sqrt{\text{km}}$ according to TELKOM requirement	
NOTE 5	The MFD nominal value shall be 8.6 μm with tolerance $\pm 0.4 \mu\text{m}$. according to TELKOM requirement	