

DAFTAR PUSTAKA

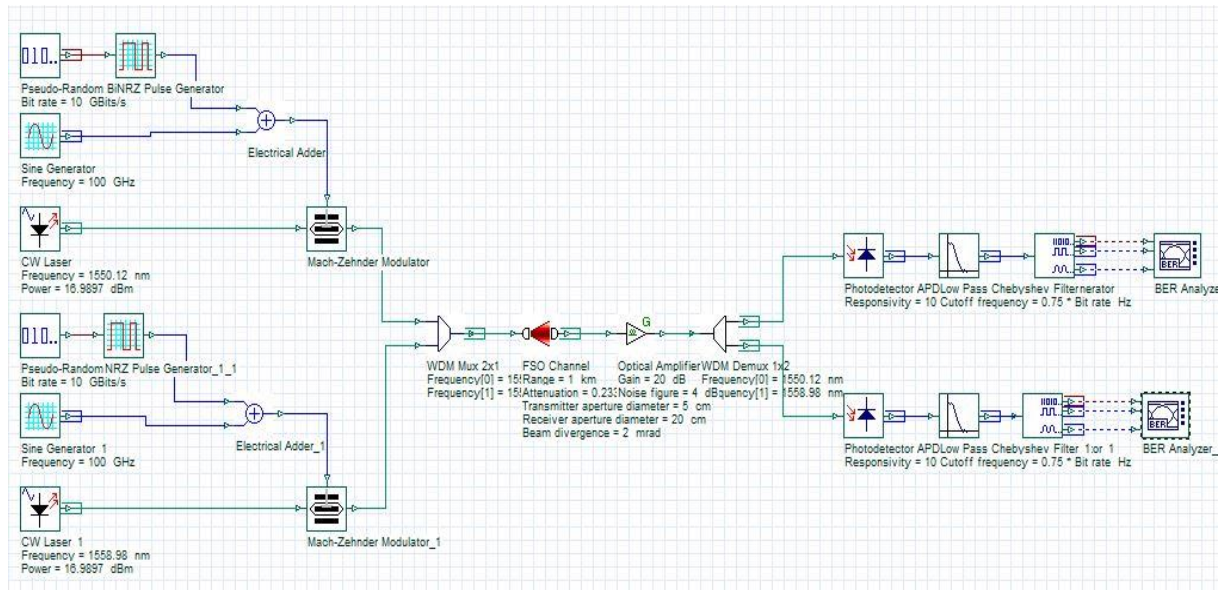
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LAMPIRAN 1. DESAIN KONFIGURASI SISTEM KOMUNIKASI RoFSO



LAMPIRAN 2. DATA HASIL PENELITIAN

Berikut data hasil simulasi menggunakan *Optisystem 7.0*

- Cuaca terang pada 10 Gbps

Bit Rate (Gbps)	Jarak Transmisi (km)	BER (NRZ 1550.12 nm)	BER (NRZ 1558.98 nm)	BER (RZ 1550.12 nm)	BER (RZ 1558.98 nm)
10	1	3,13E-13	5,75E-12	6,02E-07	1,56E-06
	2	6,35E-13	4,59E-11	7,52E-07	1,46E-06
	3	2,64E-12	9,91E-10	1,13E-06	1,68E-06
	4	2,06E-11	7,70E-09	2,05E-06	2,40E-06
	5	2,38E-10	8,75E-08	4,30E-06	4,43E-06
	6	3,16E-09	7,52E-07	9,99E-06	8,56E-06
	7	3,90E-08	4,83E-06	2,46E-05	1,94E-05
	8	3,90E-07	2,43E-05	6,10E-05	4,59E-05
	9	2,98E-06	9,63E-05	1,48E-04	1,09E-04
	10	1,71E-05	3,12E-04	3,40E-04	2,49E-04

Bit Rate (Gbps)	Jarak Transmisi (km)	Q-Factor (NRZ 1550.12 nm)	Q-Factor (NRZ 1558.98 nm)	Q-Factor (RZ 1550.12 nm)	Q-Factor (RZ 1558.98 nm)
10	1	7,1895	6,77486	4,8433	4,64623
	2	7,0930	6,47155	4,7990	4,65924
	3	6,8935	6,07849	4,7154	4,62926
	4	6,5954	5,65518	4,5926	4,55318
	5	6,2219	5,22370	4,4343	4,43254
	6	5,8027	4,81071	4,2470	4,27319
	7	5,3657	4,42361	4,0385	4,08385
	8	4,9332	4,06012	3,8168	3,87428
	9	4,5201	3,72372	3,5893	3,65372
	10	4,1349	3,41319	3,3619	3,42996

- Cuaca hujan lebat pada 10 Gbps

Bit Rate (Gbps)	Jarak Transmisi (m)	BER (NRZ 1550.12 nm)	BER (NRZ 1558.98 nm)	BER (RZ 1550.12 nm)	BER (RZ 1558.98 nm)
10	100	3,11E-13	2,19E-12	5,67E-07	1,89E-06
	200	2,98E-13	2,49E-12	5,72E-07	1,80E-06
	300	2,92E-13	3,26E-12	5,80E-07	1,68E-06
	400	3,11E-13	5,57E-12	6,01E-07	1,56E-06
	500	4,09E-13	1,49E-11	6,58E-07	1,47E-06
	600	8,02E-13	7,63E-11	8,06E-07	1,48E-06
	700	3,32E-12	8,21E-10	1,21E-06	1,74E-06
	800	4,31E-11	1,69E-08	2,55E-06	2,81E-06
	900	1,93E-09	5,10E-07	8,47E-06	7,40E-06
	1000	1,83E-07	1,43E-05	4,47E-05	3,41E-05

Bit Rate (Gbps)	Jarak Transmisi (m)	Q-Factor (NRZ 1550.12 nm)	Q-Factor (NRZ 1558.98 nm)	Q-Factor (RZ 1550.12 nm)	Q-Factor (RZ 1558.98 nm)
10	100	7,1899	6,91113	4,8562	4,60515
	200	7,1962	6,89310	4,8543	4,61631
	300	7,1991	6,85511	4,8506	4,63029
	400	7,1903	6,77928	4,8438	4,64560
	500	7,1531	6,63773	4,8257	4,65782
	600	7,0606	6,39509	4,7850	4,65674
	700	6,8605	6,02586	4,7018	4,62212
	800	6,4848	5,51940	4,5464	4,51989
	900	5,8844	4,88769	4,2845	4,30604
	1000	5,0797	4,18204	3,8937	3,94771

- Cuaca terang pada 15 Gbps

Bit Rate (Gbps)	Jarak Transmisi (km)	BER (NRZ 1550.12 nm)	BER (NRZ 1558.98 nm)	BER (RZ 1550.12 nm)	BER (RZ 1558.98 nm)
10	1	6,78E-13	1,60E-12	6,78E-13	1,60E-12
	2	2,37E-12	2,05E-12	2,37E-12	2,05E-12
	3	1,26E-11	5,36E-12	1,26E-11	5,36E-12
	4	9,11E-11	2,69E-11	9,11E-11	2,69E-11
	5	7,63E-10	2,18E-10	7,63E-10	2,18E-10
	6	6,52E-09	2,26E-09	6,52E-09	2,26E-09
	7	5,02E-08	2,43E-08	5,02E-08	2,43E-08
	8	3,31E-07	2,31E-07	3,31E-07	2,31E-07
	9	1,81E-06	1,77E-06	1,81E-06	1,77E-06
	10	8,02E-06	1,05E-05	8,02E-06	1,05E-05

Bit Rate (Gbps)	Jarak Transmisi (km)	Q-Factor (NRZ 1550.12 nm)	Q-Factor (NRZ 1558.98 nm)	Q-Factor (RZ 1550.12 nm)	Q-Factor (RZ 1558.98 nm)
10	1	7,0865	6,96793	7,0865	6,96793
	2	6,9113	6,93323	6,9113	6,93323
	3	6,6695	6,79593	6,6695	6,79593
	4	6,3735	6,55931	6,3735	6,55931
	5	6,0319	6,23996	6,0391	6,23996
	6	5,6830	5,86295	5,6830	5,86295
	7	5,3232	5,45516	5,3232	5,45516
	8	4,9688	5,03996	4,9688	5,03996
	9	4,6287	4,6347	4,6287	4,63467
	10	4,3102	4,25042	4,3102	4,25042

- Cuaca hujan lebat pada 15 Gbps

Bit Rate (Gbps)	Jarak Transmisi (m)	BER (NRZ 1550.12 nm)	BER (NRZ 1558.98 nm)	BER (RZ 1550.12 nm)	BER (RZ 1558.98 nm)
10	100	3,45E-13	2,21E-12	2,73E-10	1,65E-08
	200	3,87E-13	1,98E-12	4,32E-10	1,87E-08
	300	4,72E-13	1,76E-12	9,22E-10	2,75E-08
	400	6,65E-13	1,61E-12	2,63E-09	5,56E-08
	500	1,20E-12	1,66E-12	1,10E-08	1,52E-07
	600	3,24E-12	2,36E-12	5,10E-08	5,28E-07
	700	1,61E-11	6,37E-12	3,31E-07	2,36E-06
	800	1,76E-10	4,98E-11	2,55E-06	1,27E-05
	900	4,35E-09	1,44E-09	2,09E-05	7,35E-05
	1000	1,77E-07	1,09E-07	1,57E-04	4,08E-04

Bit Rate (Gbps)	Jarak Transmisi (m)	Q-Factor (NRZ 1550.12 nm)	Q-Factor (NRZ 1558.98 nm)	Q-Factor (RZ 1550.12 nm)	Q-Factor (RZ 1558.98 nm)
10	100	7,1794	6,92241	6,1810	5,49973
	200	7,1637	6,93790	6,1120	5,47902
	300	7,1365	6,95487	5,9950	5,41345
	400	7,0891	6,96764	5,8281	5,29184
	500	7,0070	6,96288	5,6047	5,11167
	600	6,8666	6,91341	5,3214	4,87674
	700	6,6344	6,77100	4,9725	4,57596
	800	6,27181	6,46685	4,5584	4,21130
	900	5,7515	5,93768	4,0882	3,79092
	1000	5,0891	5,18171	3,5793	3,33033